OCEANCREST SKILLED NURSING FACILITY

WEST MELBOURNE, FLORIDA

DATE:

MAY 16, 2025

PREPARED FOR:

S&A MINTON ROAD CORP.

SITE DATA:

1. GENERAL STATEMENT:

THE PROPOSED PROJECT IS FOR A SKILLED NURSING FACILITY AT THE NORTHEAST CORNER OF MINTON ROAD AND HERITAGE OAKS BOULEVARD IN WEST MELBOURNE, FLORIDA. THE PROJECT IS ZONED P1 AND FUTURE LAND USE (FLU) IS INSTITUTIONAL. IT CONSISTS OF APPROXIMATELY 117 BEDS IN A SINGLE STORY +/- 85,890 SF NEW FACILITY. THE SITE IS MASTER PLANNED FOR STORMWATER TREATMENT, HAS MULTIPLE SHARED DRIVEWAYS WITH THE PROPERTY TO THE NORTH, HAS GRAVITY SEWER EAST OF THE BUILDING, AND A WATER MAIN TO THE WEST THAT WILL NEED TO BE RELOCATED BASED ON THE PROPOSED BUILDING PAD. A NEW DRIVEWAY IS PROPOSED IN THE SOUTH CENTRAL PORTION OF THE SITE ONTO HERITAGE OAKS BOULEVARD. THE PROPOSED USE WILL HAVE OUTDOOR COURTYARDS INTERIOR TO THE BUILDING AND A FENCED OUTDOOR COURTYARD ON THE SOUTHSIDE OF THE BUILDING. IT WILL HAVE A COMPACTOR FOR SOLID WASTE COLLECTION IN THE REAR OF THE BUILDING. ALSO, AN EMERGENCY GENERATOR IS PROVIDED IN CASE OF LOSS OF POWER. THE LANDSCAPING WILL EXCEED CITY CODE MINIMUM TO PROVIDE AN IDYLLIC HOME ENVIRONMENT TO THE RESIDENTS. BUILD OUT DATE IS ANTICIPATED TO BE 1ST QUARTER OF 2027.

2. CONTACT INFORMATION:

OWNER:
S & A MINTON ROAD CORP
2 TAPPANWOOD DR
C/O CATALENNELLO
LOCUST VALLEY, NY 11560
TEL: (516) 785-2365
EMAIL: SYLCAT0504@AOL.COM

SURVEYOR:
ALLEN & COMPANY
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
TEL: (407) 654-5335

CIVIL ENGINEER:
CONSTRUCTION ENGINEERING GROUP, LLC
JAKE T. WISE, PE
2651 W. EAU GALLIE BOULEVARD, SUITE A
MELBOURNE, FL 32935
TEL: (321) 610-1760
EMAIL: JWISE@CEGENGINEERING.COM

LOCATION:
TOWNSHIP: 28 SOUTH
RANGE: 37 EAST
SECTION: 7
PARCEL ID: 28-37-07-00-253
TAX ACCOUNT NUMBER: 2858404

3. SITE CHARACTERISTICS:

TOTAL ACREAGE: 6.12
ZONING CLASSIFICATIONS: P-1
FUTURE LAND USE: INSTITUTIONAL
FLOOD ZONE: ZONE X
NUMBER OF BEDS: 117
DENSITY: 19.12 BEDS / ACRE
NUMBER OF BUILDINGS: 1 (2)

BUILDING HEIGHT:
MAX. PERMITTED = 40'
PROPOSED HEIGHT = ±30'

CALCULATED LOT COVERAGES

	SF	ACRES	PERCENT
PROPOSED IMPERVIOUS (BUILDING)	83,724	1.92	31
PROPOSED IMPERVIOUS (ASPHALT/CONCRETE)	68672	1.58	26
TOTAL IMPERVIOUS AREA	152,396	3.50	57
PROPOSED PERVIOUS AREA	69,269	1.59	26
EXISTING STORMWATER POND	45,100	1.04	17
TOTAL GROSS AREA	266,765	6.13	100

SETBACKS:	REQUIRED	PROPOSED
FRONT:	50'	58.46'
SIDE CORNER:	25'	59.92'
SIDE INTERIOR:	25'	25.32'
REAR:	35'	223.62'

4. PARKING SPACE CALCULATIONS:

PARKING REQUIRED
USE: NURSING HOMES, REST HOMES, AND CONVALESCENT HOMES
CALCULATION: 1 SPACE PER 3 PATIENTS AND 1 SPACE PER EMPLOYEE ON LARGEST SHIFT.
117 BEDS / 3 = 39 SPACES PLUS 20 EMPLOYEES ON LARGEST SHIFT = 59 SPACES REQUIRED INCLUDING 3 HANDICAP SPACES

TOTAL SPACES:
92 SPACES PROVIDED INCLUDING 6 HANDICAP SPACES.

5. FIRE FLOW CALCULATIONS:

CONSTRUCTION TYPE: V (111)
BUILDING AREA: 85,890
BASE MINIMUM FIRE FLOW (TABLE 18.4.5.2.1): 5,250 GPM
TOTAL EXPOSURE INCREASE: BASE GPM X PERCENT INCREASE= n/a GPM
INITIAL FIRE FLOW: BASE GPM + EXPOSURE INCREASE = n/a GPM
FIRE SPRINKLER DECREASE:(REDUCE INITIAL FIRE FLOW MAX 75% IF SPRINKLED)

TOTAL MINIMUM FIRE FLOW: 1,313 GPM (MINIMUM REQUIRED FIRE FLOW IS 1,000 GPM)

DURATION REQUIREMENTS: 4 HOURS (FROM TABLE)

NUMBER OF HYDRANTS REQUIRED: 2
NUMBER OF EXISTING HYDRANTS: 1
NUMBER OF NEW HYDRANTS: 1

PREPARED BY:

CONSTRUCTION ENGINEERING GROUP
Consulting Engineers



LOCATION MAP
NTS

LEGAL DESCRIPTION:

A PORTION OF LOTS 25 AND 26, FLORIDA INDIAN RIVER LAND COMPANY SUBDIVISION, OF SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF WOODFIELD AT HERITAGE OAKS, PHASE 2 AS RECORDED IN PLAT BOOK 49 AT PAGES 54 THROUGH 56 OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE SOUTH 00 DEGREES 19 MINUTES 40 SECONDS WEST ALONG THE WEST LINE OF SAID WOODFIELD AT HERITAGE OAKS, PHASE 2 AND ALONG THE
WEST LINE OF WOODFIELD AT HERITAGE OAKS, PHASE 1 AS RECORDED IN PLAT BOOK 47 AT PAGES 7 THROUGH 9 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 1,221.32 FEET TO THE POINT OF CURVE OF A NON TANGENT CURVE CONCAVE TO THE NORTH OF WHICH THE RADIUS POINT LIES NORTH 08 DEGREES 04 MINUTES 56 SECONDS WEST, A RADIAL DISTANCE OF 295.00 FEET; THENCE WESTERLY ALONG THE ARC, THROUGH A CENTRAL ANGLE OF 09 DEGREES 17 MINUTES 34 SECONDS A DISTANCE OF 47.85 FEET; THENCE NORTH 88 DEGREES 47 MINUTES 23 SECONDS WEST, A DISTANCE OF 215.36 FEET; THENCE NORTH 89 DEGREES 22 MINUTES 40 SECONDS WEST, A DISTANCE OF 149.14 FEET; THENCE NORTH 00 DEGREES 37 MINUTES 20 SECONDS EAST, A DISTANCE OF 15.00 FEET TO THE POINT OF CURVE OF A NON TANGENT CURVE CONCAVE TO THE NORTH, OF WHICH THE RADIUS POINT LIES NORTH 00 DEGREES 37 MINUTES 20 SECONDS EAST, A RADIAL DISTANCE OF 462.00 FEET; THENCE WESTERLY ALONG THE ARC, THROUGH A CENTRAL ANGLE OF 10 DEGREES 10 MINUTES 54 SECONDS, A DISTANCE OF 82.10 FEET TO A POINT OF REVERSE CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS OF 554.00 FEET AND A CENTRAL ANGLE OF 10 DEGREES 10 MINUTES 54 SECONDS; THENCE WESTERLY ALONG THE ARC, A DISTANCE OF 98.45 FEET; THENCE NORTH 89 DEGREES 22 MINUTES 40 SECONDS WEST, A DISTANCE OF 128.45 FEET TO A POINT OF CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 10.00 FEET AND A CENTRAL ANGLE OF 89 DEGREES 42 MINUTES 20 SECONDS; THENCE NORTHWESTERLY ALONG THE ARC A DISTANCE OF 15.66 FEET; THENCE NORTH 89 DEGREES 40 MINUTES 20 SECONDS WEST, A DISTANCE OF 20.00 FEET TO THE EAST RIGHT OF WAY LINE OF MINTON ROAD (A PUBLIC RIGHT OF WAY); THENCE NORTH 00 DEGREES 19 MINUTES 40 SECONDS EAST ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 732.79 FEET; THENCE SOUTH 88 DEGREES 22 MINUTES 30 SECONDS EAST ALONG THE SOUTH LINE OF THE PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 3615, PAGE 4648 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 675.00 FEET; THENCE NORTH 00 DEGREES 19 MINUTES 40 SECONDS EAST ALONG THE EAST LINE OF SAID PROPERTY, A DISTANCE OF 462.00 FEET TO THE SOUTH RIGHT OF WAY LINE OF HENRY AVENUE (A PUBLIC RIGHT OF WAY); THENCE SOUTH 88 DEGREES 22 MINUTES 30 SECONDS EAST ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 75.19 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THOSE LANDS AS CONVEYED IN OFFICIAL RECORDS BOOK 8556, PAGE 1370 AND OFFICIAL RECORDS BOOK 9010, PAGE 2897, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

CIVIL INDEX OF DRAWINGS:

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C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2A THRU C2C	SITE PLAN
C-3	GRADING AND DRAINAGE PLAN
C-4	UTILITY PLAN
C-5 THRU C-8	DETAILS
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CIVIL LEGEND:

DESCRIPTION	
BUILDING OR STRUCTURE	
CONCRETE SIDEWALK	
ASPHALTIC PAVEMENT	
DEMOLITION	
PROJECT BOUNDARY	
POND CONTOUR	
CHAIN LINK FENCE WITH PEDESTRIAN GATE	X X X
SILT FENCE	
SANITARY SEWER LINE	SS
FIRE WATER MAIN WITH VALVE AND HYDRANT	FW
WATERLINE WITH VALVE	W
BURIED ELECTRIC	BE (2)
STORM DRAIN WITH INLET	SD
SPOT ELEVATION	9.00
SWALE OR FLOW DIRECTION	
PRESERVED TREE	
REMOVED/RELOCATED TREE	

REQUIRED PERMITS (2)

CITY OF WEST MELBOURNE	SITE PLAN
SJRWMD	ERP MAJOR MODIFICATION
FDEP	WATER MAIN EXTENSION

REV#	DATE	REVISION
1	01/15/26	ISSUED FOR PERMIT
2	02/18/26	CITY COMMENTS
3	03/30/26	REVISION #2 RESPONSES TO DRC COMMENTS

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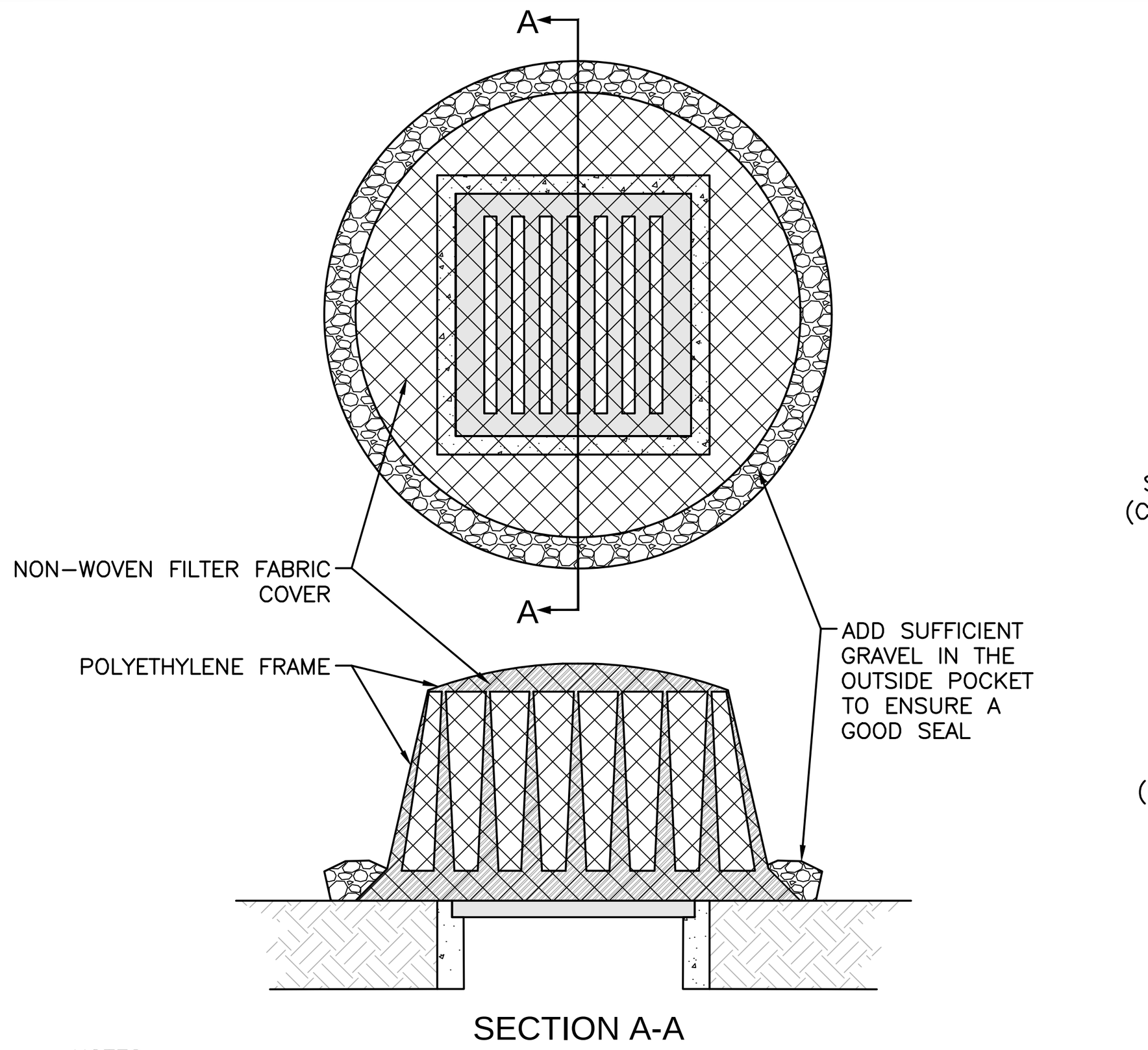
OCEANCREST SKILLED NURSING FACILITY
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
CIVIL COVER SHEET

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	NTS
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	G-1

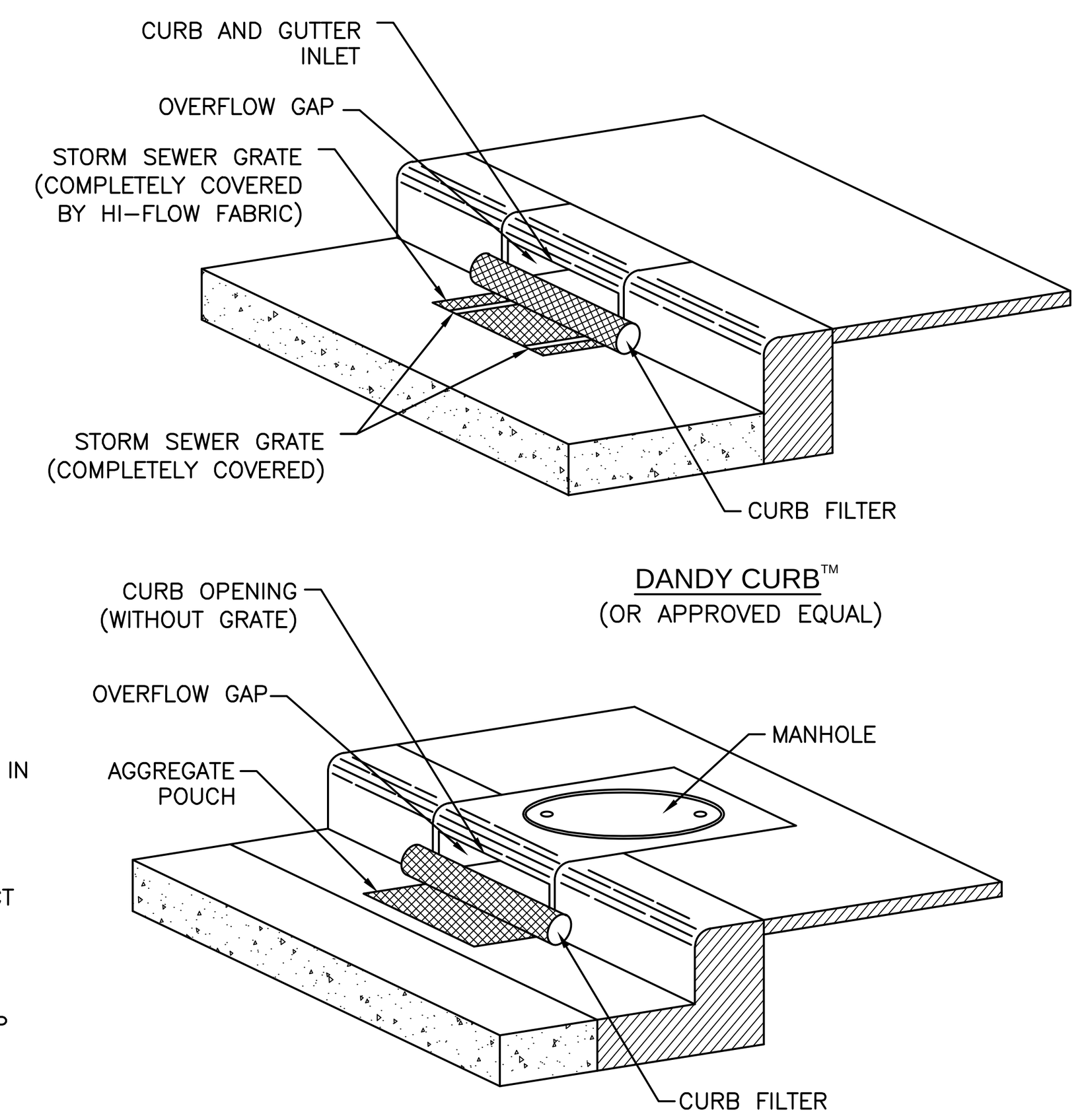


NOTES:

1. THESE BARRIERS ARE TO BE INSTALLED IN "SUMP" CONDITIONS ONLY. IF PLACED IN FRONT OF INLETS ON A GRADE, RUNOFF WILL BE DIVERTED TO DOWNSTREAM LOCATIONS AND COULD CAUSE FLOODING.
2. IT IS CRITICAL THAT A GOOD SEAL EXIST BETWEEN THE GROUND AND FABRIC MATERIAL USING ADEQUATE AMOUNTS OF GRAVEL.
3. MULTIPLE TYPES OF FILTER MEDIA ARE AVAILABLE FOR THIS SYSTEM. THE CORRECT TYPE OF FILTER FABRIC SHOULD BE CHOSEN THAT CONSIDERS BOTH SAFETY AND ENVIRONMENTAL CONCERNS.
4. FOR MAINTENANC,E REPAIR AND REPLACE GRAVEL AROUND THE UNIT AFTER EACH DAY A RAIN EVENT OCCURS.
5. INSPECT THE FABRIC MATERIAL DAILY AND REPLACE IT WHEN SEDIMENT BUILDS UP OR OTHERWISE LOSES POROSITY.

TYPICAL FRAME AND FILTER BARRIER FOR AREA DRAINS DETAIL

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CURB INLET SEDIMENT CONTROL

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EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

1. THE LAND–DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWEST PRACTICAL EROSION POTENTIAL.
2. LAND–DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
3. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM.
4. EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS.
5. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
6. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
7. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
8. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
9. ADEQUATE PROVISIONS MUST BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACE OF FILLS.
10. TO THE EXTENT NECESSARY, SEDIMENT IN RUNOFF WATER MUST BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED. TURBID WATER SHALL NOT DISCHARGE FROM THE SITE.
11. CUTS AND FILLS MUST BE CONSTRUCTED IN SUCH A MANNER THAT EROSION AND RUNOFF FROM THE SITE DOES NOT ENDANGER ADJOINING PROPERTY.
12. FILLS MAY NOT ENCROACH UPON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS IN A MANNER SO AS TO ADVERSELY AFFECT OTHER PROPERTY OWNERS WITHOUT ADEQUATE PROVISIONS FOR AN EQUIVALENT ALTERNATE SYSTEM WITH A POSITIVE OUTFALL.
13. ALL R.O.W.'S, WATERWAYS, STREETS AND SIDEWALKS SHALL BE BUFFERED BY A TWENTY (20) FOOT WIDE STRIP OF GRASS OR OTHER SUITABLE MEANS.
14. GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY MEANS OF BRIDGES OR CULVERTS EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE AND PROVIDED IN ANY CASE, THAT SUCH CROSSINGS ARE KEPT TO A MINIMUM AND SEDIMENTATION CONTROL DEVICES ARE PROVIDED.

DEWATERING PLAN:

1. FINAL GRADE AND SOD ENTIRE BANKS OF DRY RETENTION PONDS IMMEDIATELY. STAKE SOD IN AREAS WASHOUTS OCCUR. WATER SOD AS NEEDED TO MAINTAIN HEALTH OF SOD. INSTALL SILT SCREEN FENCE AROUND PONDS AFTER SODDING.
2. CONSTRUCT OVERFLOW STRUCTURES AND ALL PIPING BETWEEN RETENTION PONDS UPON FINAL GRADING. INSTALL SKIMMERS AND UTILIZE TURBIDITY BARRIERS AROUND MES TO PREVENT SILTATION OF PIPING/STRUCTURES.
3. ALL OF THIS WORK SHALL BE COMPLETED PER WATER MANAGEMENT DISTRICT OR FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND LOCAL MUNICIPALITY OR COUNTY REQUIREMENTS.
4. INSPECT AND REPAIR ANY INLETS, SILT FENCES, AND TURBIDITY BARRIERS AFTER EACH RAIN EVENT DURING CONSTRUCTION.

CONTRACTOR RESPONSIBILITIES FOR NPDES (SWPPP)

1. GENERAL NOTES:

A. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS HEREIN AND ALL WATER MANAGEMENT DISTRICT, FDEP, EPA, CORPS OF ENGINEERS, AND MUNICIPALITY/COUNTY WITH JURISDICTION REQUIREMENTS.

B. CONTRACTOR SHALL MAINTAIN A RECORD OF CONSTRUCTION WORK AND PROVIDE INSPECTION REPORTS WITH THE FOLLOWING DATA:

1) DATES WHEN SITE WORK BEGINS, EROSION CONTROL MEASURES ARE INSTALLED, GRADING WORK BEGINS, STORMWATER FACILITIES ARE CONSTRUCTED, AND FINAL STABILIZATION IS COMPLETE.

2) REPORT INSPECTOR'S NAME, QUALIFICATIONS, DAILY RAINFALL, ANY CHANGES NECESSARY TO SWPPP, AND DATES OF INSPECTIONS.

3) PICTURES OF ANY PROBLEM AREAS THAT OCCUR INCLUDING DATE AND TIME, AND PICTURES OF SAME AREA REPAIRED INCLUDING DATE AND TIME.

C. PRIOR TO FINAL PAYMENT, CONTRACTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER AND CIVIL ENGINEER CERTIFYING THE PROJECT. CONTRACTOR SHALL EXECUTE NPDES CERTIFICATION FORM AND PROVIDE COPIES TO OWNER AND ENGINEER.

2. SITE DESCRIPTION:

A. DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE.
FIRST, GRADE THE SITE INCLUDING THE STORMWATER TREATMENT SYSTEM. ALL EROSION CONTROL MEASURES INSTALLED AT THIS TIME (SOD ALL AREAS FINAL GRADED IMMEDIATELY). FINAL GRADING, PAVING, AND PLANTINGS ACROSS THE SITE WILL FINISH OUT THE PROJECT.
B. ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES.
THE ENTIRE 6.19 ACRES ARE EXPECTED TO BE DISTURBED BY GRADING, WITH THE EXCEPTION OF TREE PRESERVATION AREAS AS IDENTIFIED ON THE EXISTING SITE PLAN.
C. AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD. "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60 (AFTER), FROM TABLE 2.1 "TYPICAL "C" VALUES"
D. THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE. RIVIERA SAND AS CLASSIFIED BY THE SOIL CONSERVATION SERVICE HANDBOOK.

E. OFF–SITE OVERFLOW RECEIVING BODY: INDIAN RIVER.

3. CONTROLS:

THIS SECTION PROVIDES A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE.

A. EROSION AND SEDIMENT CONTROLS.

1) STABILIZATION PRACTICES: EXCAVATED MATERIALS WILL BE STOCKPILED FOR USE AS A BACKFILL AND STABILIZING MATERIAL. UNSUITABLE MATERIALS WILL BE PROMPTLY REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.

2) STRUCTURAL PRACTICES: THE CONTRACTOR SHALL INSTALL AND MAINTAIN WATER QUALITY CONTROL DEVICES AT ALL NEARBY STORMWATER MANAGEMENT PONDS, DITCHES, AND SWALES. INCLUDED IN THE PLANS ARE SILTATION FENCES AND TURBIDITY BARRIERS. CONTRACTOR SHALL INSTALL ADDITIONAL WATER QUALITY CONTROL MEASURES AS APPROPRIATE TO ASSURE ADEQUATE PROTECTION OF RECEIVING WATER BODIES.

B. STORMWATER MANAGEMENT: THE ENTIRE PROJECT IS DESIGNED TO IMPROVE STORMWATER MANAGEMENT. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT SITE BY USING TEMPORARY GRADING AND INSTALLING EROSION CONTROL MEASURES.

C. OTHER CONTROLS: ALL GUIDELINES AND REGULATIONS SET FORTH IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

4. MAINTENANCE:

– THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF VEGETATION, PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES FOR THE DURATION OF THE PROJECT.
– THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND SHALL RE–GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL NEW LANDSCAPING IS ESTABLISHED.
– ALL DRAINAGE STRUCTURES SHALL BE DE–SILTED AS REQUIRED DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS AND MINIMIZE TRANSPORT OF SILT TO THE MASTER DRAINAGE SYSTEM AND RECEIVING WATER BODY.
– ALL ACCUMULATIONS OF SILT GREATER THAN SIX INCHES SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED.
– ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM). IN AREAS OF ONGOING CONSTRUCTION ACTIVITY, TURBIDITY AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS. ADDITIONAL INSPECTIONS WILL BE CONDUCTED AFTER ALL SEVERE WEATHER. IF ANY DEFICIENCIES IN EROSION CONTROL ARE DISCOVERED, CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY BY THE CONTRACTOR.

5. INSPECTIONS:

INSPECTIONS WILL BE PERFORMED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM) AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER.

A. INSPECTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO: ALL DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT RECEIVED FINAL STABILIZATION. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION. EXAMINATION OF THE SITE FOR EVIDENCE OF, OR THE POTENTIAL FOR POLLUTANTS ENTERING THE RECEIVING WATERS.
STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN TO PROVIDE REASONABLE ASSURANCE THAT THEY ARE OPERATING AS DESIGNED.
LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF–SITE SEDIMENT TRACKING. ALL POINTS OF DISCHARGE INTO THE MASTER STORMWATER MANAGEMENT SYSTEM TO DETERMINE WHETHER EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES ARE EFFECTIVELY PREVENTING WATER QUALITY DEGRADATION IN THE RECEIVING WATER BODY.
B. WHEN REMEDIAL ACTION IS REQUIRED FOR COMPLIANCE, THE PLAN WILL BE REVISED AS NECESSARY AND ADDITIONAL STRUCTURAL MEASURES INSTALLED IMMEDIATELY AS WARRANTED.

1) PRODUCT SPECIFIC PRACTICES.

A) CONCRETE TRUCKS: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.
B) FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
C) PETROLEUM PRODUCTS: ALL ON–SITE 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.

2) SPILL CONTROL PRACTICES.

THESE ADDITIONAL PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION CLEANUP:
– MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED 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 ON–SITE;
– ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY AND REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY IF NECESSARY; AND
– THE SPILL PREVENTION PLAN WILL BE MODIFIED TO INCLUDE MEASURES TO PREVENT A REOCCURRENCE, HOW TO CLEAN UP IF ANOTHER OCCURS, AND A DESCRIPTION OF WHAT SPILLED, WHAT CAUSED IT, AND WHAT THE CLEANUP MEASURES ARE.

6. NON–STORMWATER DISCHARGES

NO NON–STORMWATER DISCHARGES ARE ANTICIPATED WITH THE POSSIBLE EXCEPTION OF DEWATERING. THE CONTRACTOR SHALL OBTAIN A DEWATERING PERMIT IF NECESSARY AND FOLLOW ALL STATE REQUIREMENTS AS ENFORCED BY THE WATER MANAGEMENT DISTRICT, FDEP AND MUNICIPALITY OR COUNTY WITH AUTHORITY.

7. INVENTORY FOR POLLUTION PREVENTION PLAN

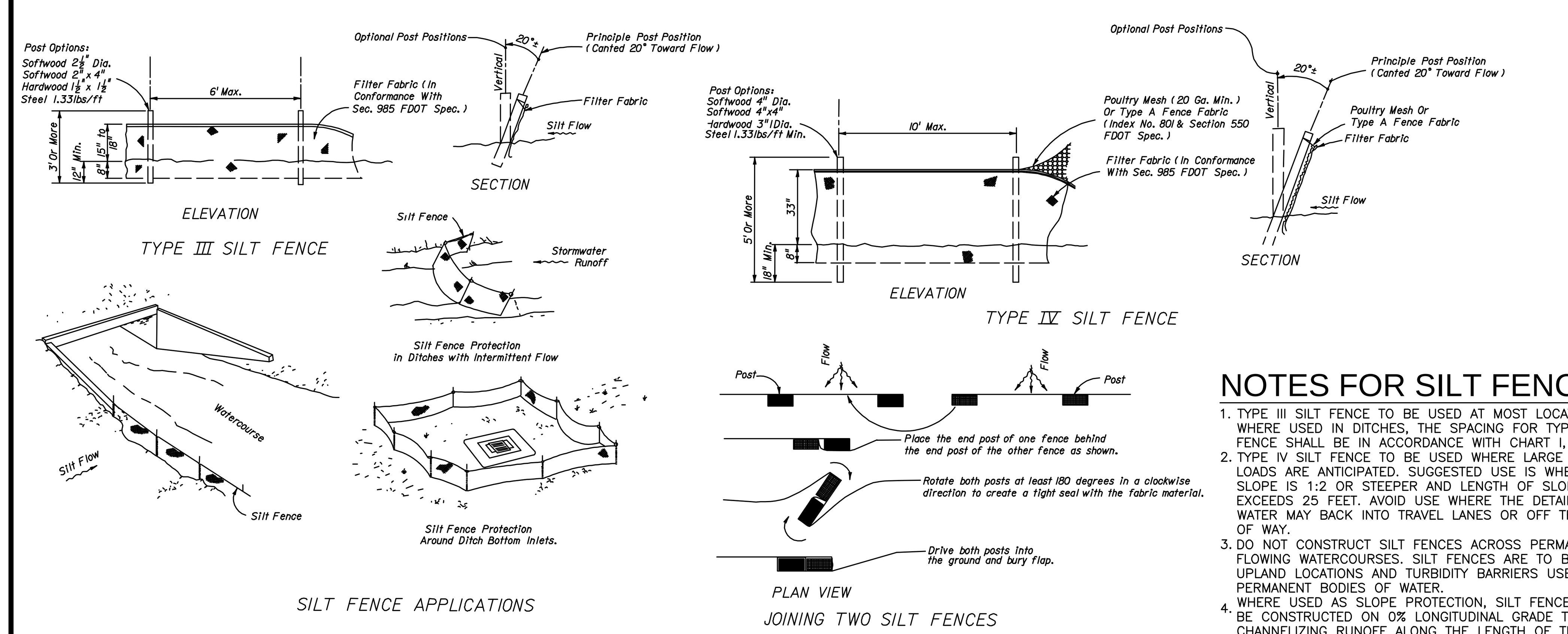
THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ON–SITE DURING CONSTRUCTION:
– CONCRETE;
– FERTILIZERS; AND
– PETROLEUM BASED PRODUCTS.

8. SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES.
THE MATERIAL MANAGEMENT PRACTICES WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.

1) GOOD HOUSEKEEPING.
THE FOLLOWING PRACTICES WILL BE FOLLOWED ON–SITE DURING THE CONSTRUCTION PROJECT.
– AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB;
– ALL MATERIALS STORED ON–SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF;
– PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURES' LABEL;
– SUBSTANCES WILL NOT BE MIXED UNLESS RECOMMENDED BY THE MANUFACTURER;
– MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED;
– WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

2) 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, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.



TYPICAL FDOT SILT FENCE DETAIL

NTS

NOTES FOR SILT FENCES

1. TYPE III SILT FENCE TO BE USED AT MOST LOCATIONS. WHERE USED IN DITCHES, THE SPACING FOR TYPE III SILT FENCE SHALL BE IN ACCORDANCE WITH CHART I, SHEET1.
2. TYPE IV SILT FENCE TO BE USED WHERE LARGE SEDIMENT LOADS ARE ANTICIPATED. SUGGESTED USE IS WHERE FILL SLOPE IS 1:2 OR STEEPER AND LENGTH OF SLOPE EXCEEDS 25 FEET. AVOID USE WHERE THE DETAINED WATER MAY BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.
3. DO NOT CONSTRUCT SILT FENCES ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
4. WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.
5. SILT FENCE TO BE PAID FOR UNDER THE CONTRCT UNIT PRICE FOR STAKED SILT FENCE, (LF).

DEWATERING SPECIFICATIONS:

1. MAINTAIN ADEQUATE SUPERVISION AND CONTROL TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY WATER, EROSION IS CONTROLLED, AND FLOODING OF EXCAVATION OR DAMAGE TO STRUCTURES DOES NOT OCCUR.
2. THE DEWATERING PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE WATER MANAGEMENT DISTRICT AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR CONSUMPTIVE USE OF GROUNDWATER. PERMITTING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. PROVIDE AN ADEQUATE SYSTEM TO LOWER AND CONTROL GROUNDWATER IN ORDER TO PERMIT EXCAVATION, CONSTRUCTION OF STRUCTURES, AND PLACEMENT OF FILL MATERIALS UNDER DRY CONDITIONS. INSTALL SUFFICIENT DEWATERING EQUIPMENT TO DRAIN WATER–BEARING STRATA ABOVE AND BELOW BOTTOM OF STRUCTURE FOUNDATIONS, DRAINS, SEWERS, AND OTHER EXCAVATIONS.
4. REDUCE HYDROSTATIC HEAD IN WATER–BEARING STRATA BELOW STRUCTURE FOUNDATIONS, DRAINS, SEWERS AND OTHER EXCAVATIONS TO EXTENT THAT WATER LEVEL AND PIEZOMETRIC WATER LEVELS IN CONSTRUCTION AREAS ARE BELOW PREVAILING EXCAVATION SURFACE.
5. PRIOR TO EXCAVATION BELOW GROUNDWATER LEVEL, PLACE SYSTEM INTO OPERATION TO LOWER WATER LEVELS AS REQUIRED AND THEN OPERATE IT CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK UNTIL DRAINS, SEWERS AND STRUCTURES HAVE BEEN CONSTRUCTED, INCLUDING PLACEMENT OF FILL MATERIALS, AND UNTIL DEWATERING IS NO LONGER REQUIRED.
6. DISPOSE OF WATER REMOVED FROM EXCAVATIONS IN A MANNER TO AVOID ENDANGERING PUBLIC HEALTH, PROPERTY, AND PORTIONS OF WORK UNDER CONSTRUCTION OR COMPLETED. DISPOSE OF WATER IN A MANNER TO AVOID INCONVENIENCE TO OTHERS. PROVIDE SUMPS, SEDIMENTATION TANKS, AND OTHER FLOW CONTROL DEVICES AS REQUIRED BY GOVERNING AUTHORITIES. TURBID WATER SHALL NOT DISCHARGE FROM THE SITE.
7. PROVIDE STANDBY EQUIPMENT ON SITE, INSTALLED AND AVAILABLE, FOR IMMEDIATE OPERATION IF REQUIRED TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS IN EVENT ANY PART OF SYSTEM BECOMES INADEQUATE OR FAILS. IF DEWATERING REQUIREMENTS ARE NOT SATISFIED DUE TO INADEQUACY OR FAILURE OF DEWATERING SYSTEM, PERFORM SUCH WORK AS MAY BE REQUIRED TO RESTORE DAMAGED STRUCTURES AND FOUNDATION SOILS AT NO ADDITIONAL EXPENSE.

CONTRACTOR SIGN-OFF / ACKNOWLEDGEMENT:

TO THE BEST OF MY KNOWLEDGE, 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 GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING 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 FINES AND IMPRISONMENT FOR KNOWING VIOLATIONS.

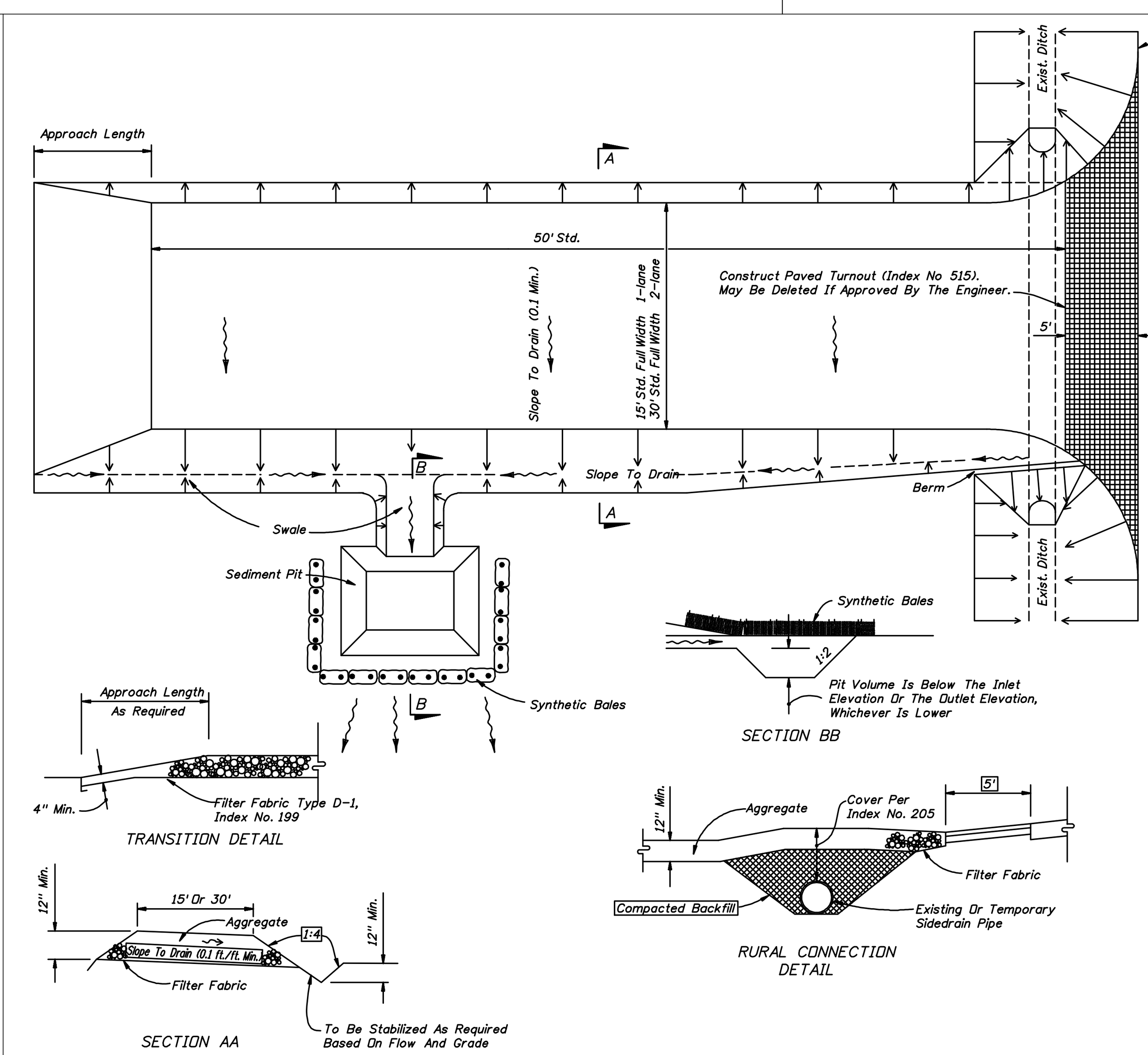
OWNER: ____________________
NAME: ____________________ TITLE: ________
SIGNATURE: ____________________ DATE: __________

CONTRACTOR'S CERTIFICATION

I 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 CONSTRUCTION ACTIVITY FROM THE SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE	COMPANY NAME AND ADDRESS	RESPONSIBLE FOR
SIGNATURE: ________ NAME: ________ DATE: ________	COMPANY: ________ ADDRESS: ________ PHONE: ________	GENERAL CONTRACTOR
SIGNATURE: ________ NAME: ________ DATE: ________	COMPANY: ________ ADDRESS: ________ ________ PHONE: ________	TEMPORARY AND PERMANENT STABILIZATION
SIGNATURE: ________ NAME: ________ DATE: ________	COMPANY: ________ ADDRESS: ________ PHONE: ________	STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, SEDIMENT BASIN

NOTE: CONTRACTOR SHALL PROVIDE ESTIMATED START DATE, COMPLETION DATE AND STABILIZATION SCHEDULE PRIOR TO EXECUTION OF STORMWATER POLLUTION PREVENTION PLAN AND SITE WORK COMMENCEMENT.

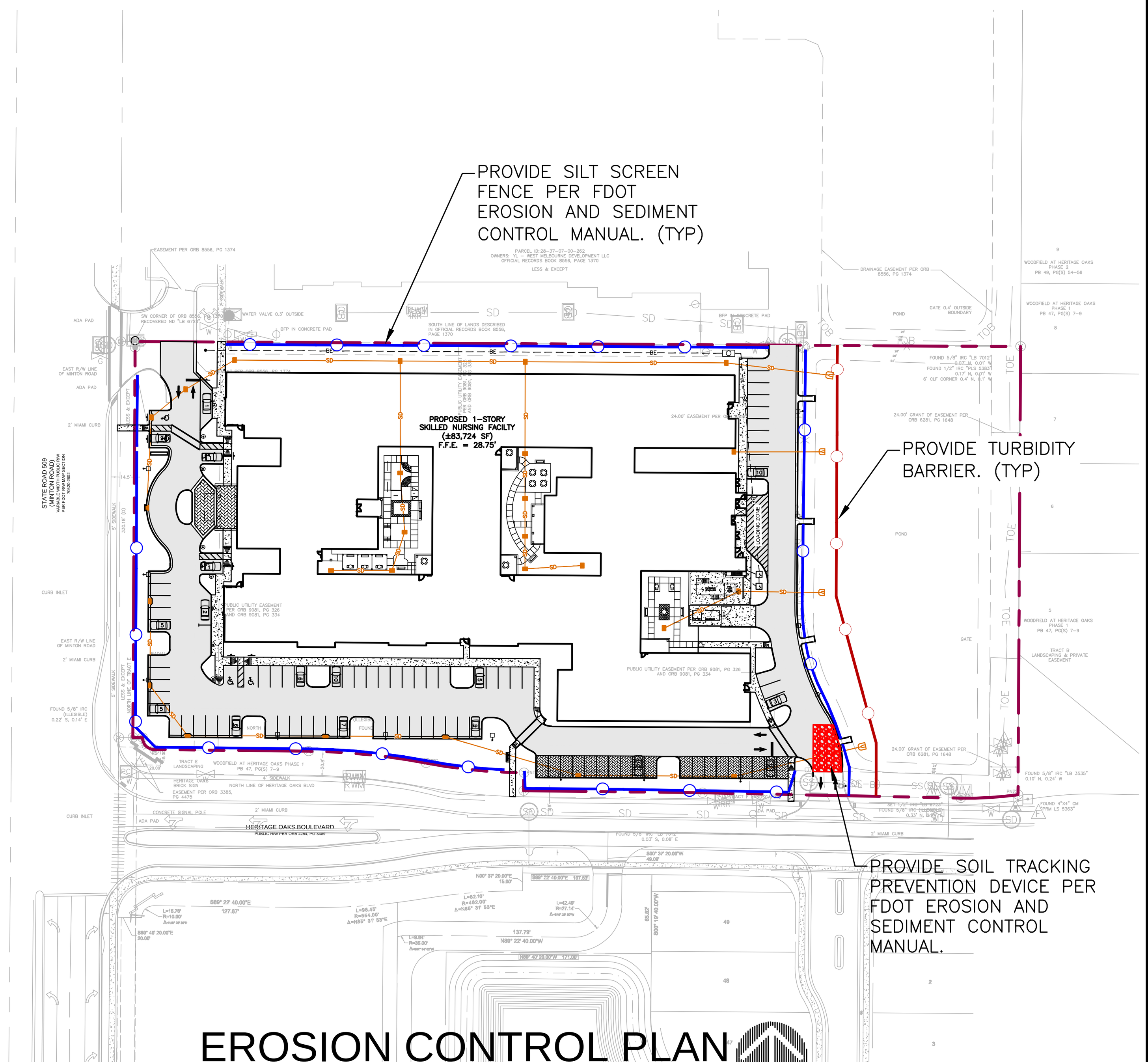


NOTES:

1. A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF TE PROJECT TO PUBLIC ROADS WHERE OFF–SITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A STPD. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFF–SITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO THE PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901–2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE UNSUITABLE.
5. THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT.
PIT VOLUMES WILL SATISFY THIS REQUIREMENT:
15'x50'=100 FT 30'x50'=200 FT
AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN THE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE HALF, IT SHALL BE CLEANED. WHEN A SWALE IS USED, SYNTHETIC BALES OR SILT FENCE SHALL BE PLACED ALONG THE ENTIRE LENGTH.
6. THE SWALE DITCH DRAINING THE STPD SHALL HAVE A 0.02% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE STPD AND TO THE SEDIMENT PIT.
7. MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDE DRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
8. THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFF–SITE TRACKING, THE STPD SHALL BE RINSED (DAILY WHEN IN USE) TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
9. A STPD SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SOIL TRACKING PREVENTION DEVICE, EA. THE UNIT PRICE SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTION, MAINTENANCE, REPLACEMENT OF MATERIALS, REMOVAL, AND RESTORATION OF THE AREA UTILIZED FOR THE STPD; INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TEMPORARY PIPE (INCLUDING MES WHEN REQUIRED), FILTER FABRIC, AGGREGATE, PAVED TURNOUT (INCLUDING ASPHALT AND BASE CONSTRUCTION), DITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENT REMOVAL AND DISPOSAL, WATER RINSING AND CLEANING OF THE STPD AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD. SYNTHETIC BALE OR BALE TYPE BARRIER SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SYNTHETIC BALES, LF. SILT FENCE SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, FL.
10. THE NORMAL SIZE OF A STANDARD STPD IS 15'x50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXISTING VEHICLES WARRANT, A 30' WIDTH STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.

SOIL TRACKING PREVENTION DEVICE

NTS



EROSION CONTROL PLAN

1"=100'

100' 0' 100' 200'

REV#	DATE	REVISION

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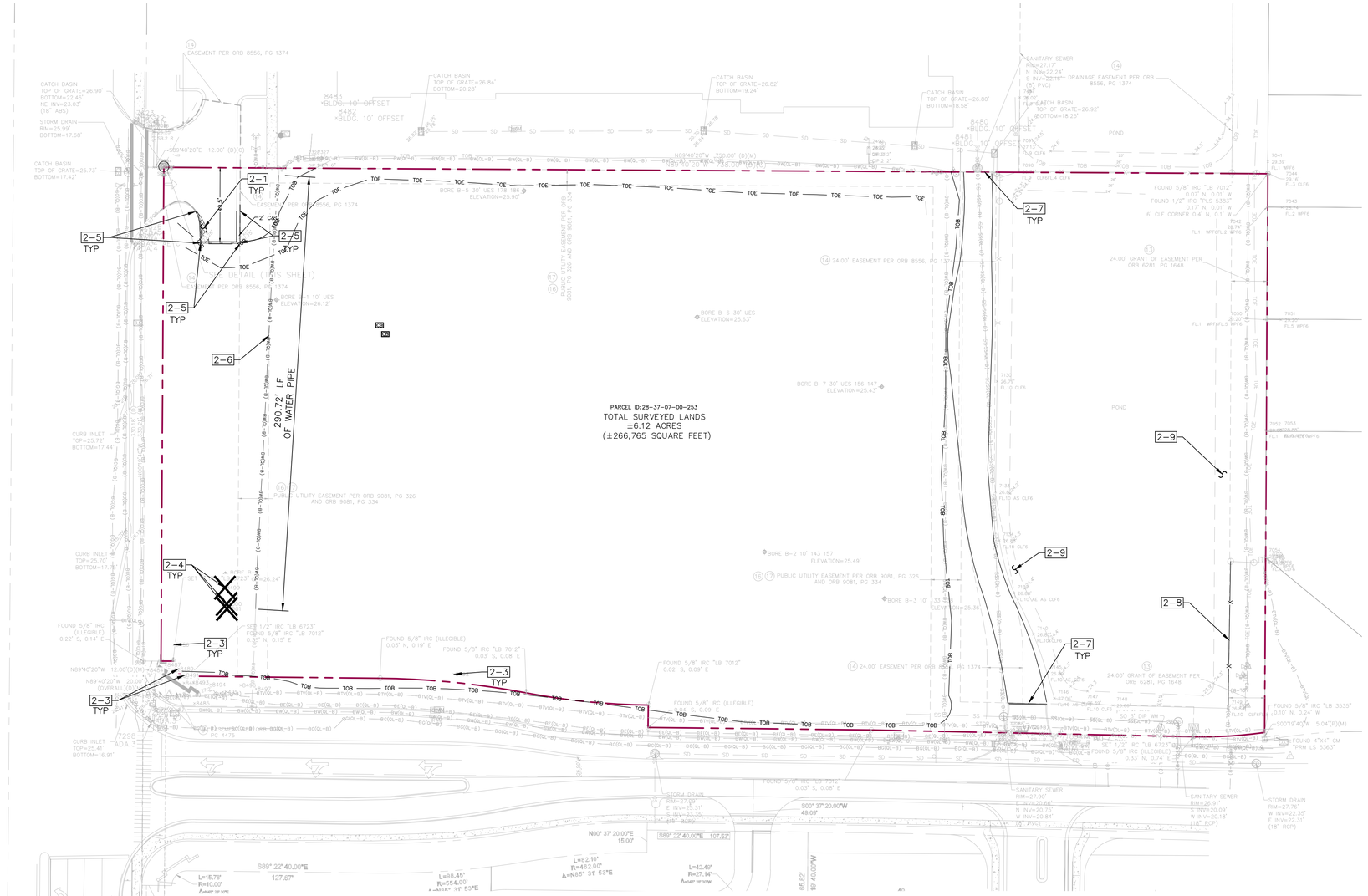
OCEANCREST SKILLED NURSING FACILITY
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	1"=100'
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	G-2



EXISTING CONDITIONS AND DEMOLITION PLAN

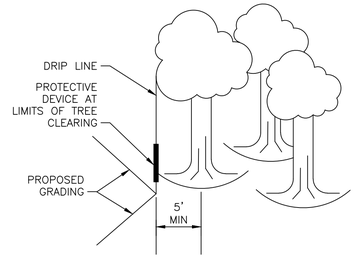
1"=40'

NOTES:

2-1. REMOVE ALL ABOVE GROUND IMPROVEMENTS WITHIN IDENTIFIED DEMOLITION AREA. CONTRACTOR TO AVOID IMPACTS TO UNDER GROUND UTILITIES TO REMAIN IN USE.
2-2. CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND OWNER'S REPRESENTATIVE ON PRESERVED TREE TRIMMING.
2-3. PRESERVE EXISTING TREE. PROVIDE TREE PROTECTION THROUGHOUT CONSTRUCTION. SEE TYPICAL DETAILS.
2-4. REMOVE ALL TREES AND ROOTS COMPLETELY NOT SHOWN FOR PRESERVATION ON DRAWING C-2.
2-5. REMOVE EXISTING CURBING. SAWCUT FOR SMOOTH STRAIGHT EDGE.
2-6. RELOCATE WATER MAIN. SEE SHEET C-4.
2-7. SAWCUT EXISTING EDGE OF PAVEMENT FOR SMOOTH STRAIGHT CONNECTION.
2-8. EXISTING CHAIN-LINK FENCE TO REMAIN.
2-9. CONTRACTOR TO CLEAR, REGRADE TO MATCH SLOPES, AND SOD POND SIDEBANKS. REFER TO SHEET C-3.

GENERAL NOTES: (ALL DRAWINGS)

1. SEE TYPICAL DETAILS ON FOLLOWING SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS. CONTRACTOR SHALL OBTAIN PERMISSION FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
3. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOD AS EXISTING. BAHIA SOD SHALL BE DEFAULT SOD IN RIGHT-OF-WAY.
4. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF UNIVERSAL ENGINEERING SUBSURFACE EXPLORATION REPORT FOR THIS SITE. CONTRACTOR SHALL OBTAIN FROM CEG OR THE GEOTECHNICAL COMPANY. UNIVERSAL PROJECT NO. 0330.2300174.0000, ADDENDUM JUNE 14, 2024.
5. SLOPE ALL SIDEWALKS TO FLOW AWAY FROM BUILDING WITH MAXIMUM 2% CROSS SLOPE.
6. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
7. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES.
8. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED, CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
9. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER STANDARD FDOT INDEX NOS. 700-010 AND 700-101.PROVIDE 36" LONG TRANSITION WITH CONSTANT SLOPE FROM TOP OF CURB TO GRADE AT TERMINATION POINT OF CURBS.
10. ALL DIMENSIONS ARE TO FACE OF CURB.
11. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DRAWING C-1 OR LANDSCAPE PLANS.
12. PROVIDE SILT FENCE ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING G-2B (SWPPP).
13. CONTRACTOR SHALL PAINT OR OTHERWISE FINISH THE DUMPSTER ENCLOSURE WALLS TO COMPLIMENT THE BUILDING. COLOR AND/OR FINISH SELECTION BY OWNER OR ARCHITECT.
14. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
15. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
16. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD 1988.
17. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
18. SEE ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUTS AND FIRE SPRINKLER/PLUMBING DRAWINGS FOR EXACT UTILITY CONNECTION LOCATIONS.
19. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED OR PER PLAN. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
20. THE FIRE LINE SHOWN DOWNSTREAM OF THE DOUBLE DETECTOR CHECK VALVE ASSEMBLY IS FOR AN APPROXIMATE LOCATION ONLY. THE FINAL DESIGN SHALL BE FROM THE FIRE PROTECTION ENGINEER.
21. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
22. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 811.
23. SUBMIT PROPOSED JOINT PLAN TO ENGINEER A MINIMUM OF ONE WEEK PRIOR TO POURING CONCRETE PAVEMENT FOR APPROVAL OR MODIFICATIONS.
24. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
25. CONTRACTOR SHALL CLEAR ALL TREES AND VEGETATION AS NECESSARY TO COMPLETE ROADWAY IMPROVEMENTS AND MEET FDOT CLEAR ZONE REQUIREMENTS. SOD ALL DISTURBED AREAS WITH BAHAI SOD.
26. JACK-AND-BORE OR DIRECTIONAL DRILL LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT SURVEY DATA. CONTRACTOR SHALL VERIFY EXACT LENGTH REQUIRED PER UTILITY DESIGN. PROVIDE ADDITIONAL PIPING AND/OR DRILLING IF NECESSARY. NOTIFY ENGINEER OF ANY SIGNIFICANT DISTANCE INCREASES.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND OWNER PRIOR TO ORDERING MATERIALS OR INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
29. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. s. 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEAR ZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 102-600.
30. STORM DRAIN CLEAN OUT SHALL MATCH SANITARY SEWER CLEAN OUT.
31. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
32. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
33. PROVIDE TRUNCATED DOMES IN RIGHT-OF-WAYS ONLY AND TACTILE SURFACE PER FLORIDA BUILDING CODE REQUIREMENTS ON-SITE AND IN RIGHT OF WAY.



NOTE:
PROVIDE PROTECTIVE DEVICES WHICH WILL EFFECTIVELY PROTECT THE ROOTS, TRUNK, AND TOPS OF TREES RETAINED ON-SITE. THIS DEVICE SHALL BE FIELD FENCE, BOARD FENCE, CORD FENCE OR EQUAL AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TYPICAL TREE PROTECTION DETAIL

NTS

40' 0' 40' 80'

REV#	DATE	REVISION
1	01/15/26	ISSUED FOR PERMIT
2	02/18/26	CITY COMMENTS

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OCEANCREST SKILLED NURSING FACILITY

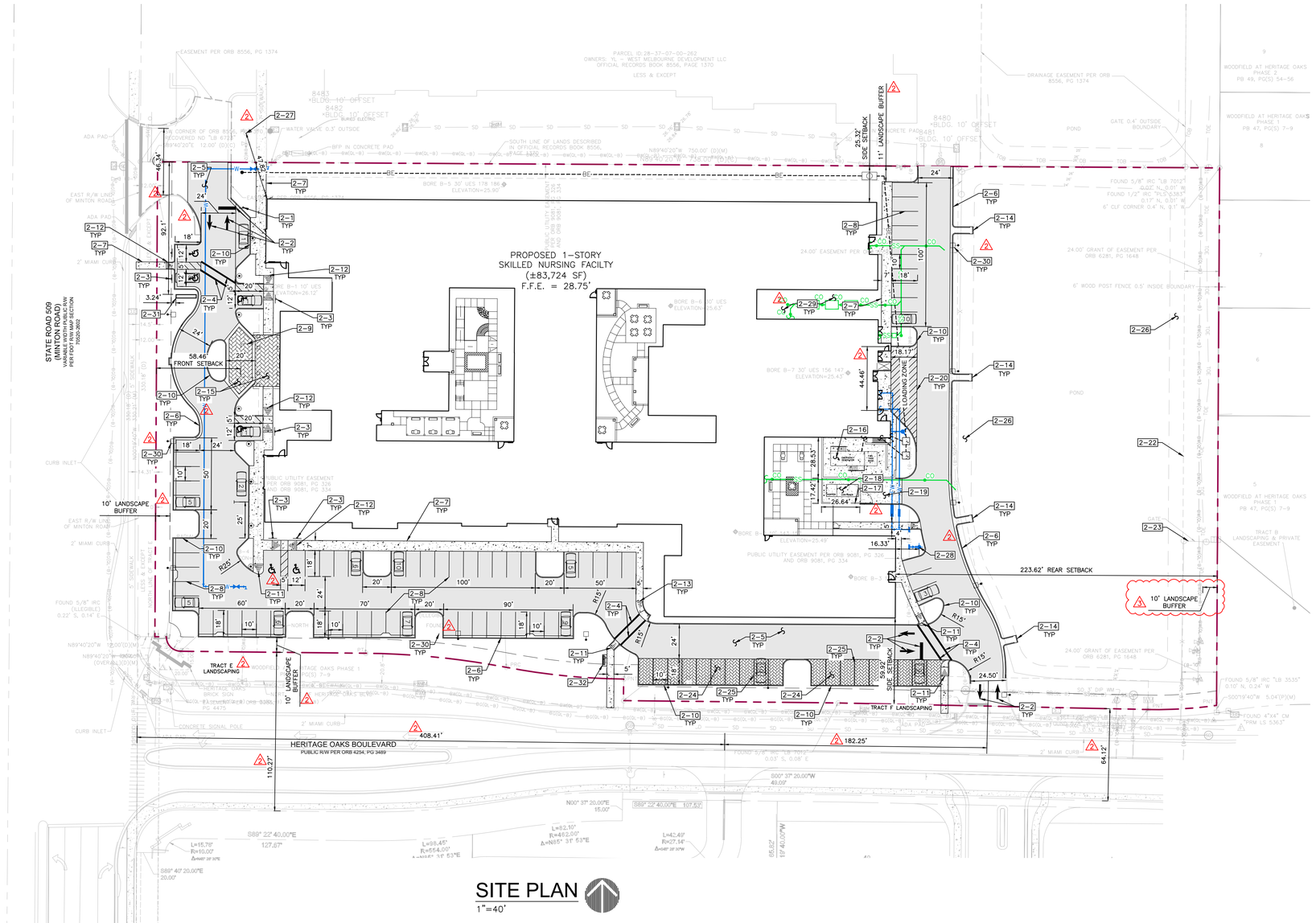
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
EXISTING CONDITIONS AND DEMOLITION PLAN

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	1"=40'
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-1



SITE PLAN
1"=40'

40' 0' 40' 80'

NOTES:

2-1. PROVIDE STOP SIGN PER MUTCD R1-1. SEE TYPICAL DETAILS.
2-2. PROVIDE WHITE PAINTED 24" STOP BAR AND DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346.
2-3. PROVIDE HANDICAPPED PARKING SPACE AND SIGNAGE. SEE TYPICAL DETAILS.
2-4. PROVIDE PAINTED WHITE 12" PARALLEL CROSSWALK STRIPES PER FDOT INDEX NO. 711-001.
2-5. PROVIDE ASPHALT PAVEMENT. SEE TYPICAL DETAIL.
2-6. PROVIDE FDOT TYPE "F" CURB AND GUTTER. SEE GRADING AND DRAINAGE PLAN FOR FLUSH CURB LOCATIONS. SEE TYPICAL DETAILS.
2-7. PROVIDE RAISED CONCRETE SIDEWALK. SEE TYPICAL DETAILS.
2-8. PROVIDE PAINTED 4" WHITE STRIPE PER FDOT INDEX NO. 711-001.
2-9. PROVIDE CANOPY. SEE ARCHITECTURAL DRAWINGS.
2-10. PROVIDE FDOT TYPE "D" CURB. SEE TYPICAL DETAILS.
2-11. PROVIDE MAXIMUM 6 FOOT LONG, 6 INCH RISE HANDICAP ACCESSIBLE RAMP PER ADA/FLORIDA ACCESSIBILITY REQUIREMENTS AND FDOT INDEX 522-002, TYPE CR-E.
2-12. PROVIDE MAXIMUM 6 FOOT LONG, 6 INCH RISE HANDICAP ACCESSIBLE RAMP PER ADA/FLORIDA ACCESSIBILITY REQUIREMENTS AND FDOT INDEX 522-002, TYPE CR-C.
2-13. PROVIDE MAXIMUM 6 FOOT LONG, 6 INCH RISE HANDICAP ACCESSIBLE RAMP PER ADA/FLORIDA ACCESSIBILITY REQUIREMENTS AND FDOT INDEX 522-002, TYPE CR-D.
2-14. PROVIDE FLUME.
2-15. PROPOSED PAVERS / STAMPED PAVEMENT.
2-16. PROPOSED BACKUP GENERATOR. COORDINATE WITH ELECTRICAL PLANS.
2-17. PROVIDE SOLID WASTE ENCLOSURE.
2-18. PROVIDE TRASH COMPACTOR. COORDINATE WITH ELECTRICAL PLANS.
2-19. PROVIDE CONCRETE PAVING WITH THICKENED EDGE ON ALL SIDES.
2-20. PROVIDE 4" WHITE STRIPES @ 45', 18" O.C. LOADING ZONE STRIPING AND "LOADING ZONE" TEXT.
2-21. NOT USED.
2-22. PROPOSED 6' TALL ENHANCED LANDSCAPE BUFFER. REFER TO LANDSCAPE PLANS.
2-23. EXISTING UTILITY EASEMENT GATE AND EXISTING FENCE TO REMAIN.
2-24. PROPOSED PERVIOUS OPEN PAVERS WITH GRASS. FINAL STYLE PER ARCHITECTURAL PLANS.
2-25. PROVIDE SOLID STONE PAVERS FOR PARKING STRIPES. FINAL STYLE PER ARCHITECTURAL PLANS.
2-26. CONTRACTOR TO CLEAR, REGRADE TO MATCH SLOPES, AND SOD POND SIDEBANKS. REFER TO SHEET C-3.
2-27. EXISTING FIRE HYDRANT.
2-28. PROPOSED FIRE HYDRANT.
2-29. UTILITY COURTYARD.
2-30. PROVIDE SITE LIGHTING. REFER TO PHOTOMETRIC PLAN.
2-31. PROVIDE MONUMENT SIGN.
2-32. PROVIDE PARK BENCH.
2-33. INSTALL SHADE STRUCTURE AT EXISTING BUS STOP. LNI MANUFACTURING MODEL GRAND MIRAGE. MOVE EXISTING BENCH TO UNDER SHADE STRUCTURE.

GENERAL NOTES: (ALL DRAWINGS)

1. SEE TYPICAL DETAILS ON FOLLOWING SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS. CONTRACTOR SHALL OBTAIN PERMISSION FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
3. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOD AS EXISTING. BAHIA SOD SHALL BE DEFAULT SOD IN RIGHT-OF-WAY.
4. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF ENGINEERING SUBSURFACE EXPLORATION REPORT FOR THIS SITE. CONTRACTOR SHALL OBTAIN FROM CEG OR THE GEOTECHNICAL COMPANY. SLOPE ALL SIDEWALKS TO FLOW AWAY FROM BUILDING WITH MAXIMUM 2% CROSS SLOPE.
5. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
6. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES.
7. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED, CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
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9. ALL DIMENSIONS ARE TO FACE OF CURB.
10. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DRAWING C-1 OR LANDSCAPE PLANS.
11. PROVIDE SILT FENCE ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING C-2 (SWPPP).
12. CONTRACTOR SHALL PAINT OR OTHERWISE FINISH THE DUMPSTER ENCLOSURE WALLS TO COMPLIMENT THE BUILDING. COLOR AND/OR FINISH SELECTION BY OWNER OR ARCHITECT.
13. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
14. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
15. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD88.
16. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
17. SEE ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUTS AND FIRE SPRINKLER/PLUMBING DRAWINGS FOR EXACT UTILITY CONNECTION LOCATIONS.
18. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED OR PER PLAN. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
19. THE FIRE LINE SHOWN DOWNSTREAM OF THE DOUBLE DETECTOR CHECK VALVE ASSEMBLY IS FOR AN APPROXIMATE LOCATION ONLY. THE FINAL DESIGN SHALL BE FROM THE FIRE PROTECTION ENGINEER.
20. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
21. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 811.
22. SUBMIT PROPOSED JOINT PLAN TO ENGINEER A MINIMUM OF ONE WEEK PRIOR TO POURING CONCRETE PAVEMENT FOR APPROVAL OR MODIFICATIONS.
23. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
24. CONTRACTOR SHALL CLEAR ALL TREES AND VEGETATION AS NECESSARY TO COMPLETE IMPROVEMENTS AND MEET FDOT CLEAR ZONE REQUIREMENTS. SOD ALL DISTURBED AREAS WITH BAHAI SOD.
25. JACK-AND-BORE OR DIRECTIONAL DRILL LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT SURVEY DATA. CONTRACTOR SHALL VERIFY EXACT LENGTH REQUIRED PER UTILITY DESIGN. PROVIDE ADDITIONAL PIPING AND/OR DRILLING IF NECESSARY. NOTIFY ENGINEER OF ANY SIGNIFICANT DISTANCE INCREASES.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND OWNER PRIOR TO ORDERING MATERIALS OR INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED.
27. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
28. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. s. 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEAR ZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 102-600.
29. STORM DRAIN CLEAN OUT SHALL MATCH SANITARY SEWER CLEAN OUT.
30. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
31. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
32. PROVIDE TRUNCATED DOMES IN RIGHT-OF-WAYS ONLY AND TACTILE SURFACE PER FLORIDA BUILDING CODE REQUIREMENTS ON-SITE AND IN RIGHT OF WAY.

REV#	DATE	REVISION
1	01/15/26	ISSUED FOR PERMIT
2	02/18/26	CITY COMMENTS
3	03/30/26	REVISION #2 RESPONSES TO DRC COMMENTS

CONSTRUCTION ENGINEERING GROUP
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OCEANCREST SKILLED NURSING FACILITY

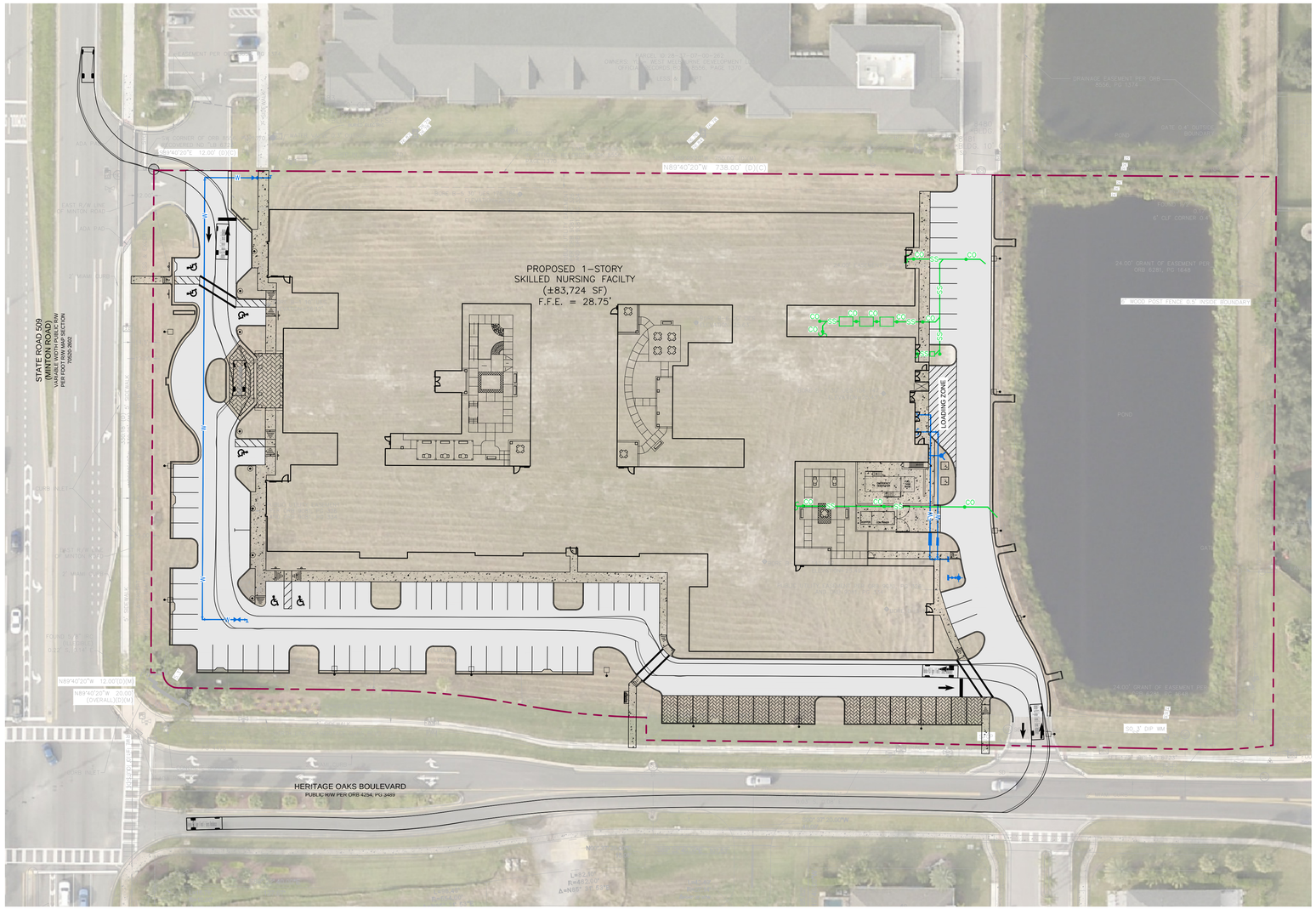
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MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
SITE PLAN

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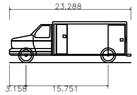
JAKE T. WISE, PE
PE # 55405

DATE 5/16/25
SCALE 1"=40'
PROJ. NO. : 240230
DESIGNED BY: NCW
DRAWN BY: JDH
CHECKED BY: JTW
DRAWING NO. C-2A



AMBULANCE ROUTE PLAN

1"=40'



Horton 453 Type I Ford E-Series Ambulance	
Overall Length	23.288ft
Overall Width	8.021ft
Overall Body Height	7.853ft
Min Body Ground Clearance	1.265ft
Track Width	8.021ft
Lock-to-lock time	5.00s
Curb to Curb Turning Radius	27.400ft

AMBULANCE DETAIL

NTS

NOTE:

2-1. NEW SHEET.

40' 0' 40' 80'

REV#	DATE	REVISION
2	02/18/26	CITY COMMENTS

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OCEANCREST SKILLED NURSING FACILITY

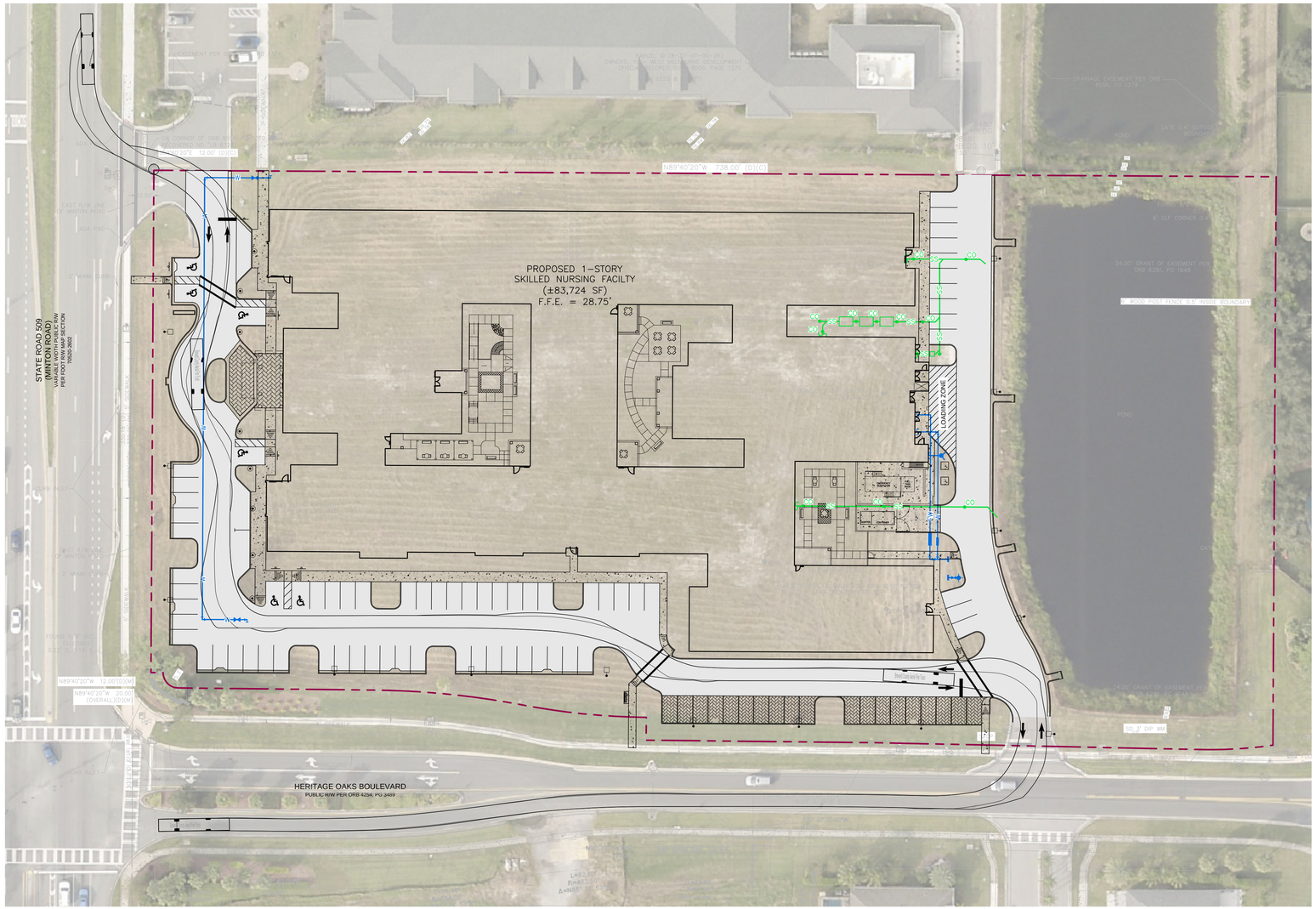
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AMBULANCE ROUTE PLAN

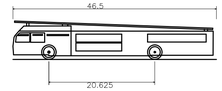
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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	1"=40'
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-2B



FIRE TRUCK ROUTE PLAN
1"=40'



Brevard County Aerial Fire Truck	
Overall Length	46.500ft
Overall Width	8.068ft
Min Body Ground Clearance	1.337ft
Track Width	8.068ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	35.330ft

FIRE TRUCK DETAIL
NTS

NOTE:
2–1. NEW SHEET.

40' 0' 40' 80'

REV#	DATE	REVISION
2	02/18/26	CITY COMMENTS

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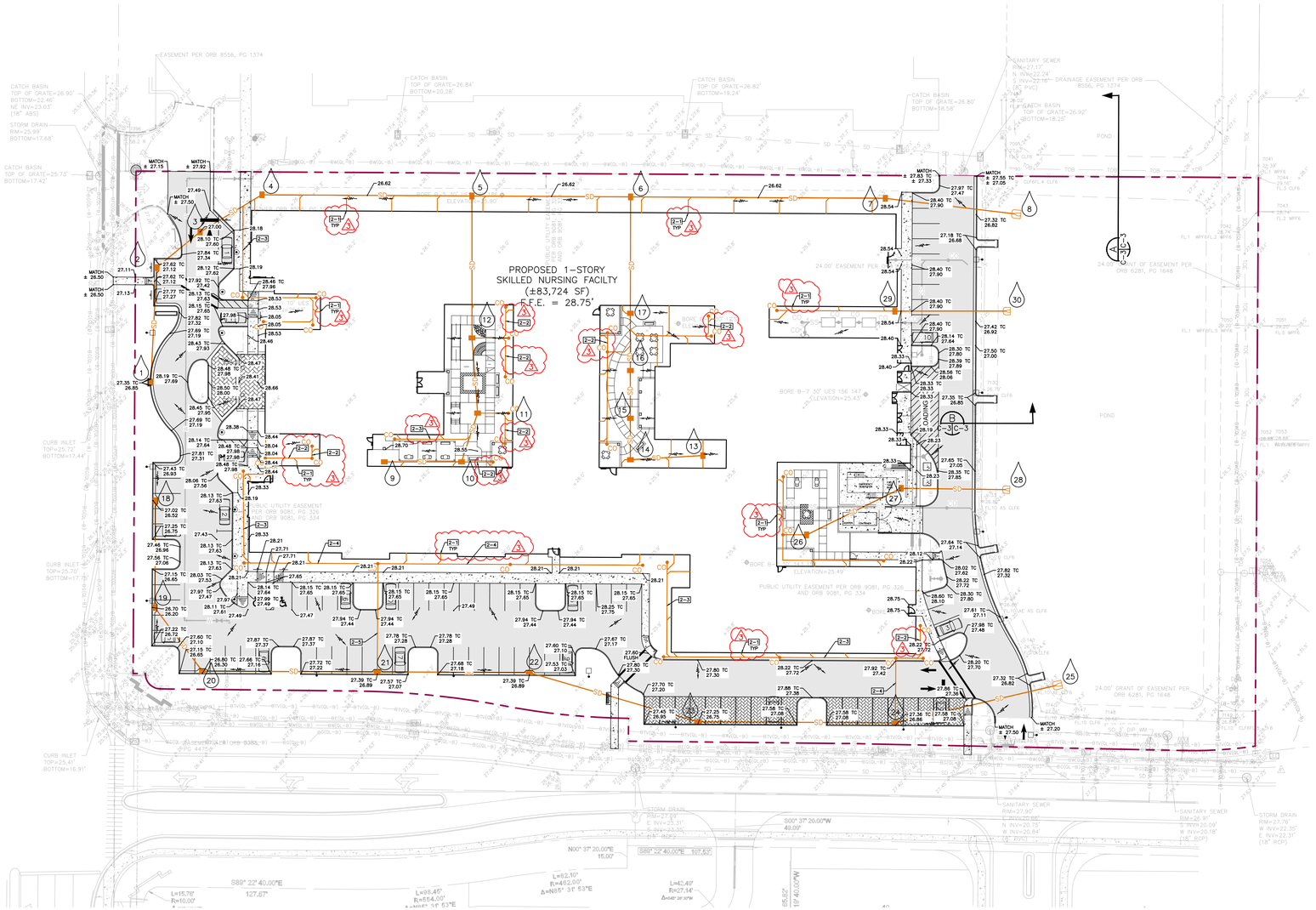
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FIRE TRUCK ROUTE PLAN

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
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PROJ. NO. :	240230
DESIGNED BY:	NCW
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CHECKED BY:	JTW
DRAWING NO.	C-2C



GRADING & DRAINAGE PLAN

1"=40'

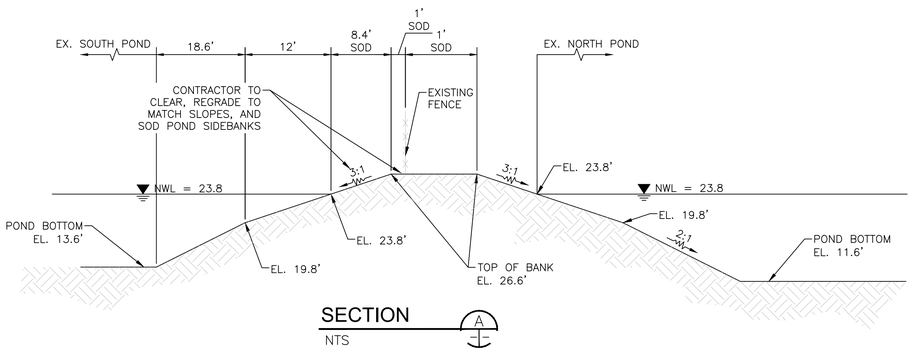
DRAINAGE STRUCTURE TABLE							
NAME	DESCRIPTION - FDOT INDEX NO.	TOP ELEVATION	INVERTS	SIZE	PIPE LENGTH (FEET)	DOWNSTREAM STRUCTURE	COMMENT
1	TYPE-C 425-052	26.85	N = 24.00	18"	66	2	HDPE
2	TYPE-C 425-052	27.05	S = 23.65 NE = 23.65	18"	43	3	HDPE
3	TYPE-C 425-052	27.00	SW = 23.43 NE = 23.43	18"	47	4	HDPE
4	TYPE-C 425-052	26.42	SW = 23.19 NE = 23.19	18"	138	5	HDPE
5	TYPE-C 425-052	26.42	W = 22.50 E = 22.50 S = 25.07	18"	104	6	HDPE
6	TYPE-C 425-052	26.42	W = 21.98 E = 21.98 S = 24.78	18"	167	7	HDPE
7	TYPE-C 425-052	26.42	W = 21.14 E = 18.25	18"	90	8	HDPE
8	M.E.S.	-	-	-	-	-	-
9	YARD DRAIN	28.55	E = 26.50	12"	51	10	NYLOPLAST
10	YARD DRAIN	28.45	W = 26.00 N = 26.00	12"	34 △1	11	NYLOPLAST
11	YARD DRAIN	28.34	S = 26.00 N = 26.00	12"	93	12	NYLOPLAST
12	YARD DRAIN	28.42	S = 26.00 N = 26.00	12"	93	5	NYLOPLAST
13	YARD DRAIN	28.67	N = 26.50	12"	47	14	NYLOPLAST
14	YARD DRAIN	28.67	S = 26.50 N = 26.50	12"	27	12	NYLOPLAST
15	YARD DRAIN	28.47	S = 26.23 N = 26.23	12"	31	13	NYLOPLAST
16	YARD DRAIN	28.47	S = 25.92 N = 25.92	12"	38	14	NYLOPLAST
17	YARD DRAIN	28.68	S = 25.54 N = 25.54	12"	77	6	NYLOPLAST
18	TYPE-C 425-052	26.52	S = 23.00	18"	70	16	HDPE
19	TYPE-C 425-052	26.20	N = 22.65 SE = 22.65	18"	52	17	HDPE
20	TYPE-C 425-052	26.30	NW = 22.39 E = 22.39	18"	115	18	HDPE
21	TYPE-C 425-052	26.89	W = 21.82 E = 21.82	18"	100	19	HDPE
22	TYPE-E 425-052	26.89	W = 21.32 E = 20.82	24"	115	20	HDPE
23	TYPE-E 425-052	26.75	W = 20.49 E = 20.49	24"	130	21	HDPE
24	TYPE-E 425-052	26.86	W = 19.94 E = 18.54	24"	112	22	HDPE
25	M.E.S.	-	W = 17.55	24"	-	-	-
26	TYPE-C 425-052	27.50	E = 24.50	18"	70	24	HDPE
27	TYPE-C 425-052	27.50	W = 24.15 E = 24.15	18"	71	25	HDPE
28	M.E.S.	-	W = 23.79	-	-	-	-
29	TYPE-C 425-052	28.50	E = 24.38	18"	76	27	HDPE
30	M.E.S.	-	W = 24.00	-	-	-	-

STORM DRAIN STRUCTURE NOTES:

1. ALL STRUCTURES SHALL BE MINIMUM 6" DEEPER THAN LOWEST PIPE INVERT.
2. ALL RIM ELEVATION FOR MANHOLES AND INLETS IS TOP OF STRUCTURE.
6. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD 88.
7. ADS STORM PIPE SHALL BE N-12 CLASS II WITH WATERTIGHT JOINTS.
8. ALL GRATES SHALL BE GALVANIZED STEEL WITH H-20 LOADING.
9. ALL YARD DRAINS ARE TO BE NYLOPLAST OR APPROVED EQUAL FOR THE TRACK WITH 2'X2' H-20 RATED, LOCKABLE GRATES
10. ALL NYLOPLAST DRAIN BASINS AND INLINE DRAINS SHALL BE ABLE TO ACCOMMODATE PIPE SIZES PROPOSED.
11. ALL ELEVATIONS PRESENTED HEREIN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

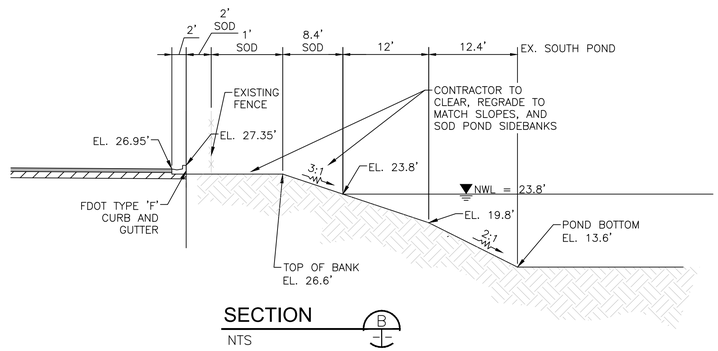
NOTES:

2-1. PROVIDE 4" CONNECTION TO DOWNSPOUT.
2-2. PROVIDE 4" PVC HEADER PIPE @ 1.0% SLOPE.
2-3. PROVIDE 6" HDPE HEADER PIPE @ 1.0% SLOPE.
2-4. PROVIDE 8" HDPE HEADER PIPE @ 1.0% SLOPE.
2-5. PROVIDE 12" HDPE DRAINAGE PIPE @ 1.4% SLOPE.
UPSTREAM INVERT = 24.00, DOWNSTREAM INVERT = 23.00 △3



SECTION A

NTS



SECTION B

NTS

NOTE:

△2 △3
2-1. ADDED FLOW ARROWS TO PARKING LOT.
2-2. ADDED ROOF DRAIN NETWORK.

40' 0' 40' 80'

REV#	DATE	REVISION
1	01/15/26	ISSUED FOR PERMIT
2	02/18/26	CITY COMMENTS
3	03/30/26	REVISION #2 RESPONSES TO DRC COMMENTS

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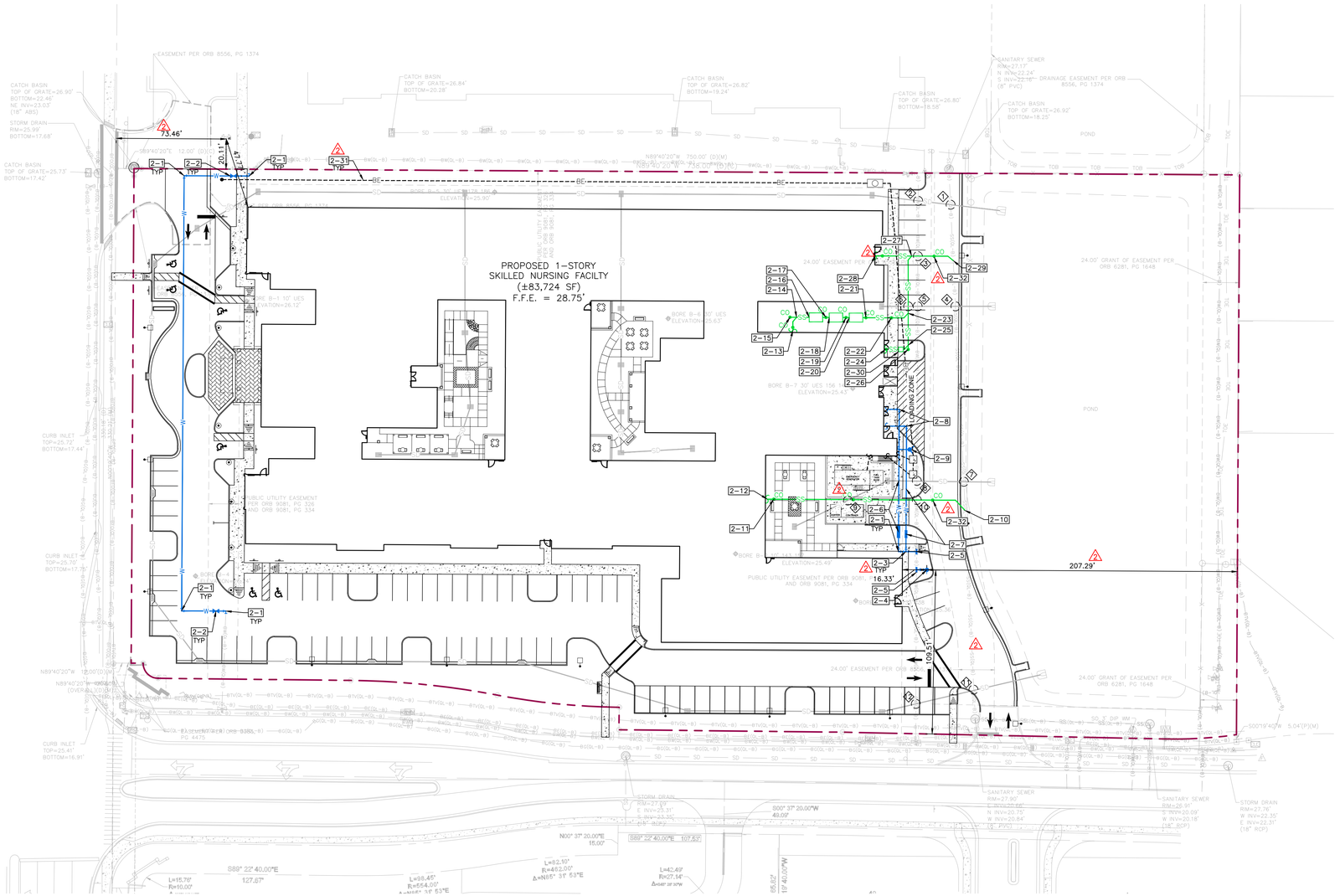
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MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
GRADING & DRAINAGE PLAN

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	1"=40'
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-3



PIPE CONFLICT TABLE

1	EXISTING SEWER OVER PROPOSED STORM 8" PVC SEWER B.O.P. = 21.99' 18" HDPE STORM T.O.P. = 19.70' CLEARANCE = 2.29'
2	EXISTING WATER OVER PROPOSED STORM 8" PVC WATER B.O.P. = 20.32' 18" HDPE STORM T.O.P. = 19.82' CLEARANCE = 0.50'
3	PROPOSED SEWER OVER EXISTING WATER 6" PVC SEWER B.O.P. = 22.26' 8" PVC WATER T.O.P. = 21.13' CLEARANCE = 1.13'
4	PROPOSED STORM OVER EXISTING SEWER 18" HDPE STORM B.O.P. = 24.05' 8" PVC SEWER T.O.P. = 22.55' CLEARANCE = 1.50'
5	PROPOSED STORM OVER EXISTING WATER 18" HDPE STORM B.O.P. = 24.01' 8" PVC WATER T.O.P. = 21.13' CLEARANCE = 2.88'
6	PROPOSED STORM OVER PROPOSED SEWER 18" HDPE STORM B.O.P. = 24.04' 8" PVC SEWER T.O.P. = 23.48' CLEARANCE = 0.56'
7	PROPOSED STORM OVER EXISTING SEWER 18" HDPE STORM B.O.P. = 23.80' 8" PVC SEWER T.O.P. = 22.10' CLEARANCE = 1.70'
8	PROPOSED STORM OVER EXISTING WATER 18" HDPE STORM B.O.P. = 23.64' 8" PVC WATER T.O.P. = 21.13' CLEARANCE = 2.51'
9	PROPOSED STORM OVER PROPOSED SEWER 18" HDPE STORM B.O.P. = 24.11' 8" PVC WATER T.O.P. = 23.48' CLEARANCE = 0.63'
10	PROPOSED SEWER OVER EXISTING WATER 8" PVC SEWER B.O.P. = 22.64' 8" PVC WATER T.O.P. = 21.13' CLEARANCE = 1.51'
11	EXISTING SEWER OVER PROPOSED STORM 8" PVC SEWER B.O.P. = 20.75' 24" HDPE STORM T.O.P. = 19.90' CLEARANCE = 0.85'
12	EXISTING WATER OVER PROPOSED STORM 8" PVC SEWER B.O.P. = 20.40' 24" HDPE STORM T.O.P. = 19.90' CLEARANCE = 0.50'

UTILITY GENERAL NOTES:

1. ALL ELEVATIONS PRESENTED HEREIN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. ELECTRIC SERVICE FROM FPL LINE TO BUILDING SHALL BE CONSTRUCTED UNDERGROUND.

NOTES:

2-1. PROVIDE 8" 90° BEND.
2-2. PROVIDE 8" GATE VALVE. SEE TYPICAL DETAIL.
2-3. PROVIDE 6" TEE.
2-4. PROVIDE FIRE HYDRANT ASSEMBLY.
2-5. PROVIDE 6" WET TAP.
2-6. PROVIDE 6" DOUBLE DETECTOR CHECK VALVE (DDCV) & FIRE WATER MAIN.
2-7. PROVIDE 3" POTABLE WATER METER, RPZ BFP, & WATER SERVICE.
2-8. PROVIDE 90° BEND.
2-9. PROVIDE FIRE DEPARTMENT CONNECTION (FDC).
2-10. PROVIDE 8" TAP INTO EXISTING GRAVITY SANITARY SEWER MAIN AT INV. = 21.80'. 130 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-11. PROVIDE 6" SANITARY SEWER CLEAN OUT AT INV. = 23.10'.
2-12. SANITARY SEWER BUILDING CONNECTION IN AT INV. = 32.24'. (REFER TO ARCHITECTURAL PLANS FOR CONTINUATION.)
2-13. SANITARY SEWER BUILDING CONNECTION OUT AT INV. = 23.96'. 10 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-14. WYE INTO 6" SANITARY SEWER MAIN AT INV. = 23.68'
2-15. PROVIDE 6" SANITARY SEWER CLEAN OUT AT INV. = 23.73'.
2-16. PROVIDE 1,000 GAL GREASE TRAP. SEE PLUMBING PLANS FOR SIZE & DETAILS. INV. IN = 23.88'. INV. OUT = 23.63'.
2-17. PROVIDE 6" CLEAN OUT AT INV. = 23.63'.
2-18. PROVIDE 1,000 GAL GREASE TRAP. SEE PLUMBING PLANS FOR SIZE & DETAILS. INV. IN = 23.63'. INV. OUT = 23.38'.
2-19. PROVIDE 6" CLEAN OUT AT INV. = 23.38'.
2-20. PROVIDE 1,000 GAL GREASE TRAP. SEE PLUMBING PLANS FOR SIZE & DETAILS. INV. IN = 23.38'. INV. OUT = 23.13'.
2-21. PROVIDE 6" CLEAN OUT AT INV. = 23.13'. 17 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-22. PROVIDE 6" CLEAN OUT AT INV. = 22.95'. 13 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-23. WYE INTO 6" SANITARY SEWER MAIN AT INV. = 22.80'.
2-24. SANITARY SEWER BUILDING CONNECTION OUT AT INV. = 23.18'. 17 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-25. WYE INTO 6" SANITARY SEWER MAIN AT INV. = 23.01'.
2-26. PROVIDE 6" CLEAN OUT AT INV. = 23.06. 63 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-27. WYE INTO 6" SANITARY SEWER MAIN AT INV. = 22.40'.
2-28. SANITARY SEWER BUILDING CONNECTION OUT AT INV. = 22.65'. PROVIDE 6" CLEANOUT 5' OUTSIDE BUILDING. 55 LINEAR FEET OF 6" PVC AT 1.0% SLOPE.
2-29. WYE INTO EXISTING GRAVITY SANITARY SEWER MAIN AT INV. = 22.10'.
2-30. PROVIDE 100 GALLON SOLIDS INTERCEPTOR (3'X3').
2-31. PROVIDE BURIED ELECTRICAL SERVICE. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PLANS.
2-32. PROVIDE 6" SANITARY SEWER CLEANOUT AT EASEMENT LINE. PRIVATE/PUBLIC POINT OF ACCEPTANCE TO CITY SEWER.

UTILITY PLAN

1"=40'

NOTE: 3

2-1. SITE LIGHTING DESIGN HAS BEEN UPDATED.

40' 0' 40' 80'

REV#	DATE	REVISION
1	01/15/26	ISSUED FOR PERMIT
2	02/18/26	CITY COMMENTS
3	03/30/26	REVISION #2 RESPONSES TO DRC COMMENTS

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OCEANCREST SKILLED NURSING FACILITY

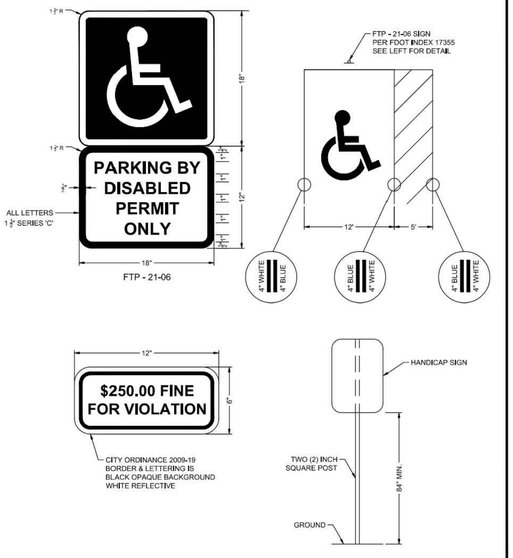
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DRAWING TITLE
UTILITY PLAN

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JAKE T. WISE, PE
PE # 55405

DATE 5/16/25
SCALE 1"=40'
PROJ. NO. : 240230
DESIGNED BY: NCW
DRAWN BY: JDH
CHECKED BY: JTW
DRAWING NO. C-4



ACCESSIBLE PARKING SPACE AND SIGNAGE

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	M-1	

SANITARY SEWER GENERAL NOTES:

1. ALL HARDWARE, MISCELLANEOUS METAL PARTS AND THE LIKE SHALL BE TYPE 304 STAINLESS STEEL.
2. GRAVITY SEWER LINES SHALL BE PVC SDR 35, HDPE DR 17, OR DUCTILE IRON PRESSURE CLASS 200, LINED WITH P-401 CERAMIC EPOXY WITH QUARTZ PIGMENT AND POLYETHYLENE ENCASEMENT.
3. MANHOLES, GREASE INTERCEPTORS AND CONCRETE WASTEWATER STRUCTURES SHALL BE LINED AND COATED WITH RAVEN 405 OR COAL TAR EPOXY.
4. SEWER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY TRENCH DETAILS T-1 THROUGH T-7.
5. GRAVITY SEWER MAINS SHALL BE 8" MINIMUM AND TERMINATE IN A MANHOLE. MANHOLES SHALL BE LOCATED IN GRASS AREAS, MIDDLE OF STREET OR CENTERED IN A DRIVE LANE. ALL LATERALS SHALL TERMINATE IN A SEWER MAIN AND SHALL BE AT LEAST 5' FROM THE NEAREST MANHOLE.
6. MANHOLES DEEPER THAN 12', DROP MANHOLES OR MANHOLES SERVICING PIPE 36" AND LARGER SHALL BE 72" DIAMETER WITH ECCENTRIC CONE WITH 30" OPENING, FRAME, AND COVER SHALL HAVE 20" AND 30" CLEAR OPENINGS.
7. MINIMUM SLOPES FOR GRAVITY SEWER SHALL BE 0.40% WITH THE HIGHEST RUN NOT LESS THAN 0.44%.
8. NO OUTSIDE DRAINS (FLOOR, YARD OR PATIO DRAINS) SHALL BE CONNECTED TO THE SANITARY SEWER SYSTEM.
9. ALL VAULTS, WET WELLS, GREASE TRAPS AND MANHOLES TWO COATS OF COAL TAR EPOXY ON THE INTERIOR AND EXTERIOR.

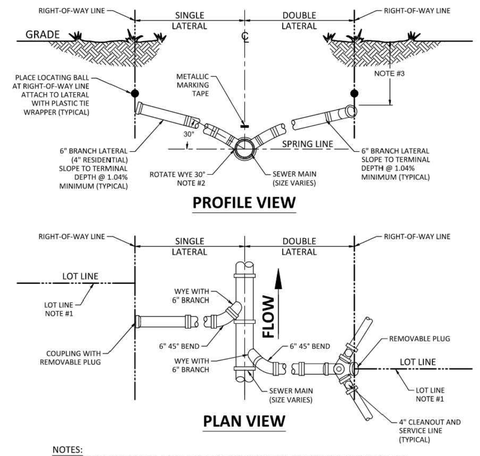
ALL MATERIALS FOR PUBLIC AND PRIVATE SEWER SYSTEM INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO INSTALLATION. PROVIDE 48 HOUR NOTICE TO THE CITY TO SCHEDULE INSPECTIONS OF MATERIAL AND INSTALLATIONS.

CONSTRUCTION HOLD POINTS FOR CITY INSPECTION:

1. OBSERVE CONNECTIONS TO, AND REMOVAL/ABANDONMENT OF EXISTING SEWER MAIN SYSTEM.
2. REVIEW CONTRACTOR'S PROPOSAL FOR MAINTAINING SANITARY FLOW OF SEWAGE DURING CONSTRUCTION.
3. OBSERVE CONSTRUCTION OF MANHOLE BASE INCLUDING PIPE STUB(S), WATERSTOP(S), AND FLEXIBLE COUPLING(S).
4. INTERMITTENTLY OBSERVE CONSTRUCTION OF PIPING.
5. WITNESS VIDEO INSPECTION.

SANITARY SEWER GENERAL NOTES

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-0	

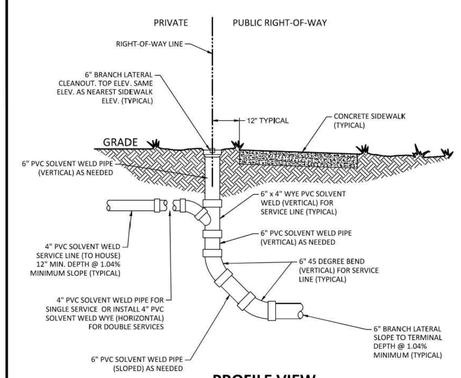


NOTES:

1. LATERAL STUB OUTS, BOTH SINGLE & DOUBLE SHALL BE LOCATED WITHIN 12" OF PROPERTY LINE / RIGHT-OF-WAY LINE JUNCTION.
2. INVERT SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. ALL LATERAL STUB OUTS TO HAVE 30" MINIMUM & 42" MAXIMUM OF COVER AT LOT LINE. THIS COVER IS TO BE MEASURED FROM THE FINISHED GRADE OF THE LOT.
4. ENGINEER OF RECORD MUST ENSURE THAT DEPTHS ARE ADEQUATE TO PROVIDE A 1.0% SLOPE FOR HOUSE SEWER TO RIGHT-OF-WAY LINE.
5. WATER MAINS AND FORCE MAINS ARE TO BE INSTALLED SO AS TO MAINTAIN 12" VERTICAL SEPARATION WITH LATERAL.

SINGLE AND DOUBLE SERVICE LATERALS

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-1A	

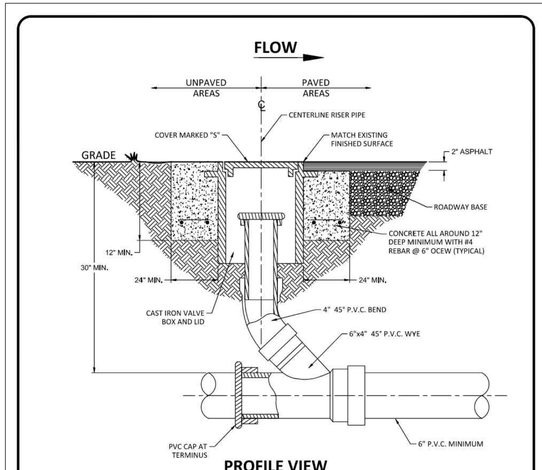


NOTES:

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2. INVERT SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. ALL LATERAL STUB OUTS TO HAVE 30" MINIMUM & 42" MAXIMUM OF COVER AT LOT LINE. THIS COVER IS TO BE MEASURED FROM THE FINISHED GRADE OF THE LOT.
4. ENGINEER OF RECORD MUST ENSURE THAT DEPTHS ARE ADEQUATE TO PROVIDE A 1.0% SLOPE FOR HOUSE SEWER TO RIGHT-OF-WAY LINE.
5. WATER MAINS AND FORCE MAINS ARE TO BE INSTALLED SO AS TO MAINTAIN 12" VERTICAL SEPARATION WITH LATERAL.

SERVICE LATERAL CONNECTION

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-1B	



NOTES:

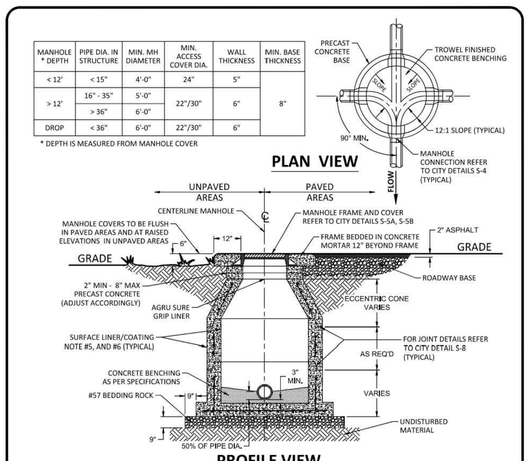
1. SEWER CLEANOUTS IN TRAFFIC AREAS SHALL BE TRAFFIC RATED.

SEWER CLEANOUT

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-2	

MANHOLE * DEPTH	PIPE DIA. IN STRUCTURE	MIN. MH DIAMETER	MIN. ACCESS COVER DIA.	WALL THICKNESS	MIN. BASE THICKNESS
< 12'	< 15"	4'-0"	24"	5"	8"
> 12'	16' - 35"	5'-0"	22"/30"	6"	
	> 36"	6'-0"			
DROP	< 36"	6'-0"	22"/30"	6"	

* DEPTH IS MEASURED FROM MANHOLE COVER

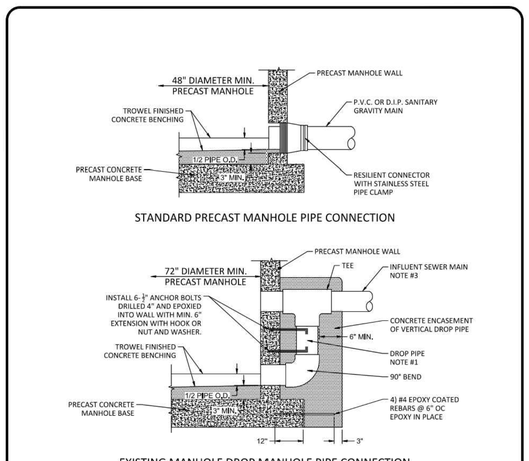


NOTES:

1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OR INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE, SEE MANHOLE CONNECTION CITY DETAIL S-4.
2. APPROVED CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE, WITH WRITTEN PRE-APPROVAL.
3. ALL MANHOLES AND COVERS SHALL BE CONSTRUCTED FOR H-20 LOADING TRAFFIC BEARING ACCORDING TO AASHTO.
4. MANHOLE COVERS >24" DIAMETER SHALL BE CONSTRUCTED OF TWO CONCENTRIC COVERS, REFER TO CITY DETAIL S-5B.
5. MANHOLES SHALL BE LINED AND COATED INTERIOR AND EXTERIOR WITH COAL TAR EPOXY PER SPECIFICATIONS.
6. MANHOLE INTERIOR SHALL BE LINED WITH HDPE OR FIBERGLASS FOR MANHOLES WITH FORCEMAIN INFLUENT MAINS.
7. BENCHING AND TROUGHS SHALL BE SMOOTH AND PROPERLY COATED.

PRECAST CONCRETE MANHOLE

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-3	

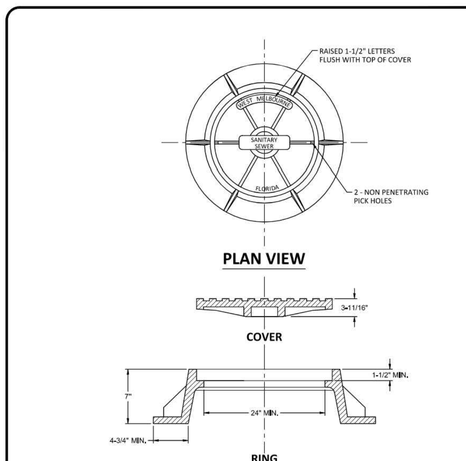


NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF SAME SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL SEWER INFLUENT PIPES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
3. THE CITY MAY APPROVE ALTERNATE WATER TIGHT CONNECTION DETAILS FOR PIPES OF 24" DIAMETER OR LARGER.
4. FOR NEW CONSTRUCTION DROP MANHOLE MAY BE PRECAST IF APPROVED IN ADVANCE OF CONSTRUCTION.

MANHOLE CONNECTION DETAILS

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	S-4	



NOTES:

1. MANHOLE RING AND COVER TO HAVE A MIN. 24" CLEAR OPENING AND "O" RING TYPE SEAL, MANUFACTURED AT THE FOUNDRY.
2. MANHOLE RING AND COVER TO BE U.S. FOUNDRY AND MANUFACTURING Co. MODEL #225-AS-ORS OR APPROVED EQUAL.
3. MANHOLE COVERS MUST BE STAMPED "WEST MELBOURNE" FOR PUBLIC SYSTEM.
4. PRIVATE SEWER MUST BE STAMPED "PRIVATE".

STANDARD 4' MANHOLE RING AND COVER

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
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2024	S-5A	

REV#	DATE	REVISION

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OCEANCREST SKILLED NURSING FACILITY

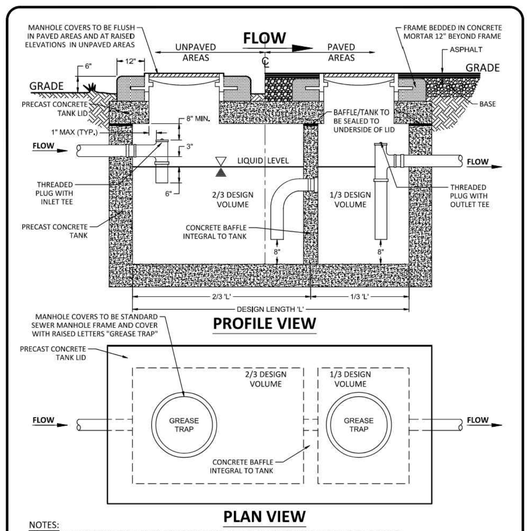
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
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JAKE T. WISE, PE
PE # 55405

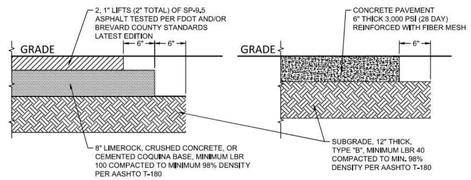
DATE	5/16/25
SCALE	NTS
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-5



NOTES:
1. ALL INTERCEPTORS TO BE CONSTRUCTED AND REINFORCED TO MEET H-20 LOADING.
2. DESIGN VOLUME AS REQUIRED, 750 GALLON MINIMUM, 1,250 GALLON MAXIMUM.
3. APPLY TWO COATS OF COAL TAR EPOXY INSIDE AND OUTSIDE OF INTERCEPTORS, WITH FIRST COAT COLOR RED AND SECOND COAT COLOR BLACK.
4. ALL GREASE TRAPS SHALL BE REGISTERED ONLINE THROUGH THE CITY'S FATS, OILS AND GREASE PROGRAM.
5. CLEANOUTS ARE REQUIRED ON BOTH IN-FLOW AND OUT-FLOW LINES WITHIN MAXIMUM 5' OF INTERCEPTOR
6. MANHOLE COVERS SHALL BE RAISED WITH CONCRETE GRADE RINGS.

West Melbourne FLORIDA | GREASE INTERCEPTOR | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. S-7

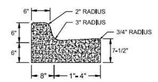
GENERAL NOTES:
1. CONCRETE PAVEMENT SHALL BE CONSTRUCTED OF 3,000 PSI (28 DAY), CLASS 1 CONCRETE.
2. CONTRACTION JOINTS SHALL BE 1/8" WIDE AND SAW-CUT OR TOOLED.
3. CONSTRUCTION JOINTS ARE REQUIRED WHEN CONSTRUCTING ADJACENT FRESH CONCRETE POURS.
4. EXPANSION JOINTS ARE REQUIRED ALONG ALL OTHER ADJACENT PAVEMENTS, AT EACH SIDE OF STORM INLET STRUCTURES, AND AT ALL RADIUS POINTS.
5. EXPANSION JOINTS SHALL BE 1/2" WIDE, (WITH 1/2" PREMOLDED JOINT MATERIAL), AND SHALL BE FULL DEPTH OF THE PAVEMENT.
6. JOINT MATERIAL SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS, SECTION 932, LATEST EDITION.
7. THE SUBGRADE SHALL BE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180 AND SHALL EXTEND A MINIMUM OF 6" BEYOND EDGE OF PAVEMENT.
8. DRIVEWAYS SHALL BE OF UNIFORM WIDTH FROM THE RIGHT OF WAY LINE TO THE EDGE OF PAVEMENT.
9. COMMERCIAL DRIVEWAYS SHALL HAVE A MINIMUM RADIUS AS FOLLOWS:
   A. 35' STANDARD RADIUS.
   B. 50' MINIMUM RADIUS FOR LARGE TRUCKS (WB 40& WB 50).
10. CONSTRUCT VALLEY GUTTERS PER FDOT 520-001 ACROSS COMMERCIAL DRIVEWAYS WHERE CURB AND GUTTER EXISTS.



ASPHALT DRIVEWAY
TYPICAL SECTION WITHIN CITY RIGHT-OF-WAY
(SEE NOTE BELOW FOR ON-SITE REQUIREMENTS)

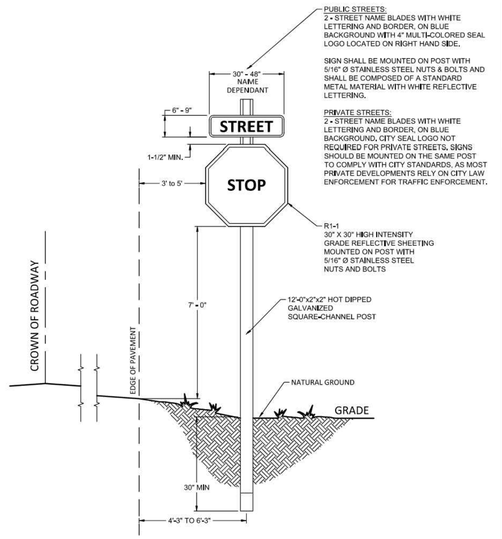
CONCRETE DRIVEWAY
ONSITE AND WITHIN CITY RIGHT-OF-WAY CONCRETE PAVEMENT SECTION

NOTE:
FOR ON-SITE COMMERCIAL PAVEMENT THE BASE MAY BE REDUCED TO 6" THICK, THE SUBGRADE MAY BE REDUSED TO 8" AND THE ASPHALT MAY BE REDUCED TO A MINIMUM OF 1-1/2" OF SP-9.5.



CURB AND GUTTER
FDOT TYPE "F" CURB

West Melbourne FLORIDA | REQUIREMENTS FOR COMMERCIAL PARKING AND DRIVEWAYS | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. ST-8

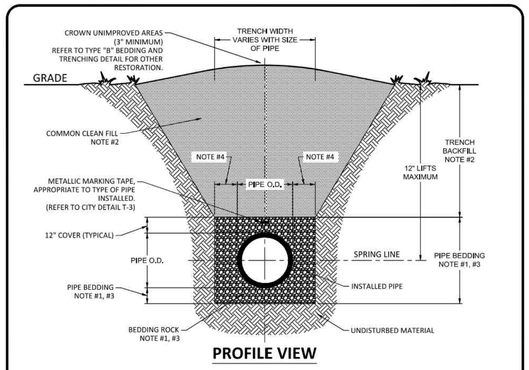


PROFILE VIEW
STREET SIGN INSTALLATION DETAIL

West Melbourne FLORIDA | TYPICAL STREET MARKER AND ROADWAY SIGNAGE | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. ST-9

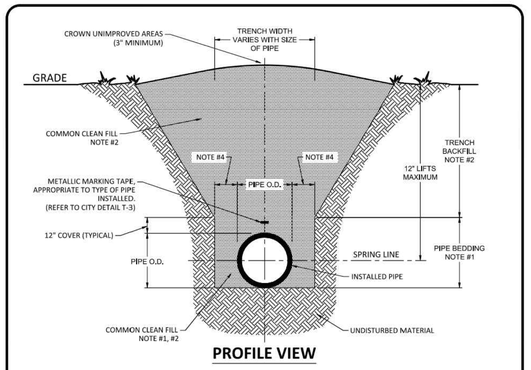
TRENCHING GENERAL NOTES:
1. ALL WORK SHALL COMPLY WITH F.A.C. RULE 62-555.314 FOR PIPELINE SEPARATIONS, REFER TO CITY DETAIL T-5.
2. TRENCHES SHALL BE DEWATERED AND MAINTAINED IN A DRY CONDITION DURING PIPE INSTALLATION AND BACKFILL.
3. WORK SHALL PROCEED WITH THE DEEPEST PIPES CONSTRUCTED FIRST AND GRAVITY PIPES INSTALLED BEFORE PRESSURE PIPES. GRAVITY LINE CONSTRUCTION SHALL START AT THE LOWEST POINT AND PROCEED FROM THERE.
4. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
6. REFER TO CHAPTER 58 OF THE LAND DEVELOPMENT REGULATIONS FOR SHEETING AND BRACING.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. CONTRACTOR SHALL DEMONSTRATE THAT ALL PIPE IS TRACEABLE.
9. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA TRENCH SAFETY ACT.
10. COMPACTION BY FLOODING OR JETTING IS NOT ALLOWED.

West Melbourne FLORIDA | TYPICAL TRENCHING DETAIL NOTES | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. T-0



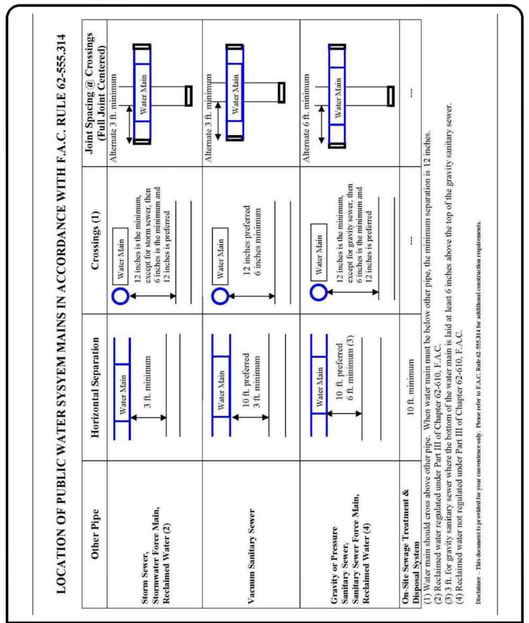
NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF FDOT TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS REQUIRED BY THE CITY OF WEST MELBOURNE.
4. 15" MAXIMUM FOR PIPE DIAMETER LESS THAN 24" AND 24" MAXIMUM FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO CHAPTER 58 OF THE LAND DEVELOPMENT REGULATIONS FOR SHEETING AND BRACING.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
9. CONTRACTOR SHALL DEMONSTRATE THAT ALL PIPE IS TRACEABLE.
10. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA TRENCH SAFETY ACT.

West Melbourne FLORIDA | TYPE "A" BEDDING AND TRENCHING DETAIL | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. T-1

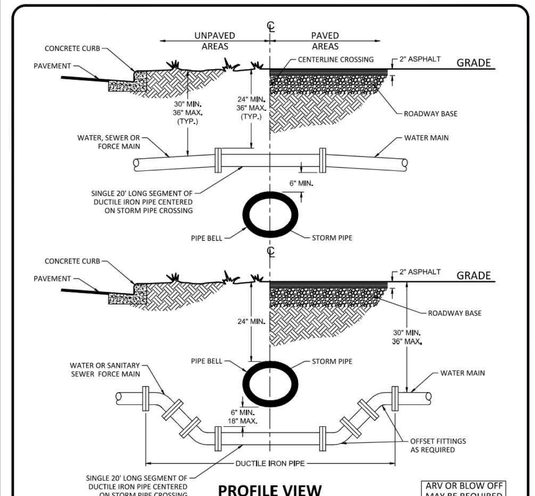


NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE "A" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED BY THE CITY OF WEST MELBOURNE.
4. 15" MAXIMUM FOR PIPE DIAMETER LESS THAN 24" AND 24" MAXIMUM FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO CHAPTER 58 OF THE LAND DEVELOPMENT REGULATIONS FOR SHEETING AND BRACING.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
9. CONTRACTOR SHALL DEMONSTRATE THAT ALL PIPE IS TRACEABLE.
10. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA TRENCH SAFETY ACT.

West Melbourne FLORIDA | TYPE "B" BEDDING AND TRENCHING DETAIL | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. T-2



West Melbourne FLORIDA | TYPICAL WATER SYSTEM CROSSING STANDARDS | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. T-5



ALL WATER MAIN JOINTS MECHANICALLY RESTRAINED USING "MEGA LUGS" OR CITY APPROVED EQUAL

- DIP WATER MAIN TREATMENT: LINING SHALL BE CEMENT, AND COATING SHALL BE POLYETHYLENE ENCASEMENT
- DIP SEWER FORCEMAIN TREATEMENT: LINING SHALL BE P-401 CERAMIC EPOXY WITH QUARTZ PIGMENT, AND COATING SHALL BE POLYETHYLENE ENCASEMENT
- UNDERGROUND VERTICAL DEFLECTION SHALL BE MECHANICAL JOINT DIP
- ABOVE GROUND VERTICAL DEFLECTION SHALL BE FLANGED DIP
- NEW CONSTRUCTION ADJUST STORM DRAIN BELOW WATER AND FORCEMAIN

West Melbourne FLORIDA | TYPICAL PIPE CROSSING DETAILS | DRWN: ZDK | DATE: 06/2024 | SCALE: NONE | REV: 2024 | DWG. NO. T-6

REVISION | DATE | REV#

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CONSTRUCTION ENGINEERING GROUP
Consulting Engineers

OCEANCREST SKILLED NURSING FACILITY
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL
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JAKE T. WISE, PE
PE # 55405

DATE: 5/16/25
SCALE: NTS
PROJ. NO. : 240230
DESIGNED BY: NCW
DRAWN BY: JDH
CHECKED BY: JTW
DRAWING NO. C-6

WATER DETAILS - GENERAL NOTES:

1. ALL WATER METERS AND RPZ BACKFLOW ASSEMBLIES SHALL BE ABOVE GROUND INSTALLATIONS, UNLESS APPROVED IN WRITING IN ADVANCE OF CONSTRUCTION. SINGLE FAMILY RESIDENTIAL SERVICES ARE THE ONLY CASE WHERE IN GROUND METER BOXES ARE REQUIRED.
2. WATERLINE SHALL BE PVC C900 OR C905 CLASS 200, HDPE DR11 (200 PSI) OR DUCTILE IRON PRESSURE CLASS 200 CEMENT LINED.
3. WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TRENCH DETAILS T-1 THROUGH T-7.
4. WATER MAINS SHALL BE 8" MINIMUM.
5. WATER SERVICE AND DDCV CONNECTIONS SHALL BE VALVED SO THAT EACH MAY BE ISOLATED AND NOT AFFECT FLOW TO THE OTHER.
6. ALL MASTER METER INSTALLATIONS SHALL HAVE A 4" TAP AND VALVE, AND 4" PIPE TO METER LOCATION, THEN REDUCED TO ENGINEER DESIGNED WATER SERVICE LINE SIZE.
7. ALL NEW WATER LINES SHALL BE CLEANED WITH PIG OR CLEANING BALL PRIOR TO TESTING.
8. POTABLE WATER SHALL NOT BE USED FOR IRRIGATION. IRRIGATION WATER SHALL BE SUPPLIED BY AN ON-SITE WELL. IF RECLAIMED WATER IS NOT AVAILABLE.
9. SERVICE LINE CROSSING UNDER PAVEMENT SHALL BE SLEEVED. ENDS OF SLEEVES TERMINATING UNDER PAVEMENT SHALL BE GROUT SEALED.

ALL MATERIALS FOR PUBLIC AND PRIVATE WATER SYSTEM INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO INSTALLATION. PROVIDE 48 HOUR NOTICE TO THE CITY TO SCHEDULE INSPECTIONS OF MATERIAL AND INSTALLATIONS.

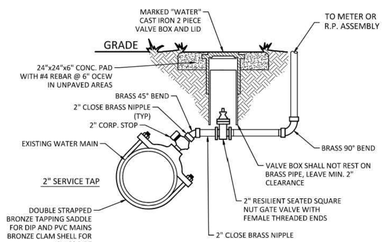
CONSTRUCTION HOLD POINTS FOR CITY INSPECTION:

1. OBSERVE CONNECTIONS TO, AND REMOVAL/ABANDONMENT OF EXISTING WATER MAIN SYSTEM.
2. REVIEW CONTRACTOR'S PROPOSAL FOR MAINTAINING WATER FLOW DURING CONSTRUCTION.
3. INTERMITTENTLY OBSERVE CONSTRUCTION OF PIPING.
4. OBSERVE PRESSURE TEST.
5. OBSERVE DISINFECTION AND BACTERIOLOGICAL TESTING.

West Melbourne FLORIDA

WATER DETAILS - GENERAL NOTES

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-0	



PROFILE VIEW

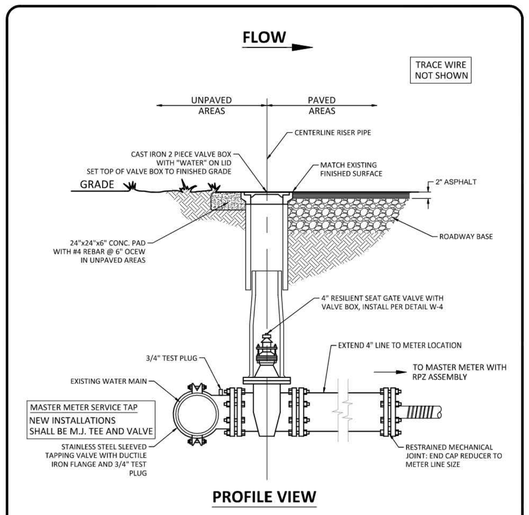
NOTES:

1. ALL FITTINGS AND PIPES TO BE THREADED BRASS.
2. LONG SIDE SERVICES REQUIRE SERVICE LINES TO BE INSTALLED IN SLEEVES UNDER THE ROADWAY.
3. PIPE CAN BE 2" CTS POLY PIPE BEYOND GATE VALVE.
4. SLEEVE SERVICE UNDER PAVEMENT.

West Melbourne FLORIDA

COMMERCIAL WATER CONNECTIONS (2" SERVICE TAP)

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-1B	



PROFILE VIEW

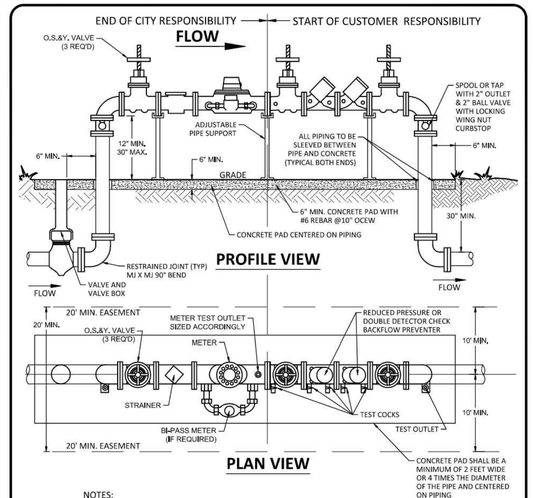
NOTES:

1. BLUE POST DELINEATORS IF REQUIRED WILL BE SUPPLIED BY CITY.

West Melbourne FLORIDA

WATER CONNECTIONS MASTER METER TAP

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-1C	



NOTES:

1. ALL PIPING ABOVE GROUND SHALL BE FLANGED DUCTILE IRON, PAINTED BLUE
2. ALL RPZ BACKFLOW ASSEMBLIES MUST BE TESTED AND RESULTS SENT TO THE UTILITY DEPARTMENT AFTER INSTALLATION AND BEFORE ASSEMBLY IS TURNED ON.

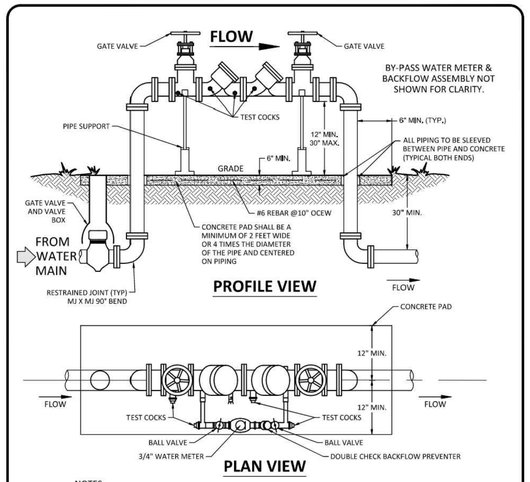
TYPE OF BACKFLOW PREVENTER TO BE BASED ON DEGREE OF HAZARD. THIS IS TO BE DETERMINED BY CITY OF WEST MELBOURNE PUBLIC WORKS DEPT.
BACKFLOW PREVENTER & ASSOCIATED PIPING TO BE MAINTAINED BY CUSTOMER AS NOTED.

ASSEMBLIES TO BE INSTALLED IN STRICT ACCORDANCE TO MANUFACTURER'S INSTRUCTIONS!

West Melbourne FLORIDA

COMBINATION MASTER METER AND BACKFLOW PREVENTER

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-2E	



NOTES:

1. ALL PIPING ABOVE GROUND SHALL BE FLANGED DUCTILE IRON
2. 1/2" PRE-FORMED JOINT MATERIAL TO BE PLACED BETWEEN PIPE & CONC. OR PIPE SLEEVE.
3. CONSTRUCT ISOLATION VALVE AND VALVE BOX WITH WATER STAMPED ON COVER. CITY POINT OF ACCEPTANCE.
4. ALL RPZ BACKFLOW ASSEMBLIES MUST BE TESTED AND RESULTS SENT TO THE UTILITY DEPARTMENT AFTER INSTALLATION AND BEFORE ASSEMBLY IS TURNED ON.

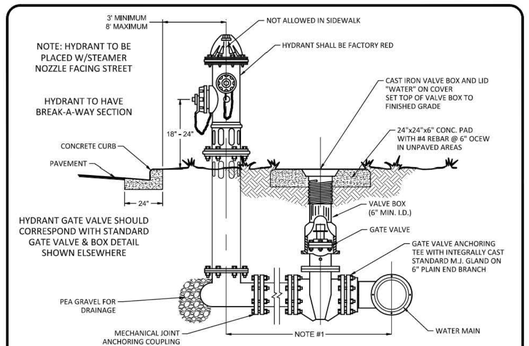
TYPE OF BACKFLOW PREVENTER TO BE BASED ON DEGREE OF HAZARD. THIS IS TO BE DETERMINED BY CITY OF WEST MELBOURNE PUBLIC WORKS DEPT. BACKFLOW PREVENTER & ASSOCIATED PIPING TO BE MAINTAINED BY CUSTOMER.

ASSEMBLIES TO BE INSTALLED IN STRICT ACCORDANCE TO MANUFACTURER'S INSTRUCTIONS!

West Melbourne FLORIDA

DOUBLE DETECTOR CHECK VAVLE

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-3	



NOTES:

1. PROVIDE ANOTHER GATE VALVE ON THE FIRE HYDRANT SERVICE ASSEMBLY, IDENTICAL TO THE ONE SHOWN ABOVE, IF DISTANCE FROM THE VALVE AT THE TEE IS EQUAL TO OR GREATER THAN 20 FT TO THE FIRE HYDRANT.
2. FOR SINGLE-FAMILY RESIDENTIAL ZONING DISTRICTS, THE MAXIMUM DISTANCE BETWEEN HYDRANTS SHALL BE 400 FEET.
3. FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH AWWA C-502 AND SHALL HAVE BRONZE TO BRONZE MAIN SEAT THREADING SURFACES. ACCEPTABLE MANUFACTURERS OF FIRE HYDRANTS SHALL BE MUELLER, AMERICAN DARLING, OR CITY-APPROVED EQUIVALENT.
4. NEW FIRE HYDRANTS SHALL BE POSITIONED NO MORE THAN 8 FEET NOR LESS THAN 3 FEET OFF THE EDGE OF PAVEMENT. THE CENTER LINE OF THE STEAMER CONNECTION (4 1/2") SHALL BE POSITIONED BETWEEN 18"-24" ABOVE FINISH GRADE.
5. A SIX-INCH M.J. HYDRANT CONNECTION SHALL BE PROVIDED USING A HYDRANT VALVE ANCHORING TEE WITH INTEGRALLY CAST STANDARD M.J. GLAND ON SIX-INCH PLAIN END BRANCH.
6. FIRE HYDRANTS SHALL BE LOCATED WITHIN 100 FEET OF ANY FIRE DEPARTMENT CONNECTION ON THE SAME SIDE OF THE ROADWAY AND POSITIONED SO THAT WHEN IN USE, THE ROADWAY WILL NOT BE BLOCKED BY FIRE DEPARTMENT APPARATUS OR EQUIPMENT.
7. LANDSCAPING, OR ANY OTHER OBSTRUCTION, SHALL NOT BE LOCATED WITHIN 7.5 FEET TO THE FRONT AND SIDES OR 4.5 FEET TO THE REAR OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION.
8. APPLY FOOD GRADE ANTI-CEASE LUBRICANT TO HYDRANT CAPS (GREASE IS NOT PERMITTED).
9. WHEN NO CURB EXISTS, PLACE HYDRANT 8' FROM EDGE OF PAVEMENT BUT INSIDE THE RIGHT-OF-WAY FOR STREET INSTALLATIONS.
10. IN PARKING LOT INSTALLATIONS, HYDRANTS SHALL BE INSTALLED BEHIND CURBS OR PROTECTED BY TWO STEEL GUARD POST (BOLLARDS).
11. FIRE HYDRANTS SHALL BE FACTORY PAINTED SAFETY RED.
12. PROVIDE BLUE RAISED REFLECTOR IN ROAD.

West Melbourne FLORIDA

FIRE HYDRANT ASSEMBLY WITH ANCHOR TEE

DRWN:	DATE:	SCALE:
ZDK	06/2024	NONE
REV:	DWG. NO.	
2024	W-7	



REV#	DATE	REVISION
2	02/18/26	CITY COMMENTS
3	03/30/26	REVISION #2 RESPONSES TO DRC COMMENTS

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www.cegengineering.com
COA #0008097

OCEANCREST SKILLED NURSING FACILITY

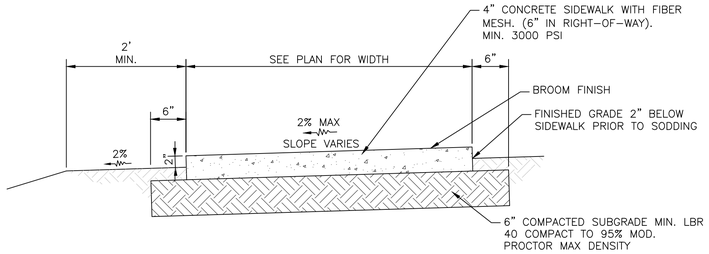
S & A MINTON ROAD CORP
MINTON ROAD, WEST MELBOURNE, FL

DRAWING TITLE
DETAILS

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	NTS
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-7

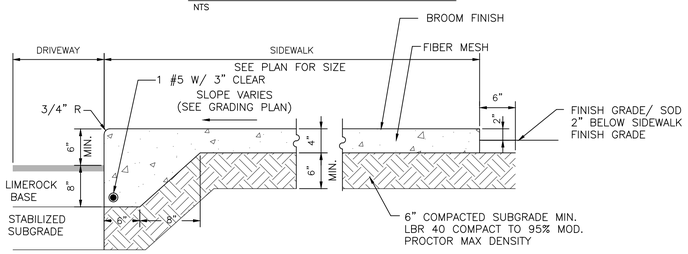


NOTES:

1. PROVIDE EXPANSION JOINTS AT CONNECTION POINTS OF OTHER IMPERVIOUS SURFACES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURBS, OTHER SIDEWALKS, ETC.
2. PROVIDE CONTRACTION JOINTS AT LOCATIONS PER FDOT INDEX NO. 522-001 FOR ENTIRE LENGTH OF SIDEWALK. CONSTRUCT JOINTS PER THIS INDEX AND FDOT REQUIREMENTS.
3. CURE WITH A WHITE CURING COMPOUND PER FDOT STANDARD SPECIFICATION SECTION 925-2 APPLIED AT A RATE OF 1 GAL/200 S.F.

TYPICAL SIDEWALK DETAIL

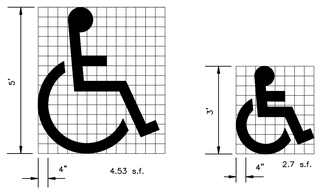
NTS



NOTES:
1. PROVIDE EXPANSION JOINTS AT CONNECTION POINTS OF OTHER IMPERVIOUS SURFACES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURBS, OTHER SIDEWALKS, ETC. SEE TYPICAL DETAIL.
2. PROVIDE CONTRACTION JOINTS AT LOCATIONS PER FDOT INDEX NO. 310 FOR ENTIRE LENGTH OF SIDEWALK. EXPANSION JOINTS SHALL BE AT 50' CENTERS. SEE TYPICAL DETAIL.
3. CONSTRUCT 2' BUFFERS AT FRONT AND BACK OF SIDEWALK WITH MAXIMUM SLOPE OF 3/4" PER FOOT.
4. CURE WITH A WHITE CURING COMPOUND PER FDOT STANDARD SPECIFICATION SECTION 925-2 APPLIED AT A RATE OF 1 GAL/200 S.F.

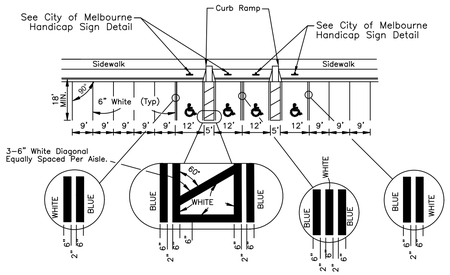
TYPICAL RAISED SIDEWALK DETAIL

NTS



USE OF PAVEMENT SYMBOL IN ACCESSIBLE PARKING SPACES IS OPTIONAL, WHEN USED THE SYMBOL SHALL BE 3' OR 5' HIGH AND WHITE IN COLOR.

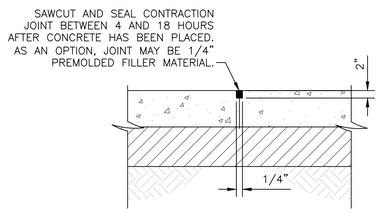
UNIVERSAL SYMBOL OF ACCESSIBILITY



NOTES:
1. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
2. AN ACCESS AISLE IS REQUIRED FOR EACH ACCESSIBLE SPACE WHEN ANGLE PARKING IS USED.
3. CRITERIA FOR PAVEMENT MARKINGS ONLY, NOT PUBLIC SIDEWALK CURB RAMP LOCATIONS. FOR RAMP LOCATIONS REFER TO PLANS.
4. TINT BLUE PAVEMENT MARKINGS TO MATCH COLOR 15180 OF FEDERAL STANDARDS 595A.
5. FOR REQUIRED SIGNAGE SEE THE CITY OF MELBOURNE HANDICAP SIGN INSTALLATION DETAIL.
6. THIS DETAIL IS FOR REFERENCE PURPOSES. SEE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX NOS. 700-102, 711-00 AND FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST VERSION FOR FURTHER DETAILS.

TYPICAL HANDICAP PARKING DETAIL

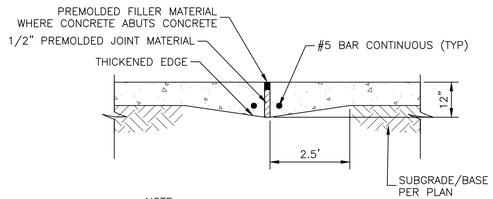
NTS



NOTE:
CONTRACTOR SHALL PROVIDE A JOINT PLAN FOR APPROVAL ONE WEEK PRIOR TO POURING.

TYPICAL CONTRACTION JOINT (CJ) DETAIL

NTS



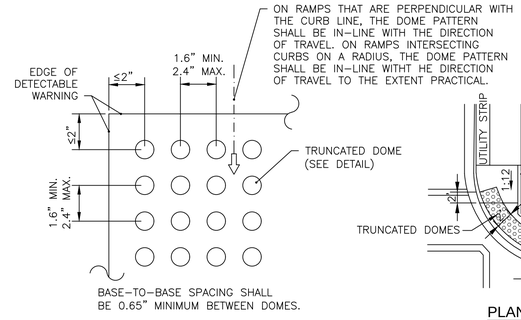
NOTE:
CONTRACTOR SHALL PROVIDE A JOINT PLAN FOR APPROVAL ONE WEEK PRIOR TO POURING.

TYPICAL EXPANSION JOINT (EJ) WITH THICKENED EDGE DETAIL

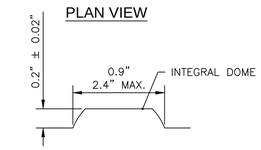
NTS

GENERAL NOTES:

1. PUBLIC SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED IN THE PUBLIC RIGHT OF WAY AT LOCATIONS THAT WILL PROVIDE CONTINUOUS UNOBSTRUCTED PEDESTRIAN CIRCULATION PATHS TO PEDESTRIAN AREAS, ELEMENTS AND FACILITIES IN THE PUBLIC RIGHT OF WAY AND TO ACCESSIBLE PEDESTRIAN ROUTES ON ADJACENT SITES. CURBED FACILITIES WITH SIDEWALKS AND THOSE WITHOUT SIDEWALKS ARE TO HAVE CURB RAMPS CONSTRUCTED AT ALL STREET INTERSECTIONS AND AT TURNOUTS THAT HAVE CURBED RETURNS. PARTIAL CURB RETURNS SHALL EXTEND TO THE LIMIT PRESCRIBED BY INDEX NO. 515 TO ACCOMMODATE CURB RAMPS. RAMPS CONSTRUCTED AT LOCATIONS WITHOUT SIDEWALKS SHALL HAVE A LANDING CONSTRUCTED AT THE TOP OF EACH RAMP, SEE SHEET 5.
2. THE LOCATION AND ORIENTATION OF CURB RAMPS SHALL BE AS SHOWN IN THE PLANS.
3. CURB RAMP RUNNING SLOPES AT UNRESTRAINED SITES SHALL NOT BE STEEPER THAN 1:12 AND ACROSS SLOPE SHALL BE 0.02 OR FLATTER. TRANSITION SLOPES SHALL NOT BE STEEPER THAN 1:12. WHEN ALTERING EXISTING PEDESTRIAN FACILITIES WHERE EXISTING SITE DEVELOPMENT PRECLUDES THE ACCOMMODATION OF A RAMP SLOPE OF 1:12, A RUNNING SLOPE BETWEEN 1:12 AND 1:10 IS PERMITTED FOR A RISE OF 6" MAXIMUM AND A RUNNING SLOPE OF BETWEEN 1:10 AND 1:8 IS PERMITTED FOR A RISE OF 3" MAXIMUM. WHERE COMPLIANCE WITH THE REQUIREMENTS FOR CROSS SLOPE CANNOT BE FULLY MET, THE MINIMUM FEASIBLE CROSS SLOPE SHALL BE PROVIDED. RAMP RUNNING SLOPE IS NOT REQUIRED TO EXCEED 8' IN LENGTH, EXCEPT AT SITES WHERE THE PLANS SPECIFY A GREATER LENGTH.
4. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, THEN THE WALK SHALL HAVE TRANSITION SLOPES TO THE RAMP; THE MAXIMUM SLOPE OF THE TRANSITIONS SHALL BE 1:12. RAMPS WITH CURB RETURNS MAY BE USED AT LOCATIONS WHERE OTHER IMPROVEMENTS PROVIDE GUIDANCE AWAY FROM THAT PORTION OF CURB PERPENDICULAR TO THE SIDEWALKS; IMPROVEMENTS FOR GUIDANCE ARE NOT REQUIRED AT CURB RAMPS FOR LINEAR PEDESTRIAN TRAFFIC.
5. CURB RAMP DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP AND 24" DEEP. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION 527. SEE SHEET 6 OF 6 FOR DETECTABLE WARNING LAYOUTS. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.
6. WHERE A CURB RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG. FOR DETAILS OF CONCRETE SIDEWALK SEE INDEX 310.
7. ALPHA-NUMERIC IDENTIFICATIONS ARE FOR REFERENCE (PLANS, PERMITS, ETC.)
8. PUBLIC CURB RAMPS ARE TO BE PAID FOR AS FOLLOWS:
   RAMPS, RECONSTRUCTED SIDEWALKS, WALK AROUND SIDEWALKS, SIDEWALK LANDINGS AND SIDEWALK CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SIDEWALK CONCRETE, (___" THICK), SY. CURB TRANSITIONS AND RECONSTRUCTED CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR THE PARENT CURB, I.E., CURB CONCRETE, (TYPE ___), LF OR CURB AND GUTTER CONCRETE, (TYPE ___), LF. WHEN A SEPARATE PAY ITEM FOR THE REMOVAL AND DISPOSAL OF EXISTING CURB, CURB AND GUTTER, AND/OR SIDEWALK IS NOT PROVIDED IN THE PLANS, THE COST OF REMOVAL AND DISPOSAL OF THESE FEATURES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR NEW CURB, CURB AND GUTTER AND/OR SIDEWALK RESPECTIVELY.
9. ACCEPTANCE CRITERIA FOR DETECTABLE WARNINGS:
   (A) THE RAMP DETECTABLE WARNING SURFACE SHALL BE COMPLETE AND UNIFORM IN COLOR (BRICK RED IN BREVARD COUNTY) AND TEXTURE.
   (B) 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE DESIGN CRITERIA.
   (C) THERE MAY BE NO MORE THAN 4 NON-COMPLING DOMES IN ANY ONE SQUARE FOOT OF SURFACE.
   (D) NO TWO ADJACENT DOMES MAY BE NON-COMPLIANT.
   (E) SURFACE MAY NOT DEVIATE MORE THAN 0.10" FROM A TRUE PLANE.
10. ALL SIDEWALKS SURFACES, RAMP SURFACES, AND LANDINGS WITH A CROSS SLOPE SHOWN IN THIS INDEX TO BE 0.02 MAXIMUM. ALL RAMP SURFACES AND RAMP TRANSITION SLOPES WITH A SLOPE SHOWN IN THIS INDEX TO BE 1:12 SHALL BE 1:12 MAXIMUM.

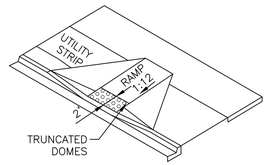


PLAN VIEW

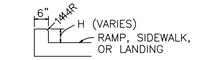


THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.

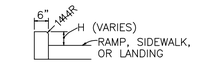
TRUNCATED DOME



PICTORIAL VIEW

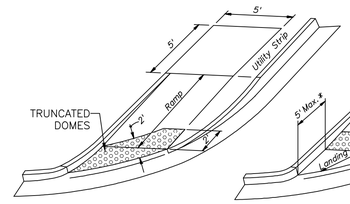


RAMP WITH INTEGRAL CAST CURB

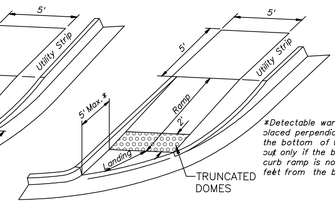


RAMP WITH SEPARATELY CAST CURB

RAMP CURB OPTIONS



PICTORIAL VIEW

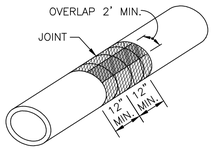


PICTORIAL VIEW 'B'

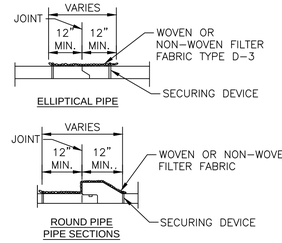
NOTE: SEE PICTORIAL VIEW 'C' ON INDEX NO. 304 SHEET 6 OF 6 FOR ANOTHER OPTION.

TYPICAL HANDICAP RAMP DETAIL

NTS



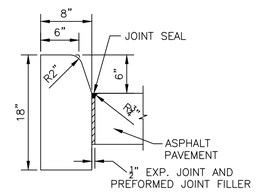
ELLIPTICAL PIPE SHOWN ISOMETRIC VIEW



NOTES:
1. FOR ALL PIPE TYPES – CONCRETE PIPE SHOWN
2. PROVIDE ON ALL STORM DRAIN PIPE JOINTS.

TYPICAL FILTER FABRIC JACKET DETAIL

NTS



NOTE:
FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, ASPHALT SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY.

TYPICAL FDOT TYPE "D" CURB

NTS

REV#	DATE	REVISION

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OCEANCREST SKILLED NURSING FACILITY

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MINTON ROAD, WEST MELBOURNE, FL

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JAKE T. WISE, PE
PE # 55405

DATE	5/16/25
SCALE	NTS
PROJ. NO. :	240230
DESIGNED BY:	NCW
DRAWN BY:	JDH
CHECKED BY:	JTW
DRAWING NO.	C-8

GENERAL SPECIFICATION NOTES:

1. PROJECT REPRESENTATIVE REFERRED TO IN THE FOLLOWING SPECIFICATIONS INCLUDE OWNER OR DESIGNATED REPRESENTATIVE, ENGINEER OR MUNICIPALITY OF JURISDICTION FOR SPECIFIED WORK.
2. CONTRACTOR SHALL BECOME FAMILIAR WITH AND ADHERE TO ALL PROJECT SITE PERMITS AND THEIR CONDITIONS AND POST ON-SITE DURING ENTIRE CONSTRUCTION PROJECT UNTIL FINAL CLEARANCE.

SITE CLEARING

1. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS AT THE DRIP LINE TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
2. REMOVE ALL TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS, AS REQUIRED, TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE SIMILAR ITEMS ELSEWHERE ON SITE OR PREMISES AS SPECIFICALLY INDICATED.
3. CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER WHERE SUCH ROOTS AND BRANCHES DO NOT OBSTRUCT INSTALLATION OF NEW CONSTRUCTION.
4. TOPSOIL IS DEFINED AS FRIABLE CLAY LOAM SURFACE SOIL. SATISFACTORY TOPSOIL IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 2 INCHES IN DIAMETER, AND WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
5. STRIP TOPSOIL TO WHATEVER DEPTHS ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF VEGETATION AND ROOTS FROM AREAS BEFORE STRIPPING.
6. STOCKPILE TOPSOIL IN STORAGE PILES IN AREAS INDICATED OR DIRECTED. CONSTRUCT STORAGE PILES TO PROVIDE FREE DRAINAGE OF SURFACE WATER. COVER STORAGE PILES, IF REQUIRED, TO PREVENT WIND EROSION. TRANSPORT WASTE MATERIALS AND UNSUITABLE TOPSOIL MATERIALS OFF OWNER'S PROPERTY AND DISPOSE OF LEGALLY.
7. TRAFFIC: CONDUCT SITE CLEARING OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
8. PROTECTION OF EXISTING IMPROVEMENTS: PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN IN PLACE. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
9. AS AN INITIAL EFFORT ON THE CONSTRUCTION SITE THE CONTRACTOR SHALL LOCATE AND FLAG ALL TREES INDICATED TO REMAIN. CONTACT ENGINEER PRIOR TO CLEARING. THE PROJECT SHALL ANTICIPATE THE REMOVAL OF UP TO 10% MORE TREES THAN INDICATED ON THE PLANS PER DIRECTION. AS PART OF THIS INSPECTION, TREES REQUIRING SPECIAL PRUNING SHALL BE IDENTIFIED.
10. WATER TREES AND OTHER VEGETATION TO REMAIN WITHIN LIMITS OF CONTRACT WORK AS REQUIRED TO MAINTAIN THEIR HEALTH DURING COURSE OF CONSTRUCTION OPERATIONS.
11. PROVIDE PROTECTION FOR ROOTS OVER 1" DIAMETER CUT DURING CONSTRUCTION OPERATIONS. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT ROOTS FROM DRYING OUT; COVER WITH EARTH AS SOON AS POSSIBLE.
12. REPLACE TREES WHICH CANNOT BE REPAIRED AND RESTORED TO FULL-GROWTH STATUS, IN A MANNER ACCEPTABLE TO THE PROJECT REPRESENTATIVE.
13. COMPLETELY REMOVE STUMPS, ROOTS, AND OTHER DEBRIS UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
14. USE ONLY HAND METHODS FOR GRUBBING INSIDE DRIP LINE OF TREES INDICATED TO BE LEFT STANDING.
15. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING 6" LOOSE DEPTH, AND THOROUGHLY COMPACT TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

EARTHWORK

1. SUBGRADE EXCAVATION, BACKFILL, AND PREPARATION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE AS IDENTIFIED ON DWG. C-1, UNLESS NOTED OTHERWISE IN THE CONTRACT DRAWINGS.
2. PROVIDE APPROVED BORROW SOIL MATERIALS FROM OFF-SITE WHEN SUFFICIENT APPROVED SOIL MATERIALS ARE NOT AVAILABLE FROM ON-SITE EXCAVATIONS.
   a. SATISFACTORY SOIL MATERIALS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM; FREE OF ROCK OR GRAVEL LARGER THAN 2 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATTER.
   b. UNSATISFACTORY SOIL MATERIALS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GC, SC, ML, MH, CL, CH, OL, OH, AND PT.
3. BACKFILL AND FILL MATERIALS: SATISFACTORY SOIL MATERIALS AS IDENTIFIED ABOVE.
4. SUBBASE AND BASE MATERIAL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND, ASTM D 2940, MEETING THE REQUIREMENTS OF SECTION 911 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. DRAINAGE FILL MATERIAL: WASHED EVENLY GRADED MIXTURE OF UNCRUSHED OR CRUSHED GRAVEL OR CRUSHED STONE, ASTM D 448, COARSE AGGREGATE GRADING SIZE 57, WITH 100 PERCENT PASSING A 1-1/2 INCH SIEVE AND 0 TO 5 PERCENT PASSING A NO. 50 SIEVE.
6. ENGINEERED FILL: BASE MATERIALS AS IDENTIFIED ABOVE.
7. BEDDING MATERIAL: SUBBASE OR BASE MATERIALS AS IDENTIFIED ABOVE.
8. FILTER FABRIC: MANUFACTURER'S STANDARD NONWOVEN PERVIOUS GEOTEXTILE FABRIC OF POLYPROPELENE, NYLON OR POLYESTER FIBERS, OR A COMBINATION IN ACCORDANCE WITH ASTM D 4759.
   a. GRAB TENSILE STRENGTH (ASTM D 4652): 100 LB
   b. APPARENT OPENING SIZE (ASTM D 4751): #100 U.S. STANDARD SIEVE.
   c. PERMEABILITY (ASTM D 4491): 150 GALLONS PER MINUTE PER SQ. FT.
9. COMPLY WITH LOCAL CODES, ORDINANCES, AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION TO MAINTAIN STABLE EXCAVATIONS. CONTRACTOR SHALL COMPLY WITH THE TRENCH SAFETY ACT.
10. EXCAVATION FOR STRUCTURES: EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT. EXTEND EXCAVATIONS A SUFFICIENT DISTANCE FROM STRUCTURES FOR PLACING AND REMOVING CONCRETE FORMWORK, INSTALLING SERVICES AND OTHER CONSTRUCTION, AND FOR INSPECTIONS.
11. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS: DO NOT DISTURB BOTTOM OF EXCAVATION. EXCAVATE BY HAND TO FINAL GRADE JUST BEFORE PLACING CONCRETE REINFORCEMENT. TRIM BOTTOMS TO REQUIRED LINES AND GRADES TO LEAVE SOLID BASE TO RECEIVE OTHER WORK.
12. EXCAVATION FOR UNDERGROUND STRUCTURES AND MECHANICAL OR ELECTRICAL APPURTENANCES: EXCAVATE TO ELEVATIONS AND DIMENSIONS INDICATED WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT. DO NOT DISTURB BOTTOM OF EXCAVATIONS INTENDED FOR BEARING SURFACE.
13. EXCAVATE TRENCHES TO UNIFORM WIDTHS TO PROVIDE A WORKING CLEARANCE ON EACH SIDE OF PIPE OR CONDUIT. EXCAVATE TRENCH WALLS VERTICALLY FROM TRENCH BOTTOM TO 12 INCHES HIGHER THAN TOP OF PIPE OR CONDUIT, UNLESS OTHERWISE INDICATED.
14. TRENCH BOTTOMS: EXCAVATE AND SHAPE TRENCH BOTTOMS TO PROVIDE UNIFORM BEARING AND SUPPORT OF PIPES AND CONDUIT. SHAPE SUBGRADE TO PROVIDE CONTINUOUS SUPPORT FOR BELLS, JOINTS, AND BARRELS OF PIPES AND FOR JOINTS, FITTINGS, AND BODIES OF CONDUITS. REMOVE STONES AND SHARP OBJECTS TO AVOID POINT LOADING.
   a. FOR PIPES OR CONDUIT LESS THAN 6 INCHES IN NOMINAL DIAMETER AND FLAT-BOTTOMED, MULTIPLE-DUCT CONDUIT UNITS, HAND-EXCAVATE TRENCH BOTTOMS AND SUPPORT PIPE AND CONDUIT ON AN UNDISTURBED SUBGRADE.
   b. FOR PIPES AND CONDUIT 6 INCHES OR LARGER IN NOMINAL DIAMETER, SHAPE BOTTOM OF TRENCH TO SUPPORT BOTTOM 90 DEGREES OF PIPE CIRCUMFERENCE. FILL DEPRESSIONS WITH TAMPED SAND BACKFILL.
   c. WHERE ENCOUNTERING ROCK OR ANOTHER UNYIELDING BEARING SURFACE, CARRY TRENCH EXCAVATION 6 INCHES BELOW INVERT ELEVATION TO RECEIVE BEDDING COURSE.
15. RECONSTRUCT SUBGRADES DAMAGED BY RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES.
16. STOCKPILE EXCAVATED MATERIALS ACCEPTABLE FOR BACKFILL AND FILL SOIL MATERIALS, INCLUDING ACCEPTABLE BORROW MATERIALS. STOCKPILE SOIL MATERIALS WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WIND-BLOWN DUST IF DIRECTED BY PROJECT REPRESENTATIVE.
17. CONTRACTOR SHALL PROVIDE DETECTABLE WARNING TAPE MADE FROM ACID AND ALKALI RESISTANT POLYETHYLENE FILM TO MARK AND IDENTIFY UNDERGROUND UTILITIES. TAPE SHALL BE 6 INCHES WIDE AND 4 MILS THICK, CONTINUOUSLY INSCRIBED WITH A DESCRIPTION OF THE UTILITY, WITH A METALLIC CORE ENCASED IN A PROTECTIVE JACKET FOR CORROSION PROTECTION, DETECTABLE BY METAL DETECTOR WHEN TAPE IS BURIED UP TO 2'-6" DEEP OVER NON FERROUS PIPE. PROVIDE TAPE COLORS TO MATCH UTILITIES AS FOLLOWS:
   RED: ———— ELECTRIC
   YELLOW: ———— GAS, OIL, STEAM AND DANGEROUS MATERIALS
   ORANGE: ———— TELEPHONE AND OTHER COMMUNICATIONS
   BLUE: ———— WATER SYSTEMS
   GREEN: ———— SEWER SYSTEMS
18. UTILITY TRENCH BACKFILL: PLACE AND COMPACT INITIAL BACKFILL OF SATISFACTORY SOIL MATERIAL OR SUBBASE MATERIAL, FREE OF PARTICLES LARGER THAN 1 INCH, TO A HEIGHT OF 12 INCHES OVER THE UTILITY PIPE OR CONDUIT.
19. CAREFULLY COMPACT MATERIAL UNDER PIPE HAUNCHES AND BRING BACKFILL EVENLY UP ON BOTH SIDES AND ALONG THE FULL LENGTH OF UTILITY PIPING OR CONDUIT TO AVOID DAMAGE OR DISPLACEMENT OF UTILITY SYSTEM.
20. PLACE AND COMPACT FINAL BACKFILL OF SATISFACTORY SOIL MATERIAL TO FINAL SUBGRADE.
21. REMOVE VEGETATION, TOPSOIL, DEBRIS, WET, AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS.
22. WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DENSITY LESS THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION OR AERATE SOIL AND RECOMPACT TO REQUIRED DENSITY.
23. PLACE FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS FOR EACH LOCATION LISTED BELOW.
   a. UNDER GRASS, USE SATISFACTORY EXCAVATED OR BORROW SOIL MATERIAL.
   b. UNDER WALKS AND PAVEMENTS, USE SUBBASE OR BASE MATERIAL, OR SATISFACTORY EXCAVATED OR BORROW SOIL MATERIAL.
   c. UNDER BUILDING SLABS, USE SATISFACTORY FILL MATERIAL.
   d. UNDER FOOTINGS AND FOUNDATIONS, USE ENGINEERED FILL.
24. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
   A. DO NOT PLACE BACKFILL OR FILL MATERIAL ON SURFACES THAT ARE MUDDY OR CONTAIN ICE.
   B. REMOVE AND REPLACE, OR SCARIFY AND AIR-DRY SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DENSITY.
   C. STOCKPILE OR SPREAD AND DRY REMOVED WET SATISFACTORY SOIL MATERIAL.
25. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
26. PERCENTAGE OF MAXIMUM DRY DENSITY REQUIREMENTS: COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 1557 UNLESS PLAN SPECIFICALLY NOTE OTHERWISE:
   a. UNDER BUILDING SLABS AND PAVEMENTS, COMPACT THE TOP 12 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT MAXIMUM DRY DENSITY.
   b. UNDER WALKWAYS, COMPACT THE TOP 6 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT MAXIMUM DRY DENSITY.
   c. UNDER LAWN OR UNPAVED AREAS, COMPACT THE TOP 6 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 90 PERCENT MAXIMUM DRY DENSITY.
27. SITE GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDING AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
   a. LAWN OR UNPAVED AREAS: PLUS OR MINUS 0.10 FOOT. WALKS: PLUS OR MINUS 0.10 FOOT. PAVEMENTS: PLUS OR MINUS 1/2 INCH.
28. UNDER PAVEMENTS AND WALKS, CONSTRUCT SUBBASE COURSE AND BASE COURSE MATERIAL IN ACCORDANCE WITH SECTIONS 160 AND 200 OF THE FDOT STANDARD SPECIFICATIONS.
29. COMPACT SUBBASE AND BASE COURSES AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS AND THICKNESS TO NOT LESS THAN 95 PERCENT OF ASTM D 4254 RELATIVE DENSITY. SHAPE SUBBASE AND BASE TO REQUIRED CROWN ELEVATIONS AND CROSS-SLOPE GRADES.
   a. WHEN THICKNESS OF COMPACTED SUBBASE OR BASE COURSE IS 6 INCHES OR LESS, PLACE MATERIALS IN A SINGLE LAYER.
30. PAVEMENT SHOULDERS: PLACE SHOULDERS ALONG EDGES OF SUBBASE AND BASE COURSE TO PREVENT LATERAL MOVEMENT. CONSTRUCT SHOULDERS OF ACCEPTABLE MATERIALS AND COMPACT SIMULTANEOUSLY WITH EACH SUBBASE AND BASE LAYER.
31. UNDER SLABS-ON-GRADE, PLACE ENGINEERED FILL ON PREPARED SUBGRADE.
32. TESTING AGENCY SERVICES: ALLOW TESTING AGENCY TO INSPECT AND TEST EACH SUBGRADE AND EACH FILL OR BACKFILL LAYER. DO NOT PROCEED UNTIL TEST RESULTS FOR PREVIOUSLY COMPLETED WORK VERIFY COMPLIANCE WITH REQUIREMENTS.
33. PERFORM FIELD IN-PLACE DENSITY TESTS ACCORDING TO ASTM D 1556 (SAND CONE METHOD). FIELD IN-PLACE DENSITY TESTS MAY ALSO BE PERFORMED BY THE NUCLEAR METHOD ACCORDING TO ASTM D 2922, PROVIDED THAT CALIBRATION CURVES ARE PERIODICALLY CHECKED AND ADJUSTED TO CORRELATE TO TESTS PERFORMED USING ASTM D 1556. WITH EACH DENSITY CALIBRATION CHECK, CHECK THE CALIBRATION CURVES FURNISHED WITH THE MOISTURE GAGES ACCORDING TO ASTM D 3017. WHEN FIELD IN-PLACE DENSITY TESTS ARE PERFORMED USING NUCLEAR METHODS, MAKE CALIBRATION CHECKS OF BOTH DENSITY AND MOISTURE GAGES AT BEGINNING OF WORK, ON EACH DIFFERENT TYPE OF MATERIAL ENCOUNTERED, AND AT INTERVALS AS DIRECTED BY THE PROJECT REPRESENTATIVE.
34. FOOTING SUBGRADE: AT FOOTING SUBGRADES, PERFORM AT LEAST ONE TEST OF EACH SOIL STRATUM TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF EACH SUBGRADE WITH RELATED TESTED STRATA WHEN ACCEPTABLE TO THE PROJECT REPRESENTATIVE.
35. PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, PERFORM AT LEAST ONE FIELD IN-PLACE DENSITY TEST FOR EVERY 2,000 SQ. FT. OR LESS OF PAVED AREA OR BUILDING SLAB, BUT IN NO CASE FEWER THAN TWO TESTS.
36. TRENCH BACKFILL: IN EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, PERFORM AT LEAST ONE FIELD IN-PLACE DENSITY TEST FOR EACH 300 FEET OR LESS OF UTILITY TRENCH, BUT NO FEWER THAN TWO TESTS.
37. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS ARE BELOW SPECIFIED DENSITY, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO THE DEPTH REQUIRED, RECOMPACT AND RETEST UNTIL REQUIRED DENSITY IS OBTAINED.
38. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED IN WRITING BY PROJECT REPRESENTATIVE AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED:
   a. NOTIFY ENGINEER NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
   b. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ENGINEER WRITTEN PERMISSION.
   c. CONTACT UTILTY-LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE EXCAVATING.
39. DEMOLISH AND COMPLETELY REMOVE FROM SITE EXISTING UNDERGROUND UTILITIES INDICATED TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES TO SHUT OFF SERVICES IF LINES ARE ACTIVE.
40. EXPLOSIVES: DO NOT USE EXPLOSIVES.
41. AREA OF BUILDINGS PLUS A MARGIN OF 10' ON ALL SIDES SHALL BE CLEARED AND GRUBBED TO REMOVE AND DISPOSE OF ANY SURFACE VEGETATION, ROOTS, AND DEBRIS UNLESS PLANS SPECIFICALLY NOTE OTHERWISE.
42. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, AS DIRECTED BY ARCHITECT.

SEWAGE COLLECTION SYSTEM

1. ALL VERTICAL AND HORIZONTAL SPACING BETWEEN SEWAGE COLLECTION SYSTEMS AND WATER DISTRIBUTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDEP STANDARDS.
2. ADHERE TO MANUFACTURER'S RECOMMENDATIONS ON THE INSTALLATION OF PVC, CPEP, AND RCP STORM SEWERS.
3. GENERAL: ALL PVC SEWER SHALL BE INSTALLED IN ACCORDANCE WITH UNI-BELL, UNI-B-5.
4. PIPE PREPARATION AND HANDLING: INSPECT ALL PIPE AND FITTINGS PRIOR TO LOWERING INTO TRENCH TO ENSURE NOT CRACKED, BROKEN, OR OTHERWISE DEFECTIVE MATERIALS ARE BEING USED. CLEAN ENDS OF PIPE THOROUGHLY. REMOVE FOREIGN MATTER AND DIRT FROM INSIDE OF PIPE AND KEEP CLEAN DURING AND AFTER LAYING. REMOVE ALL DAMAGED PIPE FROM THE JOB SITE.
5. GRAVITY SEWER PIPE: ALL SEWER LINES BETWEEN MANHOLES SHALL BE ABSOLUTELY STRAIGHT AND TRUE. NO CURVATURE SHALL BE TOLERATED. DO NOT DEVIATE FROM LINE OR GRADE, AS ESTABLISHED BY THE ENGINEER, MORE THAN 1/2" FOR LINE AND 1/4" FOR GRADE, PROVIDED THAT SUCH VARIATION DOES NOT RESULT IN A LEVEL OR REVERSE SLOPING INVERT.
6. LAYING AND JOINTING PIPE: PIPE LAYING SHALL PROCEED UPGRADE WITH SPIGOT ENDS POINTING IN DIRECTION OF FLOW. AFTER A SECTION OF PIPE HAS BEEN LOWERED INTO THE PREPARED TRENCH, CLEAN THE END OF THE PIPE TO BE JOINED, THE INSIDE OF THE JOINT, AND THE RUBBER RING IMMEDIATELY BEFORE JOINING THE PIPE. MAKE ASSEMBLY OF THE JOINT IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE TYPE OF JOINT USED. PROVIDE ALL SPECIAL TOOLS AND APPLIANCES REQUIRED FOR THE JOINTING ASSEMBLY.
7. TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PREVENT EXCAVATED OR OTHER FOREIGN MATERIAL FROM GETTING INTO THE PIPE DURING THE LAYING OPERATION. AT ALL TIMES, WHEN LAYING OPERATIONS ARE NOT IN PROGRESS, AT THE CLOSE OF THE DAY'S WORK, OR WHENEVER THE WORKERS ARE ABSENT FROM THE JOB, CLOSE AND BLOCK THE OPEN END OF THE LAST LAID SECTION OF PIPE TO PREVENT ENTRY OF FOREIGN MATERIAL OR CREEP OF THE GASKETED JOINTS.
8. PLUG OR CLOSE OFF PIPES WHICH ARE STUBBED OFF FOR MANHOLE CONSTRUCTION OR FOR CONSTRUCTION BY OTHERS, WITH TEMPORARY PLUGS.
9. WHERE NONREINFORCED PIPE IS CONNECTED TO MANHOLES OR CONCRETE STRUCTURES, MAKE CONNECTION SO THAT THE STANDARD PIPE JOINT IS LOCATED NOT MORE THAN 3' FROM THE OUTSIDE EDGE OF THE STRUCTURE.
10. WHEN CUTTING AND/OR MACHINING THE PIPE IS NECESSARY, USE ONLY TOOLS AND METHODS RECOMMENDED BY THE PIPE MANUFACTURER.
11. UNDERGROUND STRUCTURES:
   a. ROCK BASE: PRIOR TO SETTING PRECAST CONCRETE BASE SECTION, REMOVE WATER FROM THE EXCAVATION. PLACE A MINIMUM OF 6" OF ROCK BASE AND THOROUGHLY COMPACT WITH A MECHANICAL VIBRATING OR POWER TAMPER.
   b. MANHOLE JOINT SEALS: CAREFULLY INSPECT PRECAST MANHOLE SECTIONS TO BE JOINED. SECTIONS WITH CHIPS OR CRACKS IN THE TONGUE SHALL NOT BE USED. JOINT SEALS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ONLY PIPE PRIMER FURNISHED BY THE JOINT SEAL MANUFACTURER WILL BE APPROVED.
   c. PRECAST CONCRETE MANHOLES: PLACE PRECAST CONCRETE SECTIONS AS SHOWN ON THE DRAWINGS. WHERE MANHOLES OCCUR IN PAVEMENTS, SET TIPS OF FRAMES AND COVERS FLUSH WITH FINISH SURFACE. ELSEWHERE, SET TOPS 3" ABOVE FINISH SURFACE, UNLESS OTHERWISE INDICATED.
   d. MANHOLE INVERT: CONSTRUCT MANHOLE INVERTS IN CONFORMANCE WITH DETAILS SHOWN ON THE DRAWINGS, AND WITH SMOOTH TRANSITIONS TO ENSURE AN UNOBSTRUCTED FLOW THROUGH MANHOLE. REMOVE ALL SHARP EDGES OR ROUGH SECTIONS WHICH TEND TO OBSTRUCT FLOW. WHERE A FULL SECTIONS OF PIPE IS LAID THROUGH A MANHOLE, BREAK OUT THE TOP SECTION AS INDICATED AND COVER EXPOSED EDGE OF PIPE COMPLETELY WITH MORTAR. TROWEL ALL MORTAR SURFACES SMOOTH.
   e. PROVIDE RUBBER JOINT GASKET COMPLYING WITH ASTM C-443.
   f. APPLY BITUMINOUS MASTIC COATING AT JOINTS OF SECTIONS.
12. PRIOR TO FINAL ACCEPTANCE, THE SEWER COLLECTION SYSTEM SHALL BE THOROUGHLY CLEANED AND VISUALLY INSPECTED IN THE PRESENCE OF THE ENGINEER AND LOCAL AUTHORITIES HAVING JURISDICTION.
13. FOLLOWING VISUAL INSPECTION, THE SEWER SYSTEM INCLUDING SERVICE LINES SHALL BE TESTED IN THE PRESENCE OF THE ENGINEER AND LOCAL AUTHORITIES HAVING JURISDICTION.
14. ACCEPTABLE METHODS OF TESTING SHALL BE LOW PRESSURE AIR EXFILTRATION OR WATER EXFILTRATION IN ACCORDANCE WITH THE LOCAL AUTHORITY REQUIREMENTS.
15. THE CONTRACTOR SHALL FURNISH ALL NECESSARY TOOLS, SUPPLIES, LABOR AND EQUIPMENT FOR TESTING.
16. LOW PRESSURE AIR EXFILTRATION TESTING SHALL BE IN ACCORDANCE WITH UNI-BELL, UNI-B-6.
17. WATER EXFILTRATION TESTING SHALL BE IN ACCORDANCE WITH UNI-BELL, UNI-B-5.
18. VISUAL INSPECTION AND TESTING SHALL BE PERFORMED ON THE SAME DAY. NOTIFY ENGINEER AND PERMIT AGENCY OF JURISDICTION MINIMUM 72 HOURS OF WEEKDAYS NOTICE.

WATER DISTRIBUTION AND SERVICE PIPING

1. ALL VERTICAL AND HORIZONTAL SPACING BETWEEN WATER DISTRIBUTION SYSTEMS AND SEWAGE COLLECTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDEP STANDARDS.
2. CODE COMPLIANCE: COMPLY WITH APPLICABLE PORTIONS OF NATIONAL STANDARD PLUMBING CODE, LOCAL PLUMBING CODES LOCAL MUNICIPALITY WITH JURISDICTION CONSTRUCTION STANDARDS AND DETAILS, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND NFPA 24.
3. DUCTILE IRON PIPE: DUCTILE IRON PIPE SHALL BE CEMENT-MORTAR LINED, CLASS 150, MECHANICAL OR PUSH-ON JOINT AND SHALL MEET ALL THE REQUIREMENTS OF THE FOLLOWING: ANSI/AWWA C-104/A-21.4; ANSI/AWWA C-111/A-21.11 (FOR RUBBER GASKET JOINTS); ANSI/AWWA C-150/A-21.50 (FOR THICKNESS DESIGN); AND ANSI/AWWA C-151/A-21.51 (FOR D.I.P. MOLDS).
4. LINING: ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE CEMENT-MORTAR LINED AND SEAL COATED IN CONFORMANCE WITH ANSI A-21.4
5. POLYVINYL CHLORIDE (PVC) PIPE: AWWA C900; CLASSES 150 AND 200; WITH BELL END AND ELASTOMERIC GASKET, WITH PLAIN END FOR CAST-IRON OR DUCTILE-IRON FITTINGS.
   a. PIPE MARKING: NSF 14, "NSF-PVC CTO ONLY."
   b. GASKETS: ASTM F 477; ELASTOMERIC SEAL.
6. JOINTS: PIPE JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS, EXCEPT WHERE SPECIFICALLY SHOWN OR DETAILED OTHERWISE.
7. PIPE FITTINGS: ALL FITTINGS 4" IN DIAMETER AND LARGER SHALL BE DUCTILE IRON WITH MECHANICAL OR PUSH-ON JOINTS AND SHALL CONFORM TO ANSI A-21.10 (AWWA C-110) FOR SHORT BODY FITTINGS WITH A 250 PSI PRESSURE RATING FOR FITTINGS UP TO 12" IN DIAMETER.
8. MECHANICAL JOINT FITTINGS: MECHANICAL JOINT DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA C-110/A-21.10 AND ANSI/AWWA C-111/A-21.11 AND SHALL BE OF A CLASS AT LEAST EQUAL TO THAT OF THE ADJACENT PIPE. MORTAR LINING AND SEAL COAT FOR FITTINGS SHALL BE SAME THICKNESS SPECIFIED FOR PIPE.
9. GASKETS: THE RUBBER-RING GASKETS SHALL BE SUITABLE FOR THE SPECIFIED PIP SIZES AND PRESSURE AND SHALL CONFORM TO APPLICABLE PARTS OF THE LATEST FEDERAL SPECIFICATION WW-F-421, AND SHALL BE FURNISHED WITH THE PIPE.
10. JOINT LUBRICANT: THE JOINT LUBRICANT FOR PUSH-ON JOINT PIPE SHALL HAVE BEEN TESTED AND APPROVED FOR POTABLE WATER SERVICE. NO LUBRICANT SHALL BE USED THAT WILL HARBOR BACTERIA OR DAMAGE THE GASKETS.
11. POLYVINYL CHLORIDE(PVC) PRESSURE PIPE UNDER 4" SHALL BE MINIMUM PRESSURE CLASS OF 200 PSI SCHEDULE 40 CONFORMING TO ASTM D-1785 OR SDR 21 CONFORMING TO ASTM D-2241 WITH CEMENT-SOLVENT WELDED JOINTS OR PUSH ON ELASTOMERIC JOINTS. MARK PIPE WITH "NSF-PW" ACCORDING TO NSF14.
12. CONTROL VALVES: PROVIDE VALVES AND FLOW CONTROL DEVICES AS INDICATED. ALL VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS.
   a. MINIMUM WORKING PRESSURE, 200 PSI UNLESS OTHERWISE INDICATED.
   b. GATE VALVES (4" AND LARGER): RESILIENT SEAT TYPE WITH NON-RISING STEM, CAST IRON BODY AND BRONZE FITTINGS CONFORMING TO AWWA C-500. GATE VALVES LOCATED ON FIRE PROTECTION MAINS MUST BE FM APPROVED.
   c. VALVE BOXES: SHALL BE OF CAST IRON WITH ADJUSTABLE TOP. THE SIZE SHALL BE LARGE ENOUGH FOR OPERATION OF THE VALVE ON WHICH IT IS USED WITH A MINIMUM SHAFT DIAMETER OF 5-1/4". THE COVER SHALL HAVE THE WORD "WATER" CAST ON IT.
   d. GATE VALVES (SMALLER THAN 4"): SHALL BE NON-RISING STEM, HANDWHEEL OPERATED, WEDGE DISCS, ALL BRONZE WITH FLANGED ENDS, CONFORMING TO FED. SPEC. WW-V-54, CLASS B, TYPE 1. FOR BELOW GROUND INSTALLATION, VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS OR IRON PIPE THREAD AND 2" SQUARE OPERATING NUT.
13. WATER SERVICE PIPING: EXTEND WATER SERVICE PIPING OF SIZE AND IN LOCATIONS INDICATED TO WATER SERVICE ENTRANCE AT BUILDINGS. PROVIDE SLEEVE IN FOUNDATION WALL FOR WATER SERVICE ENTRY; MAKE ENTRY WATERTIGHT.
14. POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS: INSTALL IN ACCORDANCE WITH UNI-BELL HANDBOOK OF PVC PIPE.
15. DUCTILE IRON PIPE: INSTALL IN ACCORDANCE WITH AWWA C-600.
16. CONTROL VALVES: INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
17. INTERIOR INSPECTION: INSPECT CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
18. IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
19. CLEANING CONDUIT: CLEAR INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED.
20. PLACE PLUGS IN END OF UNCOMPLETED CONDUIT AT END OF DAY OR WHENEVER WORK STOPS.
21. DISINFECTION: AT COMPLETION OF WATER SERVICE LINE INSTALLATION, FLUSH AND DISINFECT IN CONFORMANCE WITH AWWA C-651, TO THE SATISFACTION OF LOCAL AUTHORITIES HAVING JURISDICTION.
22. HYDROSTATIC AND LEAKAGE TEST: ALL SITE WATER DISTRIBUTION PIPING SHALL BE TESTED AFTER INSTALLATION. DUCTILE IRON PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-600, AND PVC PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-603. ACCEPTABLE LEAKAGE MUST BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULAS IN AWWA C-600 AND C-605.
23. THE POTABLE WATER LINES SHALL BE TESTED TO 150 PSI TEST PRESSURE AND THE FIRE LINE SHALL BE TESTED TO 200 PSI TEST PRESSURE, BOTH FOR TWO (2) HOURS DURATION. ALL GAUGES AND APPURTENANCES NECESSARY SHALL BE FURNISHED BY THE CONTRACTOR. ALL LEAKS SHALL BE REPAIRED BY REMOVING AND REPLACING DEFECTIVE PIPE AND JOINTS WITH PIPE AND JOINTS FREE OF DEFECTS, AFTER WHICH THE LINES SHALL BE RETESTED. SUCH REPAIR AND RETESTING SHALL BE DONE UNTIL THE LINES PASS THE SPECIFIED TEST.
24. ALL VALVES SHALL BE HYDROSTATICALLY TESTED WITH THE LINE IN WHICH THEY ARE INSTALLED.
25. PERFORM OPERATION TESTING OF HYDRANTS AND VALVES BY OPENING AND CLOSING UNDER WATER PRESSURE TO ENSURE PROPER OPERATION.

STORM SEWER SYSTEM

1. EXCEPT AS OTHERWISE PROVIDED, ALL STORM SEWER MATERIALS SHALL COMPLY WITH THE APPLICABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" CURRENT EDITION WHICH ARE HEREBY INCORPORATED INTO THESE SPECIFICATIONS BY REFERENCE. FURTHER, ALL CONSTRUCTION DETAILS INCLUDED IN THE CURRENT EDITION OF FDOT'S "ROADWAY AND TRAFFIC DESIGN STANDARDS" ARE INCORPORATED INTO THESE SPECIFICATIONS BY REFERENCE.
2. FOR PIPES SMALLER THAN 12": SELECTION OF MATERIALS SPECIFIED BELOW IS AT THE INSTALLER'S OPTION.
   a. POLYVINYL CHLORIDE (PVC), ASTM D-3034, SDR 35 PIPE AND FITTINGS. FITTINGS SHALL BE WITH RUBBER GASKETED JOINTS.
   b. CORRUGATED POLYETHYLENE PIPE (CPEP) IN ACCORDANCE WITH AASHTO M294 AND ASTM D-3350. CPEP SHALL HAVE A SMOOTH INTERIOR.
3. FOR PIPES 12" AND LARGER: REINFORCED CONCRETE PIPE(RCP): FDOT SECTION 941, ROUND OR ELLIPTICAL PER DWG. PLANS, STANDARD CLASS III CONCRETE CULVERT PIPE UNLESS CLASS IV PIPE IS CALLED FOR.
4. FDOT SECTION 425. USE STEEL GRATES ON ALL INLETS, TRAFFIC BEARING.
5. ADHERE TO MANUFACTURER'S RECOMMENDATIONS ON THE INSTALLATION OF PVC, CPEP, AND RCP STORM SEWERS.

ASPHALT CONCRETE PAVEMENT

1. REFERENCE TO STANDARD SPECIFICATIONS REFERS TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010.
2. ASPHALT CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 330 OF THE STANDARD SPECIFICATIONS.
3. THE JOB MIX FORMULA SHALL BE DETERMINED BY AND SHALL CONFORM TO REQUIREMENTS OF ASTM T-17.
4. APPLY PRIME AND TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEG F (10 DEG C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEG F (1 DEG C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS AN EXCESS OF MOISTURE.
5. CONSTRUCT HOT-MIXED ASPHALT SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40 DEG F (4 DEG C) AND WHEN BASE IS DRY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEG F (MINUS 1 DEG C) AND RISING.
6. PRIME COAT SHALL BE IN ACCORDANCE WITH SECTION 330 OF THE STANDARD SPECIFICATIONS APPLIED AT A RATE OF 0.35 TO 0.40 GALLONS PER SQUARE YARD.
7. SUBGRADE STABILIZING MATERIAL: FDOT SECTION 914.
8. BASE COURSE: THE BASE COURSE SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS:
   a. LIMEROCK BASE COURSE: FDOT SECTION 911. LIMEROCK SHALL HAVE A MINIMUM LBR OF 100% AND SHALL BE MINED FROM AN FDOT APPROVED SOURCE.
9. PRIME AND TACK COATS: FDOT SECTION 300.
10. LANE MARKINGS:
   a. PAINT: FDOT SECTION 971, CODE T-1 OR T-2, COLOR AS INDICATED ON THE DRAWINGS.
   b. THERMOPLASTIC: FDOT SECTION 971, COLOR AS INDICATED ON THE DRAWINGS.
11. CONSTRUCTION OF BASE COURSE: FDOT SECTION 200, FOR LIMEROCK
12. PLACE LIMEROCK IN MAXIMUM 6" LIFTS AND COMPACT EACH LIFT TO A MINIMUM DRY DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (AASHTO T-180)
13. PERFORM COMPACTION TESTING FOR LIMEROCK THE FULL DEPTH AT A FREQUENCY OF ONE TEST PER 10,000 SQUARE FOOT, OR AT A MINIMUM OF TWO TEST LOCATIONS, WHICHEVER IS GREATER.
14. CONSTRUCTION OF WEARING COURSE: FDOT SECTION 330.
15. PAVEMENT MARKINGS: FDOT SECTIONS 710 AND 711.

CONCRETE

1. ALL CONCRETE STRENGTHS SHALL BE AS FOLLOWS WITH BROOM FINISH UNLESS IDENTIFIED OTHERWISE:
   FOUNDATIONS & SLABS ON GRADE ____ 3000 PSI
   MASONRY GROUT AND UNREINFORCED CONCRETE ____ 3000 PSI
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 (FY=60 KSI).
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE LAPPED ONE FULL MESH PANEL PLUS 2 IN. AT SIDES AND ENDS AND BE WIRED TOGETHER. FIBER MESH MAY BE SUBSTITUTED PER DIRECTION OF ENGINEER AT REQUEST OF CONTRACTOR.
4. CALCIUM CHLORIDE SHALL NOT BE USED IN ANY FORM.
5. ADDITION OF WATER TO CONCRETE AT THE JOB SITE SHALL BE PROHIBITED.
6. ALL CONCRETE WORK SHALL COMPLY WITH PROVISIONS OF ACI 318, 315, AND 301, LATEST EDITIONS, UNLESS OTHERWISE NOTED.
7. REINFORCING FOR CONTINUOUS FOUNDATIONS AND BEAMS SHALL BE CONTINUOUS AT CORNERS AND INTERSECTIONS. PROVIDE SPLICE BARS AND/OR HOOK ENDS FOR CONTINUOUS REINFORCING.
8. MINIMUM CONCRETE PROTECTION FOR REINFORCING BARS:

STRUCTURAL ELEMENT	MIN CLEAR COVER
FOOTINGS, (CAST AGAINST & PERMANENTLY EXPOSED TO EARTH)	3 INCHES
SLABS (IN CONTACT WITH EARTH)	2 INCHES

REV#	DATE	REVISION

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SPECIFICATIONS

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SCALE: NTS
PROJ. NO. : 240230
DESIGNED BY: NCW
DRAWN BY: JDH
CHECKED BY: JTW
DRAWING NO. C-9

FDEP WATER SPECIFICATIONS

1. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS. [FAC 62-555.320(21)(B), RSWW 8.0, AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330; EXCEPTIONS ALLOWED UNDER FAC 62-555.320(21)(C)]
2. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61 AS ADOPTED IN RULE 62-555.335, F.A.C., OR OTHER APPLICABLE STANDARDS, REGULATIONS, OR REQUIREMENTS REFERENCED IN PARAGRAPH 62-555.320(3)(B), F.A.C. [FAC 62-555.320(3)(B); EXCEPTIONS ALLOWED UNDER FAC 62-555.320(3)(D)]
3. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD. [FAC 62-555.322]
4. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62-555.320(21)(B)3]
5. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL HAVE UNPLUGGED, UNDERGROUND DRAINS WILL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM." [FAC 62-555.314(4)]
6. NEW OR ALTERED CHAMBERS, PITS, OR MANHOLES THAT CONTAIN VALVES, BLOW-OFFS, METERS, OR OTHER SUCH WATER DISTRIBUTION SYSTEM APPURTENANCES AND THAT ARE INCLUDED IN THIS PROJECT WILL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER, AND BLOW-OFFS OR AIR RELIEF VALVES INSTALLED UNDER THIS PROJECT WILL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER. [FAC 62-555.320(21)(B) AND RSWW 8.4.3]
7. NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED PROCEDURES. [FAC 62-555.320(21)(B), RSWW 8.5.1, AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330]
8. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT. [FAC 62-555.320(21)(B), RSWW 8.5.2]
9. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AS INCORPORATED INTO RULE 62-555.330, F.A.C., AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 AS INCORPORATED INTO RULE 62-555.330. [FAC 62-555.320(21)(B)1 AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330]
10. NEW OR ALTERED WATER MAINS, INCLUDING FIRE HYDRANT LEADS AND INCLUDING SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, WILL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C. [FAC 62-555.320(21)(B)2 AND FAC 62-555.340]
11. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE INSTALLED IN AREAS WHERE THERE ARE KNOWN AGGRESSIVE SOIL CONDITIONS WILL BE PROTECTED THROUGH USE OF CORROSION-RESISTANT WATER MAIN MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION. [FAC 62-555.320(21)(B) AND RSWW 8.5.7.D]
12. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM." [FAC 62-555.314(1); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]
13. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]
14. AT THE UTILITY CROSSINGS DESCRIBED IN PART II.C.1.W ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]
15. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS UNDER SURFACE WATER COURSES GREATER THAN 15 FEET IN WIDTH WILL HAVE FLEXIBLE OR RESTRAINED, WATERTIGHT PIPE JOINTS AND WILL INCLUDE VALVES AT BOTH ENDS OF THE WATER CROSSING SO THE UNDERWATER MAIN CAN BE ISOLATED FOR TESTING AND REPAIR; THE AFOREMENTIONED ISOLATION VALVES WILL BE EASILY ACCESSIBLE AND WILL NOT BE SUBJECT TO FLOODING; THE ISOLATION VALVE CLOSEST TO THE WATER SUPPLY SOURCE WILL BE IN A MANHOLE; AND PERMANENT TAPS WILL BE PROVIDED ON EACH SIDE OF THE ISOLATION VALVE WITHIN THE MANHOLE TO ALLOW FOR INSERTION OF A SMALL METER TO DETERMINE LEAKAGE FROM THE UNDERWATER MAIN AND TO ALLOW FOR SAMPLING OF WATER FROM THE UNDERWATER MAIN. [FAC 62-555.320(21)(B) AND RSWW 8.7.2]
16. THIS PROJECT IS BEING DESIGNED TO INCLUDE PROPER BACKFLOW PROTECTION AT THOSE NEW OR ALTERED SERVICE CONNECTIONS WHERE BACKFLOW PROTECTION IS REQUIRED OR RECOMMENDED UNDER RULE 62-555.360, F.A.C., OR IN RECOMMENDED PRACTICE FOR BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL, AWWA MANUAL M14, AS INCORPORATED INTO RULE 62-555.330, F.A.C.; OR THE PUBLIC WATER SYSTEM THAT WILL OWN THIS PROJECT AFTER IT IS PLACED INTO OPERATION HAS A CROSS-CONNECTION CONTROL PROGRAM REQUIRING WATER CUSTOMERS TO INSTALL PROPER BACKFLOW PROTECTION AT THOSE SERVICE CONNECTIONS WHERE BACKFLOW PROTECTION IS REQUIRED OR RECOMMENDED UNDER RULE 62-555.360, F.A.C., OR IN AWWA MANUAL M14. [FAC 62-555.360 AND AWWA MANUAL M14 AS INCORPORATED INTO FAC 62-555.330]
17. NEITHER STEAM CONDENSATE, COOLING WATER FROM ENGINE JACKETS, NOR WATER USED IN CONJUNCTION WITH HEAT EXCHANGERS WILL BE RETURNED TO THE NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT. [FAC 62-555.320(21)(B) AND RSWW 8.8.2]

FDEP WASTEWATER SPECIFICATIONS

1. APPROPRIATE DEFLECTION TESTS ARE SPECIFIED FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED; AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES. [RSWF 33.85]
2. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM; 2) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; AND 3) AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. [RSWF 33.93, 33.94, AND 33.95]
3. DESIGN REQUIRES DROP PIPES TO BE PROVIDED FOR SEWERS ENTERING MANHOLES AT ELEVATIONS OF 24 INCHES OR MORE ABOVE THE MANHOLE INVERT. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE INCOMING SEWER AND THE MANHOLE INVERT IS LESS THAN 24 INCHES, THE INVERT IS DESIGNED WITH A FILLET TO PREVENT SOLIDS DEPOSITION. INSIDE DROP CONNECTIONS (WHEN NECESSARY) ARE DESIGNED TO BE SECURED TO THE INTERIOR WALL OF THE MANHOLE AND PROVIDE ACCESS FOR CLEANING. DESIGN REQUIRES THE ENTIRE OUTSIDE DROP CONNECTION BE ENCASED IN CONCRETE. [RSWF 34.2]
4. DESIGN REQUIRES THAT A BENCH BE PROVIDED ON EACH SIDE OF ANY MANHOLE CHANNEL WHEN THE PIPE DIAMETER(S) ARE LESS THAN THE MANHOLE DIAMETER AND THAT NO LATERAL SEWER, SERVICE CONNECTION, OR DROP MANHOLE PIPE DISCHARGES ONTO THE SURFACE OF THE BENCH. [RSWF 34.5]
5. DESIGN REQUIRES: 1) MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL; 2) INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATERTIGHT CONNECTION OR ANOTHER WATERTIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL; AND 3) WATERTIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OR HIGH WATER. [RSWF 34.6]
6. MANHOLE INSPECTION AND TESTING FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE ARE SPECIFIED. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244. [RSWF 34.7]
7. THE DESIGN REQUIRES 1) ELECTRICAL SYSTEMS AND COMPONENTS (E.G., MOTORS, LIGHTS, CABLES, CONDUITS, SWITCH BOXES, CONTROL CIRCUITS, ETC.) IN RAW WASTEWATER WET WELLS, OR IN ENCLOSED OR PARTIALLY ENCLOSED SPACES WHERE HAZARDOUS CONCENTRATIONS OF FLAMMABLE GASES OR VAPORS MAY BE PRESENT, COMPLY WITH THE NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS I GROUP D, DIVISION 1 LOCATIONS; 2) ELECTRICAL EQUIPMENT LOCATED IN WET WELLS BE SUITABLE FOR USE UNDER CORROSIVE CONDITIONS; 3) EACH FLEXIBLE CABLE BE PROVIDED WITH A WATERTIGHT SEAL AND SEPARATE STRAIN RELIEF; 4) A FUSED DISCONNECT SWITCH LOCATED ABOVE GROUND BE PROVIDED FOR THE MAIN POWER FEED FOR ALL PUMP STATIONS; 5) ELECTRICAL EQUIPMENT EXPOSED TO WEATHER TO MEET THE REQUIREMENTS OF WEATHERPROOF EQUIPMENT NEMA 3R OR 4; 6) A 110 VOLT POWER RECEPTACLE TO FACILITATE MAINTENANCE BE PROVIDED INSIDE THE CONTROL PANEL FOR PUMP STATIONS THAT HAVE CONTROL PANELS OUTDOORS; AND 7) GROUND FAULT INTERRUPTION PROTECTION BE PROVIDED FOR ALL OUTDOOR OUTLETS. [RSWF 42.35]
8. THE DESIGN REQUIRES WET WELL FLOORS HAVE A MINIMUM SLOPE OF 1 TO 1 TO THE HOPPER BOTTOM AND THE HORIZONTAL AREA OF HOPPER BOTTOMS BE NO GREATER THAN NECESSARY FOR PROPER INSTALLATION AND FUNCTION OF THE INLET. [RSWF 42.63]
9. THE DESIGN REQUIRES PUMP STATIONS BE ENCLOSED WITH A FENCE OR OTHERWISE DESIGNED WITH APPROPRIATE FEATURES TO DISCOURAGE THE ENTRY OF ANIMALS AND UNAUTHORIZED PERSONS. POSTING OF AN UNOBSTRUCTED SIGN MADE OF DURABLE WEATHER RESISTANT MATERIAL AT A LOCATION VISIBLE TO THE PUBLIC WITH A TELEPHONE NUMBER FOR A POINT OF CONTACT IN CASE OF EMERGENCY IS SPECIFIED. [62-604.400(2)(D), F.A.C.]
10. IN SUBMERSIBLE PUMP STATIONS, THE DESIGN REQUIRES: 1) PUMP MOTOR POWER CORDS BE FLEXIBLE AND SERVICEABLE UNDER CONDITIONS OF EXTRA HARD USAGE AND TO MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE STANDARDS FOR FLEXIBLE CORDS IN WASTEWATER PUMP STATIONS; 2) GROUND FAULT INTERRUPTION PROTECTION BE USED TO DE ENERGIZE THE CIRCUIT IN THE EVENT OF ANY FAILURE IN THE ELECTRICAL INTEGRITY OF THE CABLE; AND 3) POWER CORD TERMINAL FITTINGS BE CORROSION-RESISTANT AND CONSTRUCTED IN
A MANNER TO PREVENT THE ENTRY OF MOISTURE INTO THE CABLE, PROVIDED WITH STRAIN RELIEF APPURTENANCES, AND DESIGNED TO FACILITATE FIELD CONNECTING. [RSWF 44.33]
11. THE DESIGN REQUIRES: 1) EMERGENCY STANDBY SYSTEMS TO HAVE SUFFICIENT CAPACITY TO START UP AND MAINTAIN THE TOTAL RATED RUNNING CAPACITY OF THE STATION, INCLUDING LIGHTING, VENTILATION, AND OTHER AUXILIARY EQUIPMENT NECESSARY FOR SAFETY AND PROPER OPERATION; 2) SPECIAL SEQUENCING CONTROLS BE PROVIDED TO START PUMP MOTORS UNLESS THE GENERATING EQUIPMENT HAS CAPACITY TO START ALL PUMPS SIMULTANEOUSLY WITH AUXILIARY EQUIPMENT OPERATING; 3) A RISER FROM THE FORCE MAIN WITH RAPID CONNECTION CAPABILITIES AND APPROPRIATE VALVING BE PROVIDED FOR ALL PUMP STATIONS TO HOOK UP PORTABLE PUMPS; AND 4) ALL PUMP STATION RELIABILITY DESIGN FEATURES BE COMPATIBLE WITH THE AVAILABLE TEMPORARY SERVICE POWER GENERATING AND PUMPING EQUIPMENT OF THE AUTHORITY RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE COLLECTION/TRANSMISSION SYSTEM. [62-604.400(2)(A)3., F.A.C., AND RSWF 46.431]
12. THE DESIGN PROVIDES FOR EMERGENCY EQUIPMENT TO BE PROTECTED FROM OPERATION CONDITIONS THAT WOULD RESULT IN DAMAGE TO THE EQUIPMENT AND FROM DAMAGE AT THE RESTORATION OF REGULAR ELECTRICAL POWER. [RSWF 46.411, 46.417, AND 46.432]
13. FOR PERMANENTLY-INSTALLED OR PORTABLE ENGINE-DRIVEN PUMPS ARE USED, THE DESIGN INCLUDES PROVISIONS FOR MANUAL START-UP. [RSWF 46.422]
14. WHERE INDEPENDENT SUBSTATIONS ARE USED FOR EMERGENCY POWER, EACH SEPARATE SUBSTATION AND ITS ASSOCIATED TRANSMISSION LINES IS DESIGNED TO BE CAPABLE OF STARTING AND OPERATING THE PUMP STATION AT ITS RATED CAPACITY. [RSWF 46.44]

FDEP SEPARATION NOTES:

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
   a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE 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 REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
   b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
   d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
   a. 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 INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   b. 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 AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   c. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) 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 FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.(3)
3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES
   a. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
   b. EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:
      1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
      2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
      3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS a. THROUGH d. BELOW.
         a. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
         b. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
         c. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
         d. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.
4. SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
   a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE 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 REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
   b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
   d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
5. THE CONTRACTOR IS TO CONTACT THE ENGINEER TO RESOLVE ALL SEPARATION PROBLEMS ENCOUNTERED IN THE FIELD. NOTE: MOST STRINGENT LOCAL, STATE AND FEDERAL RULES TO APPLY.

REV#	DATE	REVISION

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