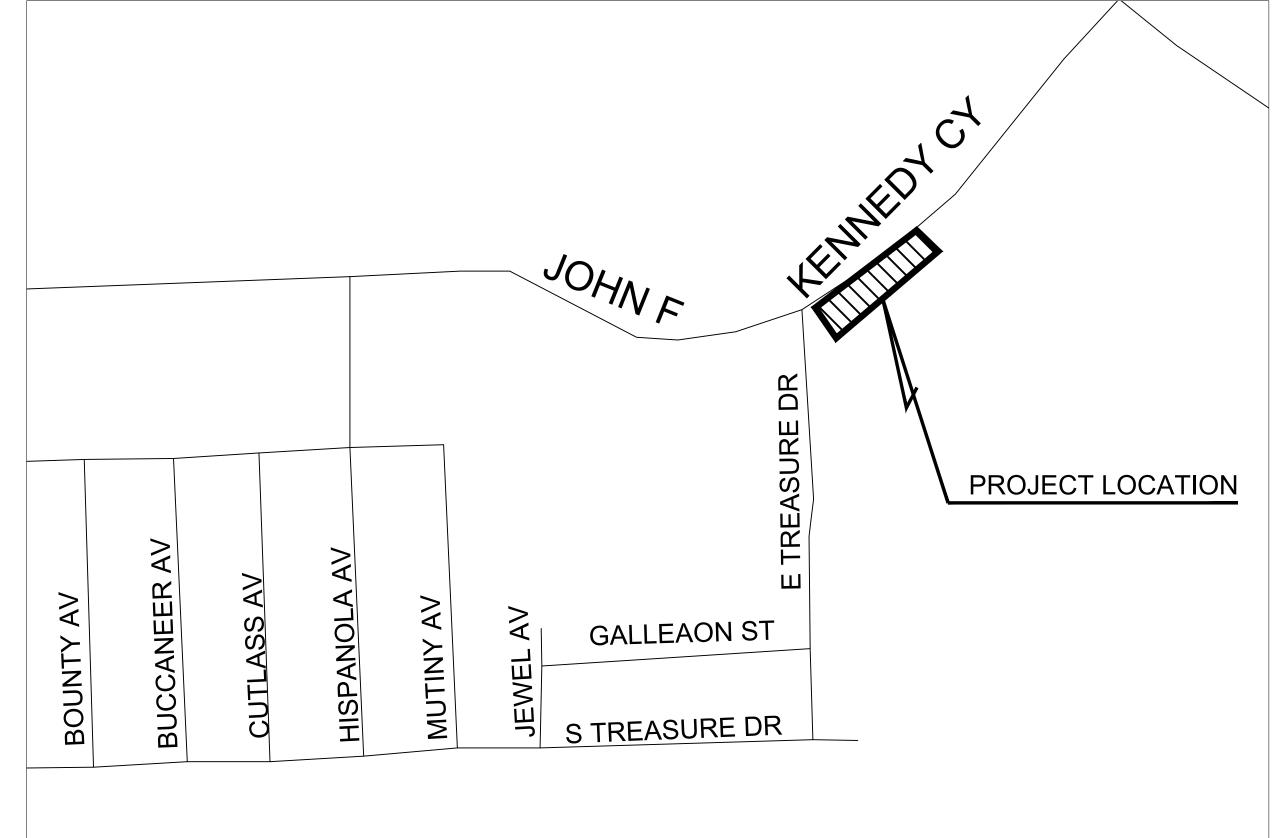


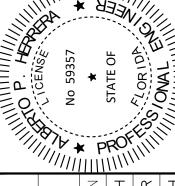
## WELL SUBMITTAL FOR BAYWALK PLAZA

79TH STREET CAUSEWAY & EAST TREASURE DR NORTH BAY VILLAGE, FLORIDA JANUARY 2022

SECTION 09, TOWNSHIP 53, RANGE 42



Sheet	List Table
Sheet Number	Sheet Title
C-100	COVER SHEET
C-101	GENERAL NOTES
C-300	EROSION CONTROL NOTES
C-301	EROSION CONTROL PLAN AND DETAILS
C-400	PAVING & GRADING PLAN
C-401	DRAINAGE PLAN
C-402	PAVING, GRADING, AND DRAINAGE DETAILS



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**C-**100



# LIST OF CONTACTS:

**CABLE PROVIDER** COMCAST CABLE 2501 SW 145TH AVENUE MIRAMAR, FLORIDA 33322 CONTACT: RICHARD THOMAS

OWNER/DEVELOPER

1666 KENNEDY CAUSEWAY, 3RD FLOOR

**GEOTECHNICAL ENGINEER** 

13370 SW 131 STREET, SUITE 105

LANDSCAPE ARCHITECT

CONTACT: GEORGE PUIG, PLA

MIAMI, FLORIDA 33186

(305) 259-9779

(305) 673-2025

STORMWATER

DEPT. OF PERMITTING, ENVIRONMENT AND **REGULATORY AFFAIRS** 701 NW 1ST COURT MIAMI, FLORIDA 33136 305-372-6681 CONTACT: CAMILO IGNACIO

WATER AND SEWER NORTH BAY VILLAGE 1666 KENNEDY CAUSEWAY NORTH BAY VILLAGE, FL 33141 TELEPHONE PROVIDER AT&T DISTRIBUTION

**CIVIL ENGINEER** 

(305) 673-2025

**SURVEYOR** 

DORAL, FL 33172

(305) 266-1188

CORAL GABLES, FL 33134

KIMLEY -HORN AND ASSOCIATES, INC.

355 ALHAMBRA CIRCLE, SUITE 1400

CONTACT: ALBERTO HERRERA, P.E.

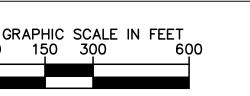
1985 NW 88TH COURT, SUITE 202

CONTACT: PAUL IZQUIERDO, PSM

600 NW 79th AVE **ROOM 336** MIAMI, FLORIDA 33126 305-260-8243 CONTACT: RICHARD RENFROW

**ELECTRIC PROVIDER** FLORIDA POWER AND LIGHT 425 N WILLIAMSON BLVD. DAYTONA BEACH, FLORIDA 32114 CONTACT: TRACY STERN

**LOCATION MAP** 





NORTH BAY VILLAGE ITB 2022-001 DERM Approved Drainage Well Plans To Used by Contractor to Apply for FDEP Well Construction Permit.

#### I. APPLICABLE CODES

- 1. ALL WORK AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THE FLORIDA BUILDING CODE, CITY OF NORTH BAY VILLAGE PUBLIC WORKS, MIAMI—DADE COUNTY RER, MIAMI—DADE WATER AND SEWER DEPARTMENT (MDWASD), FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS, AS WELL AS ALL OTHER LOCAL, STATE, AND NATIONAL CODES AND REGULATORY REQUIREMENTS, AS APPLICABLE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- 3. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS. FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE: "MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY - ALTA/ACSM LAND TITLE SURVEY" DATE: 07/16/2014

HADONNE PROFESSIONAL LAND SURVEYORS AND MAPPERS 1985 NW 88TH COURT, SUITE 100 DORAL, FLORIDA 33172 PHONE: 305.266.1188

TITLE: "SUBSURFACE UTILITY ENGINEERING" DATE: 8/24/2020

POMPANO BEACH, FL 33061 PHONE: 954.993.5552

FAX: 305.207.6845

- 4. EXISTING AND PROPOSED GRADE ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM, 1929 (NGVD 29). BENCHMARKS USED ARE THOSE IDENTIFIED ON THE TOPOGRAPHIC BOUNDARY
- 5. THE HORIZONTAL LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS REFLECT UTILITY INFORMATION PROVIDED BY:

MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT (TRANSPORTATION DIVISION) CITY OF NORTH BAY VILLAGE PUBLIC WORKS DEPARTMENT

- 6. PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES.
- 7. EXISTING UTILITIES TO BE ADJUSTED IN ACCORDANCE WITH PROPOSED GRADES AND REQUIREMENTS OF UTILITY OWNERS, AS REQUIRED.
- 8. EXISTING STRUCTURES, TREES, UTILITIES AND OTHER IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE SUCH AS BUILDING SEWERS, DRAINS, WATER OR GAS PIPES, CONDUITS, POLES, WALLS, COLUMNS, ETC., WHETHER OR NOT SHOWN ON THE PLANS, ARE TO BE CAREFULLY PROTECTED FROM DAMAGE. IF DAMAGE OCCURS FROM WORK PERFORMED UNDER THIS CONTRACT, THE CONTRACTOR SHALL PROMPTLY REPAIR THE DAMAGED ITEM(S) TO THE CONDITION OF THE ITEM(S) PRIOR TO THE DAMAGE. THIS WORK SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
- 9. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
- 10. CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, PARKING METERS, BENCHES, TRAFFIC CONTROL SIGNS, ETC. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REINSTALL THESE OR DELIVER SAID PUBLIC PROPERTY TO THE RESPECTIVE OWNER.
- 11. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH ANY OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECT.
- 12. ALL DITCH EXCAVATION SHALL BE PERFORMED IN FULL COMPLIANCE WITH THE PROVISIONS OF THE FLORIDA TRENCH SAFETY ACT.
- 13. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING EXCAVATION OF SUBSOIL MATERIAL OR DURING THE FILLING OF ANY AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

#### II. SHOP DRAWINGS

PRIOR TO FABRICATION OR CONSTRUCTION, SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD FOR APPROVAL OF THE FOLLOWING ITEMS:

1. <u>DRAINAGE:</u>

a. TRENCH OR SLOT DRAINS INCLUDING CHANNELS, ANCHORS, GRATES, OUTLETS, ETC. b. DRAINAGE PIPE AND FITTINGS c. CLEANOUTS

2. WATER DISTRIBUTION

a. PIPE AND FITTINGS b. BACKFLOW PREVENTION DEVICES

#### III. PRECONSTRUCTION RESPONSIBILITIES

- 1. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY AND ALL INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- 2. TWO (2) BUSINESS DAYS BEFORE BEGINNING CONSTRUCTION IN THE AREA, THE CONTRACTOR SHALL NOTIFY SUNSHINE STATE CALL ONE OF FLORIDA, INC. AT 1-800-432-4770 AND ANY OTHER UTILITY COMPANIES WHICH MIGHT BE AFFECTED.
- 3. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER, AND THE ENGINEER OF RECORD.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING A TRAFFIC CONTROL PLAN THAT ADDRESSES THE MAINTENANCE OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN A SAFE AND REASONABLY ADEQUATE MANNER AROUND THE WORK SITE. PRIOR TO COMMENCING WITH ANY ACTIVITIES AT THE JOB SITE, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE TRAFFIC CONTROL PLAN FROM ALL AGENCIES HAVING JURISDICTION.
- 5. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS
- 6. THE CONTRACTORS SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.
- 7. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL LOCATE AND EXPOSE ALL EXISTING UTILITIES TO BE CONNECTED SUFFICIENTLY AHEAD OF CONSTRUCTION TO ALLOW REDESIGN BY THE ENGINEER IF SUCH UTILITIES ARE FOUND TO BE DIFFERENT THAN THOSE SHOWN ON PLANS.

#### IV. INSPECTION AND TESTING

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD VIA TELEPHONE AND EMAIL AT LEAST TWO BUSINESS DAYS PRIOR TO THE FOLLOWING:
- a. FINISHED PAVEMENT PRIOR TO PLACEMENT OF ANY FINISHED ASPHALT, CONCRETE AND/OR
- b. SUBSTANTIAL COMPLETION

c. FINAL INSPECTION

REGARDLESS OF WHETHER OR NOT THE ABOVE ARE WITNESSED BY OTHERS, IF THE CONTRACTOR FAILS TO NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS PRIOR AND THESE ARE THE WORK AND REPEAT ALL TESTS AS REQUESTED BY THE ENGINEER OF RECORD AT NO <u>ADDITIONAL COST TO THE CONTRACT. OTHERWISE, THE ENGINEER OF RECORD RESERVES THE RIGHT</u> O REFUSE ISSUANCE OF ANY CERTIFICATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND CALLING FOR ANY TESTING AND INSPECTIONS REQUIRED BY CITY, COUNTY, STATE AND FEDERAL AGENCIES HAVING JURISDICTION OVER THE CONTRACTOR'S WORK.

#### V. TEMPORARY FACILITIES

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY DURING CONSTRUCTION.
- 2. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE ACCESS ENTRANCE TO ADJACENT PROPERTIES AT ALL TIMES.
- 3. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION.
- 4. ALL EXISTING DRAINAGE INLETS, DRAINAGE DITCHES AND WATER BODIES ABUTTING THE PROJECT SHALL BE PROTECTED FROM DEBRIS, SILT AND SOIL EROSION (REFER TO EROSION CONTROL PLAN AND DETAILS). EROSION CONTROL MEASURES SHALL BE CAREFULLY MAINTAINED UNTIL CONSTRUCTION ACTIVITIES ARE COMPLETE.
- 5. THE CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY FOR THE MAINTENANCE OF TRAFFIC WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH FDOT STANDARD PLANS, SERIES 102-600.
- 6. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN AND BARRICADED/SHIELDED DURING NIGHTTIME HOURS WITHOUT THE EXPRESS PERMISSION OF THE CITY OF MIAMI PUBLIC WORKS DEPARTMENT, AND/OR FDOT.

#### VI. PROJECT CLOSE OUT:

- 1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN.
- 2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS AS
- 3. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL REPLACE ALL PAVING. STABILIZED EARTH. CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION
- 4. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION AS
- 5. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENVIRONMENTAL ENGINEER. MATERIAL CLEARED FROM THE SITE SHALL NOT BE
- 6. ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED
- 7. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY EXISTING FACILITIES NOT FOUND TO BE EXACTLY AS SHOWN ON THE PLANS, AND ANY NEW FACILITIES NOT BUILT EXACTLY ACCORDING TO PLANS.
- FINISHED PAVEMENT, SIDEWALKS, CURBS, DRAINAGE STRUCTURES, AND ALL PHYSICAL IMPROVEMENTS. SUCH GRADES SHALL BE OBTAINED BY A LICENSED SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF FLORIDA, AND SHALL DOCUMENT THE INTENT OF THE PROPOSED
- CONTRACTOR TO REPLACE ALL FOUND PIPES WITH NAIL AND DISKS.

#### VII. STORM DRAINAGE

- . ALL ONSITE STORM DRAINAGE MATERIALS AND INSTALLATION SHALL CONFORM TO THE APPLICABLE CITY OF NORTH BAY VILLAGE PUBLIC WORKS, MIAMI DADE COUNTY PUBLIC WORKS AND FDOT SPECIFICATIONS.
- 2. PROVIDE A MINIMUM PROTECTIVE COVER OF 24 INCHES OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.
- 3. THE CONTRACTOR SHALL PROTECT COMPLETED DRAINAGE STRUCTURES AND EXFILTRATION TRENCH SYSTEMS FROM CONTAMINATION OF SILT AND CONSTRUCTION DEBRIS. PLACE PLYWOOD ON, OR FILTER FABRIC BETWEEN, THE FRAME AND INLET GRATE UNTIL CONSTRUCTION OPERATIONS ARE
- 4. CONTRACTOR TO USE CAUTION WHEN EXCAVATING NEAR EXISTING SEAWALL TO AVOID DAMAGING THE SEAWALL AND ANY POSSIBLE TIE-BACK SUPPORTS.

## VIII. ENVIRONMENTAL

1. THE AREAS WITHIN APPROXIMATELY STA 109+00 TO STA 111+70 HAS/HAVE BEEN IDENTIFIED AS POTENTIALLY CONTAMINATED.

ONE POTENTIALLY CONTAMINATED SITE LOCATED WITHIN A 500-FT RADIUS OF THE PROJECT CORRIDOR HAS BEEN IDENTIFIED. THE CONTRACTOR SHALL NOTIFY THE LAP CITY OF NORTH BAY VILLAGE ENGINEER FOR TECHNICAL ASSISTANCE BEFORE APPLYING FOR A DEWATERING PERMIT FROM ANY ENVIRONMENTAL REGULATORY AGENCY TO AVOID POTENTIAL CONTAMINATION PLUME EXACERBATION AND DETERMINE PROPER GROUNDWATER MANAGEMENT ASSOCIATED WITH THE ABOVE REFERENCED AREA.

A COORDINATION MEETING BETWEEN THE LAP CITY OF NORTH BAY VILLAGE ENGINEER OR A DESIGNATED QUALIFIED ENVIRONMENTAL INDIVIDUAL/CONSULTANT AND THE CONTRACTOR SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION TO COORDINATE ACTIVITIES WITHIN THE PROJECT

DETERMINED BY THE ENGINEER.

WHICH EXISTED PRIOR TO THE BEGINNING OF OPERATIONS.

DETERMINED BY THE ENGINEER.

DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

8. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AS-BUILT GRADES AND LOCATIONS OF

GRADES SHOWN ON THE PLANS. THIS SHALL BE DONE AT NO COST TO THE OWNER.

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SHEET NUMBER C-101

A. PREVENT LOSS OF SOIL DURING CONSTRUCTION BY STORMWATER RUNOFF AND/OR WIND EROSION, INCLUDING PROTECTING TOPSOIL BY STOCKPILING FOR REUSE.

B. SEDIMENTION PROTECTION OF STORM SEWER OR RECEIVING

C. PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER. THE VARIOUS TECHNIQUES OR ACTIONS IDENTIFIED UNDER EACH SECTION INDICATE THE APPROPRIATE SITUATION WHEN THE TECHNIQUES SHOULD BE EMPLOYED. ALSO IDENTIFIED IS A CROSS-REFERENCE TO A DIAGRAM OR FIGURE REPRESENTING THE TECHNIQUE. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMP(S). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. CONTRACTOR SHALL PREPARE REQUIRED NPDES DOCUMENTATION AND OBTAIN PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE THE REQUIRED NPDES DOCUMENT AND OBTAIN THE NPDES PERMIT ALL COST ASSOCIATED WITH SUCH WORK SHALL BE DEEMED INCIDENTAL TO THE PROJECT LUMP SUM COST.

#### GENERAL EROSION CONTROL NOTES:

A. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THIS DRAWING, THE STANDARD DETAILS, THE NPDES PERMIT (TO BE OBTAINED BY CONTRACTOR) AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THIS DRAWING AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP) IN ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- FUEL SPILLS AND LEAKS PREVENTION
   PREVENT/REDUCE VEHICLE AND EQUIPTMENT WASHING AND
- STEAM CLEANING
  3. VEHICLE AND EQUIPTMENT MAINTENANCE AND REPAIR
- 4. PROPER OUTDOOR LOADING/UNLOADING OF MATERIALS
  5. PREVENT/REDUCE OUTDOOR STORAGE OF RAW MATERIALS,
- PRODUCTS, AND BY—PRODUCTS
- SOLID WASTE MANAGEMENT
   HAZARDOUS WASTE MANAGEMENT
- 8. CONCRETE WASTE MANAGEMENT 9. SANDBLASTING WASTE MANAGEMENT
- 10. STRUCTURE CONSTRUCTION AND PAINTING
- 11. SPILL PREVENTION AND CONTROL
- 12. CONTAMINATED SOIL MANAGEMENT13. SANITARY/SEPTIC WASTE MANAGEMENT
- 14. SOIL EROSION CONTROL
- 15. STORM WATER TURBIDITY MANAGEMENT
- ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

D. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

E. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. CONTRACTOR MUST MAINTAIN ALL PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS ON SITE AT ALL TIMES.

F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. CONTRACTOR SHALL BEGIN CLEARING AND GRUBBING THOSE PORTIONS OF THE SITE NECESSARY TO IMPLEMENT PERIMETER CONTROL MEASURES. CLEARING AND GRUBBING FOR THE REMAINING PORTIONS OF THE PROPOSED SITE SHALL COMMENCE ONCE PERIMETER CONTROLS ARE IN PLACE. PERIMETER CONTROLS SHALL BE ACTIVELY MAINTAINED UNTIL SAID AREAS HAVE BEEN STABILIZED AND SHALL BE REMOVED ONCE FINAL STABILIZATION IS COMPLETE.

H. GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL LAKE SLOPE CAVE—INS. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION.

I. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

J. TOPSOIL CANNOT BE STOCKPILED INSIDE THE PROPERTY FOR REFUSE.

K. SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BMP'S IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.

## STORM WATER EROSION CONTROL PRACTICES:

A. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

B. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

C. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.

D. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY

E. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:

1. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.

2. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.

3. A TEMPORARY SEDIMENT TRAP SHOLD BE CONSTRUCTED TO DETAIN SEDIMENT—LADEN RUNOFF FROM DISTURBED AREAS.

F. SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.

G. SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 3H:1V FROM TOP OF BANK TO TWO FEET BELOW NORMAL WATER LEVEL, AS APPLICABLE.

H. SOD SHALL BE PLACED FOR A 2-FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL INLETS. SOD SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED.

I. WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A

J. FILTER FABRIC SHOULD BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.

TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED.

#### WIND EROSION CONTROL PRACTICES:

A. WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE:

1. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

2. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED (SEE PERMANENT STABALIZATION PRACTICES FOR DETAILS). THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN. CLEARED SITE DEVELOPMENT AREAS NOT CONTINUALLY SCHEDULED FOR CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH HAY OR OVERSEEDED AND PERIODICALLY WATERED SUFFICIENTLY TO STABILIZE THE TEMPORARY GROUNDCOVER (SEE TEMPORARY STABALIZATION PRACTICES FOR

3. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS SHOULD INCLUDE ERECTION OF DUST CONTROL FENCES. A 6-FT GEOTEXTILE FILTER FIBER SHOULD BE HANGING AGAINST THE EXISTING CHAIN LINK FENCE AND GATE.

B. ALL DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

## SPILL CONTROL PRACTICES:

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

A. SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.

B. THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.

C. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ONSITE AND READILY AVAILABLE TO CONTAIN AND CLEAN—UP FUEL OR CHEMICAL SPILLS AND LEAKS.

D. ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.

E. WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.

F. TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

G. AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

H. THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

#### STABILIZATION PRACTICES:

A. TEMPORARY STABILIZATION — TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

B. PERMANENT STABILIZATION — DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY.

C. STABILIZATION WILL BE INITIATED ON ALL DISTURBED AREAS WITHIN 14 DAYS OF WORK CEASING, UNLESS CONSTRUCTION ACTIVITY WILL RESUME IN THAT AREA WITHIN 21 DAYS AFTER WORK STOPPAGE. THE TEMPORARY SEDIMENT SUMP SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE SUMP.

D. CONTRACTOR TO ENSURE THAT EXISTING VEGETATION ON OR ADJACENT TO THE PROPOSED SITE IS PRESERVED AND DISTURBED PORTIONS OF THE SITE ARE STABILIZED. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.

E. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

F. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO. 62-621.300(4)(a)

## STRUCTURAL PRACTICES:

A. EARTH DIKE — IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN—ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

B. SEDIMENT BASIN — A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

C. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO. 62-621.300(4)(a)

#### WASTE DISPOSAL:

A. WASTE MATERIALS — ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

B. HAZARDOUS WASTE — HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

C. SANITARY WASTE — SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE

D. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

E. ANY CONSTRUCTION DEBRIS GENERATED AS A RESULT OF THIS PROJECT WILL BE DISPOSED OF OFF—SITE AN AT APPROPRIATE WASTE FACILITY.

F. CONCRETE WASHOUT LOCATIONS WILL BE PROVIDED IN AREAS WHERE THE DISPOSAL MATERIALS WILL BE CONTAINED TO PREVENT DISCHARGE OUTSIDE OF THE PROJECT LIMITS AND INTO THE WATERWAYS.

#### **INSPECTION AND MAINTENANCE**

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

A. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.

C. THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE—THIRD THE HEIGHT OF THE SILT FENCE.

D. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

E. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

F. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 10% AND AFTER CONSTRUCTION IS COMPLETE.

G. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

H. DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.

I. A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON—SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

J. ALL REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

K. THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

### OFFSITE TRACKING:

A. STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED ONCE A DAY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK RESULTING FROM CONSTRUCTION TRAFFIC. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

B. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATION PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES, HAY BALES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.

C. ALL WASH WATER FROM CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC. SHALL BE DETAINED ON SITE AND SHALL BE PROPERLY TREATED OR DISPOSED.

D. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

E. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

#### SPILL PREVENTION AND CONTROL:

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

A. GOOD HOUSEKEEPING

1. SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

2. STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT

3. ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF

COMPLETION.

CONTAINER.

4. ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE,

STORED UNDER A ROOF OR PROTECTIVE COVER.

5. PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

6. ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

B. HAZARDOUS PRODUCTS

1. MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

2. PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

C. PRODUCT SPECIFIC PRACTICES

1. PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

2. THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

3. PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

4. CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

## STORMWATER POLLUTION PREVENTION PRACTICES:(FOR PROJECTS OF 0.5 ACRES OR MORE CITY ORDINANCE NUMBER 13081)

1. TREE PROTECTION AND PRUNING SHALL BE ACCOMPLISHED AS DETAILED IN SPECIAL PROVISIONS, THE CONSTRUCTION PLANS, AND/OR PER TREE ORDINANCE 12636.

2. ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), ARE TO BE INSTALLED AT ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM, OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED ON SHEET 2 OF 4 OF THE MISC. 35-89-5 OF THE CITY OF MIAMI PUBLIC WORKS ENGINEERING STANDARD FOR DESIGN AND CONSTRUCTION MANUAL.

3. ALL ENVIRONMENTAL CONTROL FEATURES ARE TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN ACCORDANCE WITH NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. THE CONTRACTOR MUST ENSURE THAT ALL EROSION CONTROL FEATURES FUNCTION PROPERLY AT ALL TIMES.

4. ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS.

5. DITCH BOTTOM INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE OF INLET TOP SHALL NOT BE HIGHER THAT INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH ROCK BAGS TO PREVENT SEDIMENT INTAKE

6. CURB INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPETE. ALL EXPOSED SLOPED MATERIAL ADJACENT TO INLETS SHALL BE COVERED WITH EROSION CONTROL MATTING WITH OUTER LIMITS PROTECTED BY ROCK BAGS. ANY DAMAGED OR INEFFECTIVE ROCK BAGS ARE TO BY REPLACED WITH NEW ONES.

7. STOCKPILED MATERIAL SHALL NOTE BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER OR ROCK BAGS.

8. INSPECTION OF EROSION CONTROL MEASURES AND CONDITION OF ADJACENT PROPERTIES SHALL BE PERFORMED DAILY BY THE CONTRACTOR'S REPRESENTATIVE AND THE PROJECT ENGINEER. DEFICIENCIES SHALL BY NOTED AND CORRECTED.

9. ANY OFFSITE SEDIMENT DISCHARGE TO A MUNICIPAL SEPARATE STORMWATER SYSTEM ARISING FROM THE CONTRACTOR'S ACTIVITIES IS NOT ALLOWED. REFER TO PUBLIC WORKS BULLETIN NO. 25.

10. THE USE OF SANITARY SEWERS, FRENCH DRAINS, COVER DITCHES AND/OR ROCK DRAINS FOR THE DISPOSAL OF WASTEWATER IS EXPRESSLY PROHIBITED. REFER TO PUBLIC WORKS BULLETIN NO. 25.

#### PROJECT DESCRIPTION:

1. PROJECT LOCATION: 3565 NW 36TH STREET, MIAMI, FLORIDA 33127

7.96 ACRES. THE TOTAL DISTURBED AREA IS APPROXIMATELY6.69 ACRES.3. CONSTRUCTION ACTIVITY: CONSTRUCTION OF PROPOSED

PROJECT LIMITS: TOTAL PROJECT AREA IS APPROXIMATELY

BUILDING, ROADWAY IMPROVEMENTS, SIDEWALKS, LANDSCAPING, UTILITIES, AND DRAINAGE SYSTEM.

4. MAJOR SOIL DISTURBING ACTIVITIES: CLEARING AND

GRUBBING, INSTALLATION OF DRAINAGE SYSTEM, INSTALLATION

5. DEWATERING ACTIVITIES: DEWATERING IS NOT ANTICIPATED

OF UTILITIES, CONSTRUCTION OF BUILDING FOUNDATION.

FOR THIS SITE.

6. SOIL CHARACTERISTICS: THE SOIL TYPE WITHIN THE PROJECT'S LIMIT OF DISTURBANCE IS CLASSIFIED AS URBAN SOIL AND IS NOT HIGHLY ERODIBLE.

7. RUNOFF COEFFICIENTS: EXISTING: 0.35

DURING CONSTRUCTION: 0.80

## SEQUENCE OF CONSTRUCTION:

SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

1. PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING, INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE EROSION CONTROL PLAN, STANDARD DETAILS, NPDES REQUIREMENTS, AND THE CITY OF MIAMI PUBLIC WORKS ENGINEERING STANDARD FOR DESIGN AND CONSTRUCTION

2. BEGIN CLEARING AND GRUBBING.

3. INSTALL DRAINAGE SYSTEM, INCLUDING: CONCRETE INLETS, DRAIN BASINS, DRAINAGE PIPES, DRAINAGE WELLS, AND EXFILTRATION TRENCHES.

4. INSTALL INLET PROTECTION AND ROCK BAGS ON ALL INLETS AND MANHOLES IN THE LOCATIONS SHOWN ON THE PLANS AND PER THE STANDARD DETAILS PROVIDED AND THE CITY OF MIAMI PUBLIC WORKS ENGINEERING STANDARD FOR DESIGN AND CONSTRUCTION MANUAL.

5. PREPARE SUBBASE MATERIAL.

DECIN ACRUALT AND CONODETE INSTALLATION

BEGIN ASPHALT AND CONCRETE INSTALLATION.
 AFTER COMPLETION OF SITE WORK, BEGIN SITE STABILIZATION AND PERMANENT SEEDING.

8. ONCE SITE STABILIZATION IS COMPLETE, CONTRACTOR TO CLEAN ALL CONSTRUCTION DEBRIS FROM CONSTRUCTION SITE.

9. ONCE A UNIFORM 70% VEGETATIVE COVER OF PERENNIAL VEGETATION IS ACHIEVED ACROSS THE ENTIRE DISTURBED AREA THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES MAY BEGIN.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ALBERTO P. HERRERA, P.E., ON THE DATE ADJACENT TO THE SEAL.

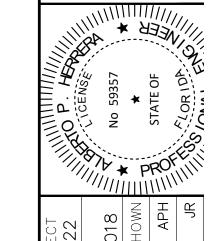
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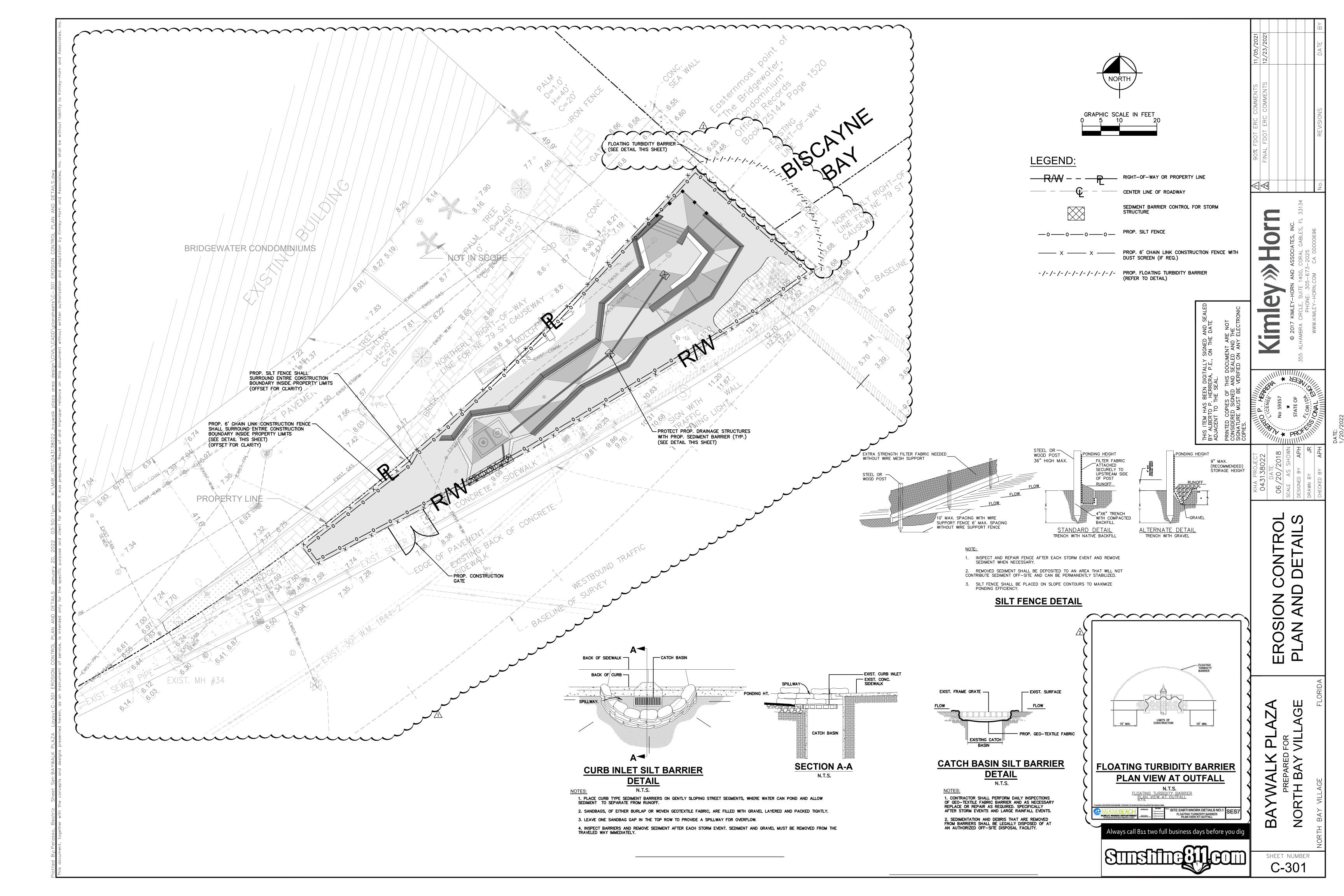
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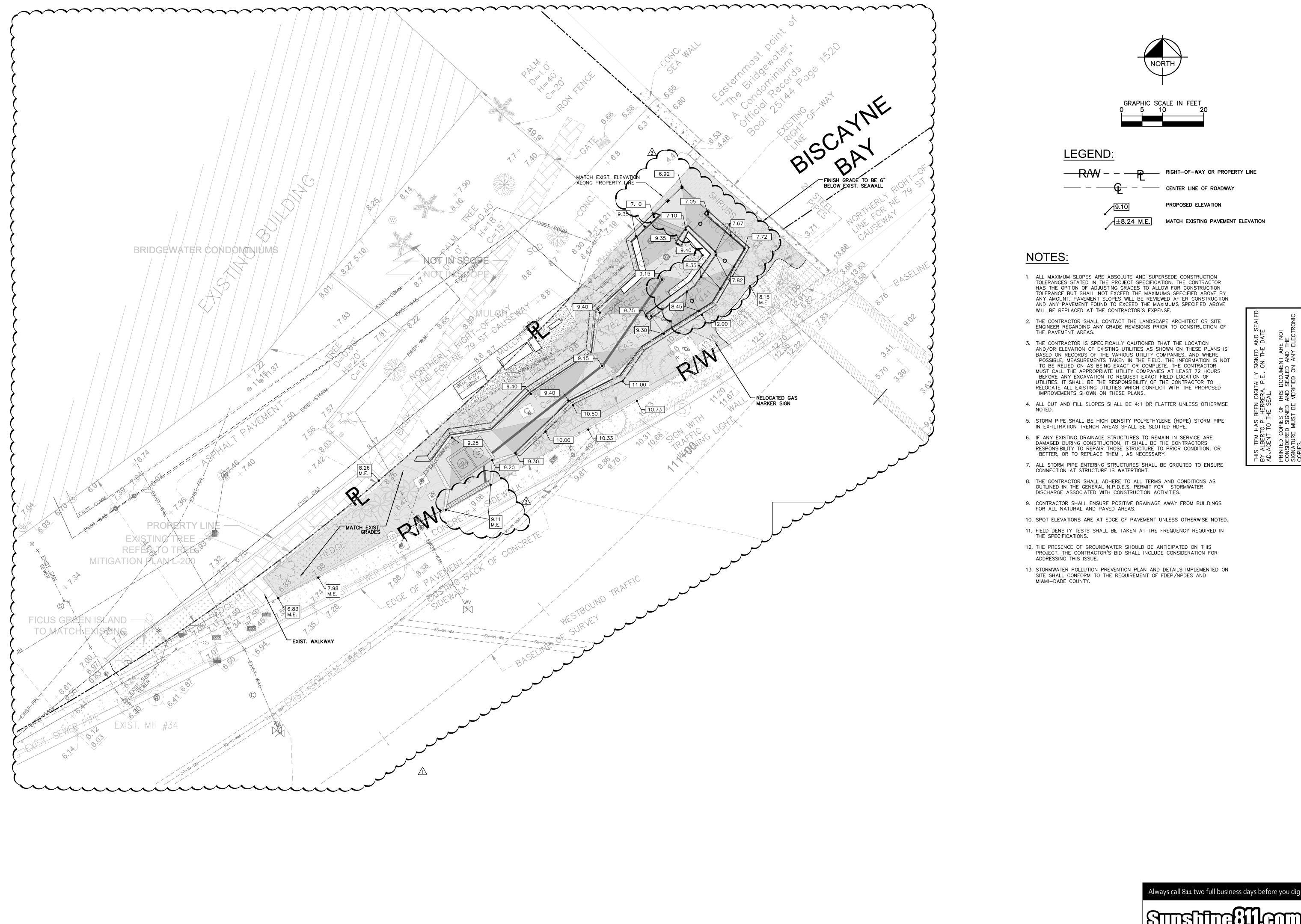


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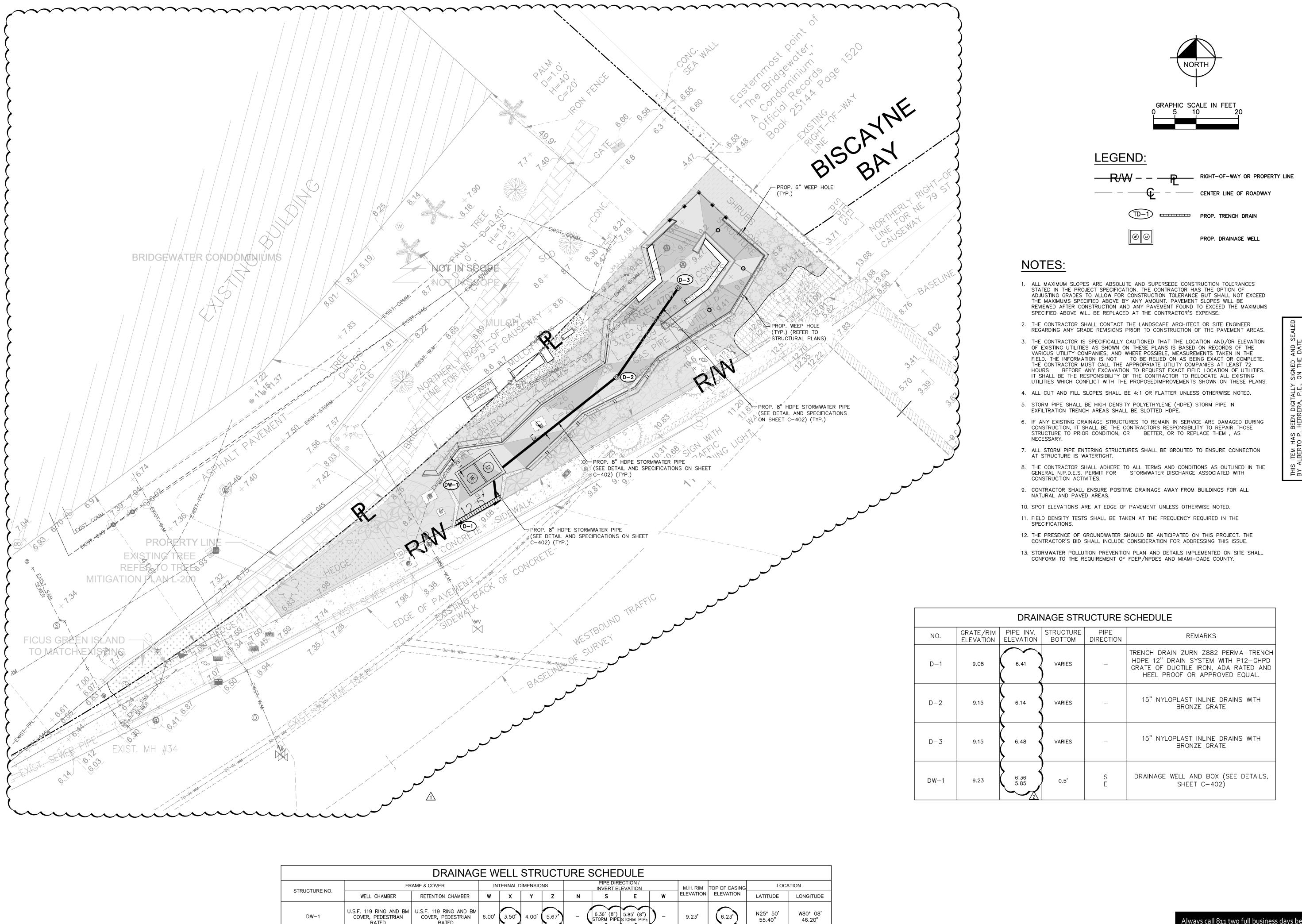
BAYWALK PLAZA PREPARED FOR NORTH BAY VILLAGE

SHEET NUMBER





SHEET NUMBER C-400



N25° 50' 55.40"

9.23'

W80° 08' 46.20"

U.S.F. 119 RING AND BM COVER, PEDESTRIAN RATED

U.S.F. 119 RING AND BM COVER, PEDESTRIAN RATED

6.00'

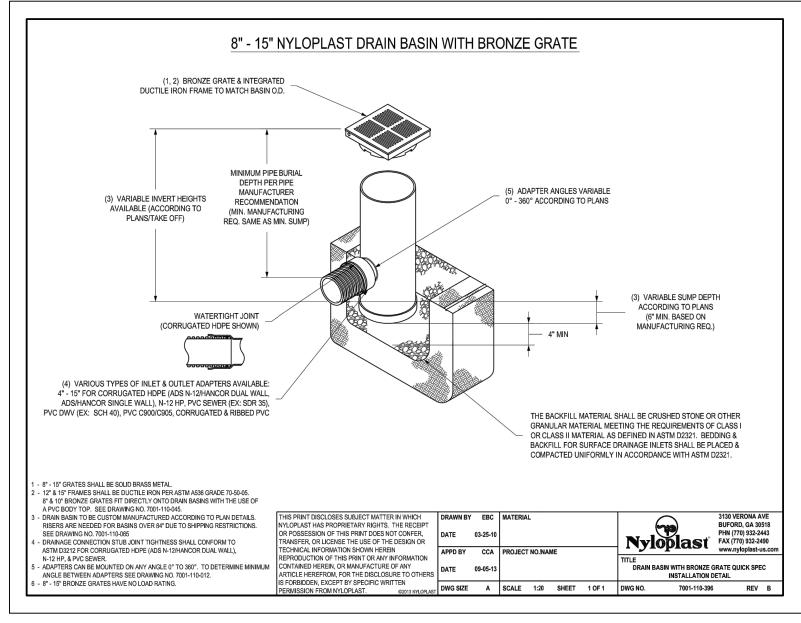
DW-1

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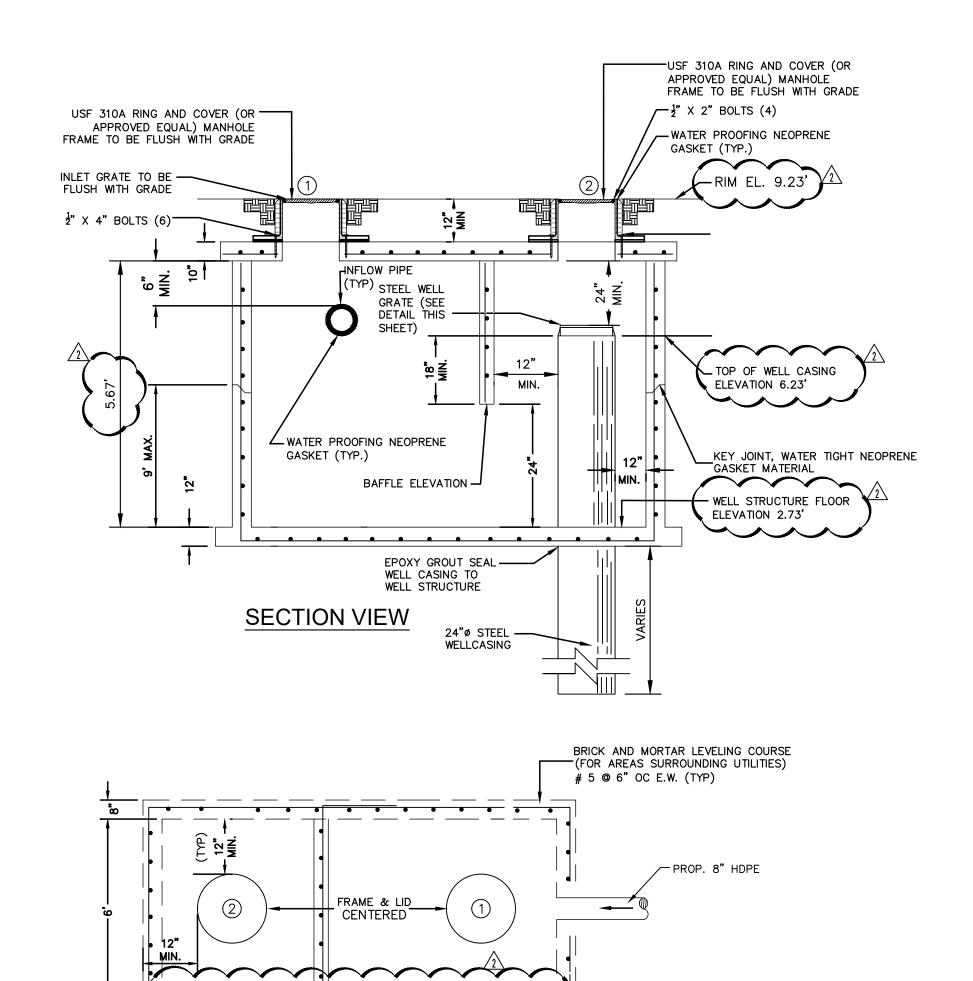
SHEET NUMBER C-401

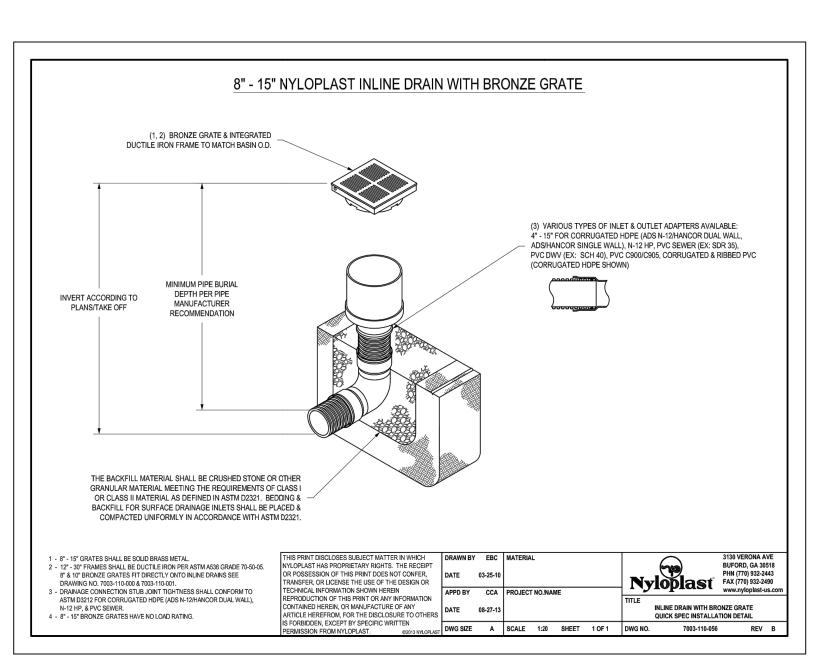
RAINAGE

## **ZURN Z-882 TRENCH DRAIN SYSTEM DETAILS (TYPICAL)** (OR APPROVED EQUAL) N.T.S.



15" NYLOPLAST DRAIN BASIN (OR APPROVED EQUAL)





-PROP. 8" HDPE

**TOP VIEW** 

STORM DRAINAGE WELL (DW-1)

15" NYLOPLAST INLINE DRAIN (OR APPROVED EQUAL) N.T.S.

DRAINAGE WELL STRUCTURES STRUCTURAL NOTES:

<u>DESIGN CRITERIA:</u> DESIGN, FABRICATION AND ERECTION OF PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-99 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND PCI DESIGN HANDBOOK. DESIGN OF CAST-IN-PLACE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-99.

DESIGN LIVE LOADS: THE TOP SLAB OF DRAINAGE STRUCTURE SHALL BE DESIGNED TO CARRY TRAFFIC LOADS (H-10 LOADING).

GEOTECHNICAL CRITERIA: SOIL BEARING PRESSURE UNDER STRUCTURE ASSUMED TO BE AT MINIMUM 2000 PSF. PRIOR TO INSTALLATION OF DRAINAGE STRUCTURE THE SOIL BEARING CAPACITY OF THE FOUNDATION MUST BE CONFIRMED BY THE CONTRACTOR, THROUGH A CERTIFIED GEOTECHNICAL LABORATORY.

CONCRETE: CONCRETE SHALL BE NORMAL WEIGHT, AND SHALL ATTAIN A 28, DAY COMPRESSIVE STRENGTH OF 5000 PSI AND SHALL MEET THE REQUIREMENT OF ASTM C478. CONCRETE COVER FOR REINFORCEMENT SHALL BE 2 INCHES EXCEPT FOOTING BOTTOM BARS SHALL HAVE 3" COVER.

REINFORCING: REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, AND SHALL BE OF U.S.

MORTAR: MORTAR GROUT TO SEAL THE PIPE, TOP SLABS, AND LEVELING COURSE SHALL BE OF SUCH A MIX THAT SHRINKAGE WILL NOT CAUSE LEAKAGE INTO OR OUT OF THE UNIT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MORTAR FOR ENGINEER REVIEW AND APPROVAL.

SHOP DRAWINGS: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SIGNED AND SEALED BY A FLORIDA LICENSED ENGINEER, FOR PRECAST STRUCTURES TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE CONSTRUCTION OF STRUCTURE.

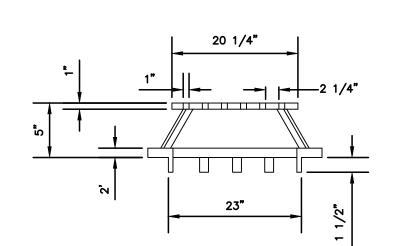
MANHOLE RING & COVER: ALL MANHOLE RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL HAVE THE WORD "STORM SEWER" CAST ON COVER.

#### DRAINAGE WELL NOTES

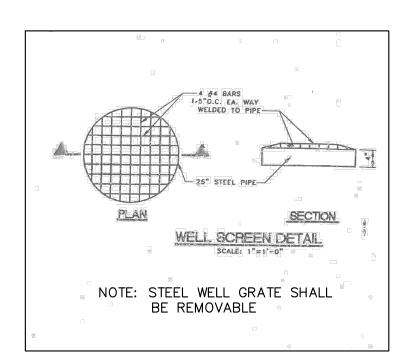
MINIMUM WELL CAPACITY: 800 GPM PER FOOT OF HEAD FOR WELLS. CONTRACTOR MUST PROVIDED A 60% CASED AND 40% OPEN WELL AT ANY DEPTH.

1. DEEP WELL TO BE CONSTRUCTED PER DRAINAGE WELL SCHEDULE. CONTRACTOR IS TO VERIFY THE FOLLOWING

- 2. STEEL WELL GRATE TO BE INSTALLED OVER 24" DEEP WELL. STEEL GRATE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. COST TO BE INCLUDED IN THE PRICE OF CASING.
- 3. DEVELOPER OF WELL TO ASSURE 1500 P.P.M. SALINITY. THE WELL CASING SHALL PENETRATE A ZONE CONTAINING A MINIMUM OF 10,000 mg/L OF TOTAL DISSOLVED SOLIDS (TDS) IN ACCORDANCE WITH RULE 62-528.200(6), FAC.
- 4. WELL TESTING TO COMPLY WITH ASTM D 5472-93 AND D-4050-96 AND BE PERFORMED BY A THIRD PARTY FLORIDA REGISTERED GEOLOGIST.
- 5. ALL WELL BOX CONSTRUCTION JOINTS SHALL BE WATER TIGHT. WELL BOX MUST BE DESIGNED FOR UPLIFT FORCES (MIN 3 PSI) AND SIGNED AND SEALED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER.



NEENAH GRATE CATALOG No. R-4341-A OR APPROVED EQUIVALENT STEEL WELL GRATE DETAIL N.T.S.



## NOTES:

1. ALL PEDESTRIAN AREA MANHOLE RIMS, VAULT COVERS, GRATES, ETC. SHALL BE ADA/PEDESTRIAN COMPLIANT MODEL. ALL EXISTING MANHOLE RIMES, VAULT COVERS, GRATES, ETC. WITHIN PEDESTRIAN AREAS SHALL BE REPLACED WITH ADA/PEDESTRIAN COMPLIANT MODELS.

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C-402

GRADIN

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SHEET NUMBER