CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASIN D-3-1 AT NW 29TH STREET & NW 79TH AVENUE

PROJECT LOCATION

UTILITY PROVIDERS

MIAMI DADE WATER & SEWER
Miami-Dade Water & Sewer Department 3575 South LeJeune Road Miami, FL 33146
Contact:Mr. Lazaro Guerra Phone: (786) 268-5273

POWER
Florida Power and Light
10705 Quail Roost Dr.
Miami, FL 33157
Contact: Edgar Aguilar
Phone: (305) 378-2634

GAS
Florida City 4" GAS
4045 NW 97 Ave
Doral, FL 33178
Contact: Michael Bobb
Phone: (305) 835-3618

CABLE
Comcast Cable
6565 Novia Dr.
Davie, FL 33317
Contact: Ricardo Davidson
Phone: (786) 586-8505

TELEPHONE
AT&T/Distribution
600 NW 79th Ave
Miami, FL 33126
Contact: Mr. Henry Urena
Phone: (305) 913-1408

MCI
3301 Matrix Dr.
Richardson, TX 75082
Phone: 800-624-9675

STORM DRAINAGE PERMITTING
Miami-Dade County Department
Regulatory & Economic Resources
701 NW 1st Court
Miami, FL 33166
Phone: (305) 372-6789

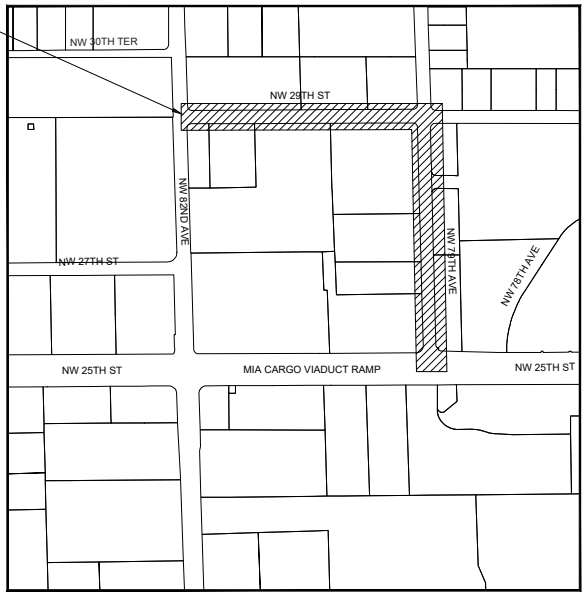
DESIGN TEAM

CIVIL ENGINEER
300 Engineering Group LLC
2222 Ponce de Leon Blvd,
Suite 300
Coral Gables, FL 33134

OWNER
City of Doral
8401 NW 53rd Terrace
Doral, Florida 33166

SURVEYOR
Miller Legg
1845 NW 112 Avenue, Suite 211
Miami, FL 33172

GEOTECHNICAL
Terracon
16200 NW 59th Ave, Suite 106
Miami, FL 33014



LOCATION MAP
SECTION 27 TOWNSHIP 53 S – RANGE 40 E
N.T.S.

SHEET INDEX

C1	COVER SHEET
C2	GENERAL NOTES
C3	SUMMARY OF QUANTITIES
C4	KEY PLAN PROJECT
C5 TO C6	PAVING & GRADING PLAN
C7 TO C10	DRAINAGE PLAN & PROFILE
C11	TYPICAL ROADWAY SECTIONS
C12	MISCELLANEOUS DETAILS
C13 TO C14	STORMWATER POLLUTION PREVENTION PLANS
C15	STORMWATER POLLUTION PREVENTION DETAILS
C16 TO C17	PAVEMENT MARKINGS & SIGNAGE PLANS

DORAL FLORIDA

CITY OF DORAL
DEPARTMENT OF PUBLIC WORKS
8401 NW 53 TERRACE, DORAL FL 33166

MAYOR CITY COUNCIL

CHRISTI FRAGA	MAYOR
RAFAEL PINEYRO	VICE MAYOR
DIGNA CABRAL	COUNCILWOMAN
OSCAR PUIG-CORVE	COUNCILMAN
MAUREN PORRAS	COUNCILWOMAN

CITY STAFF

CARLOS ARROYO PUBLIC WORK DIRECTOR

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

DILLON JAMES SWIDERSKI SOTO LICENSE No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Dillon J Swiderski Soto
Date: 2024.07.16 22:04:09 -04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BID SET

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE
COVER SHEET

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	9/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	4/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD
DILLON JAMES SWIDERSKI SOTO LICENSE No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/10/2024
Dillon Swiderski Soto, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT
300 Engineering Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK L.J	APPR. D.S.
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C1		FILE NO.	

GENERAL NOTES

1 ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST STANDARDS, CODES AND SPECIFICATIONS OF THE MIAMI-DADE COUNTY, FLORIDA DEPARTMENT OF TRANSPORTATION AND THE FLORIDA BUILDING CODE, CURRENT EDITION.

2 THE LOCATIONS OF EXISTING RIGHT-OF-WAY LINES, CENTERLINES, ROADWAY PAVEMENT, UTILITIES, TREES AND OTHER PHYSICAL ABOVE-GROUND FEATURES SHOWN ON THE PLANS WERE TAKEN FROM THE SPECIFIC PURPOSE SURVEY PREPARED MILLER LEGG 5747 N. ANDREWS WAY, FORT LAUDERDALE, FL 33309-2364 PHONE: 954-436-7000

3 ALL STATIONS AND OFFSETS ARE REFERENCED TO BASELINE/CENTERLINE OF CONSTRUCTION. ELEVATIONS SHOWN HEREON RELATE TO NATIONAL GEODETIC VERTICAL DATUM, N.G.V.D., 1929

4 EXISTING SECTION CORNERS AND 1/4 SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION USING A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.

5 ANY NGVD-1929 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, NOTIFY: GEODETIC INFORMATION CENTER ATTN: MARK MAINTENANCE SECTION N/CG-162 6001 EXECUTIVE BLVD. ROCKVILLE, MARYLAND 20852 TEL:(301) 443.8319

6 EXISTING LAND MARKERS WITHIN LIMITS OF CONSTRUCTION SHALL BE REFERENCED IN DISTURBED BY THE CONTRACTOR'S SURVEY PARTY UNDER THE DIRECTION OF A FLORIDA REGISTERED LAND SURVEYOR.

7 ITEMS IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES AND PIPES, EXFILTRATION TRENCH, PAVEMENT AND BASE AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT.

8 THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE APPLICABLE FDOT STANDARD PLANS INDEX SERIES 102 AND THESE DOCUMENTS: THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S. DEPARTMENT OF TRANSPORTATION, FHWA), SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS. PEDESTRIAN AND VEHICULAR TRAFFIC SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES. THE CONTRACTOR SHALL SUBMIT MOT PLANS AS NECESSARY, AND PREPARED BY ADVANCED MOT QUALIFIER, FOR APPROVAL BY THE CITY PRIOR TO IMPLEMENTATION.

9 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 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, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS OF THE PROJECT AND FULLY SATISFY HIMSELF OF BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE HIS PRICING ACCORDINALY. GEOTECHNICAL REPORT IS IN THE CONTRACT DOCUMENTS.

10 THE LOCATION OF UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY; THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. RELOCATION OF UTILITIES SHAL BE COORDINATED WITH UTILITY COMPANIES BY THE CONTRACTOR AFTER IDENTIFICATION OF CONFLICT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE BEFORE ANY RELOCATION.

11 THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS. HE/SHE IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.

12 LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING FACILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF FIELD SURVEY. THE CONTRACTOR SHALL CONFIRM THE ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.

13 ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.

14 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.

15 ALL DITCH EXCAVATION SHALL BE PERFORMED IN FULL COMPLIANCE WITH THE PROVISIONS OF THE FLORIDA TRENCH SAFETY ACT.

16 CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, PARKING METERS, BENCHES, TRAFFIC CONTROL SIGNS, LANDSCAPING, ETC. WHEN DIRECTED BY THE ENGINEER, THE ENGINEER, THE CONTRACTOR SHALL REINSTALL OR DELIVERY SAID PUBLIC PROPERTY TO THE CITY.

17 THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL EQUIPMENT 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 OPERATIONS DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR WILL BE REQUIRED TO RESTORE, AT NO ADDITIONAL COST TO THE OWNER, ANY AREAS EXCAVATED BEYOND THE LIMITS PROVIDED BY THESE PLANS.

18 THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.

19 THE CONTRACTOR IS REQUIRED TO OBTAIN AND CLOSE OUT ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO THE START OF CONSTRUCTION. 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 PROJECT.

20 INSTALLATIONS OF ALL STORM SEWERS, INLETS, MANHOLES AND APPURTENCANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE COUNTY DEPARTMENT OF PUBLIC WORKS, FDOT OR AS INDICATED ON THE DRAWINGS.

21 STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY OR PUBLIC R-O-W WITHOUT APPROVAL FROM THE CITY.

22 APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWING SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE THE BIDDING. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANY WORK REQUIRED DUE TO MISUNDERSTANDING OF JOB OR SITE CONDITIONS AFFECTING THE WORK AS DESCRIBED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY APPARENT ERROR OR OMISSION IN DRAWINGS OR SPECIFICATIONS, AND THE ENGINEER SHALL BE PERMITTED TO MAKE CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR FULFILLMENT OF THE INTENT OF THE CONTRACT DOCUMENTS. THE TENDERING OF A PROPOSAL WILL ACKNOWLEDGE THE ACCEPTANCE OF THESE CONDITIONS BY THE BIDDER.

23 THE AMOUNT OF EACH OF THE MATERIALS PROVIDED IS THE ESTIMATED AMOUNT REQUIRED TO COMPLETE THE JOB. THESE QUANTITIES ARE ESTIMATED ONLY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE THE JOB IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SHOULD ADDITIONAL MATERIALS BE REQUIRED, THEY WILL BE PAID FOR AT THE CONTRACT UNIT PRICES AS DESCRIBED IN THE BID DOCUMENTS.

24 UPON THE RECEIPT OF THE NOTICE TO PROCEED THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE THE CITY OF DORAL, AND ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER, AND THE ENGINEER OF RECORD.

25 THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT COMPANY REPRESENTATIVES CAN BE PRESENT.

26 THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.

27 PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.

28 THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.

29 ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM CONTAMINATION BY SILT AND CONSTRUCTION DEBRIS UNTIL CONSTRUCTION OPERATIONS ARE COMPLETED. IN ACCORDANCE WITH THE ATTACHED STORMWATER POLLUTION PREVENTION PLANS. IF NECESSARY, NEW DRAINAGE STRUCTURES MUST BE DESILTED AT THE DIRECTION OF THE ENGINEER.

30 UPON COMPLETION OF THE PROPOSED DRAINAGE WORK, THE CONTRACTOR SHALL CLEAN THE NEW SYSTEM, REMOVE ALL POLLUTION CONTROL DEVICES FROM THE NEW AND EXISTING SYSTEM, AND CLEAN THE EXISTING STRUCTURES AND DRAINAGE SYSTEM AT NO ADDITIONAL COST.

31 EXISTING CATCH BASINS AND STORM SEWER STRUCTURES REQUIRING MODIFICATIONS MAY BE REPAIRED IN PLACE WITH CASE-IN-PLACE CONCRETE.

32 ALL ROAD CROSSINGS ARE OPEN CUT UNLESS OTHERWISE NOTED ON THE DRAWINGS.

33 THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE CITY.

34 THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT.

35 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC. THE CONTRACTOR SHALL INCLUDE COSTS TO REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES AS PART OF THE LUMP SUM SWALE RESTORATION PAY ITEM.

36 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT, PIPES, CONDUITS, CURBS, CABLES, TREES, SOD, LANDSCAPE ITEMS, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL INCLUDE THE COST TO RESTORE THEM AS PART OF THE LUMP SUM SWALE RESTORATION PAY ITEM. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY AREA.

37 CONTRACTOR IS RESPONSIBLE TO REMOVE AND REINSTALL ALL BRICK OR PAVER DRIVEWAYS IMPACTED BY THE CONSTRUCTION, REPAIR OR REPLACE ALL ASPHALT, CONCRETE, OR STAMPED CONCRETE DRIVEWAYS IMPACTED BY CONSTRUCTION.

38 THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.

39 ANY MAILBOXES, WALLS, FENCES OR OTHER HOMEOWNER PROPERTY OR IMPROVEMENTS SHALL BE TEMPORARILY RELOCATED AND REPLACED. SUCH RELOCATIONS SHALL BE COORDINATED WITH THE ENGINEER OF RECORD AND ALL COSTS SHALL BE INCLUDED IN THE COST OF THE OVERALL BID.

40 All SIDEWALK IMPACTED BY CONSTRUCTION MUST BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO COST TO THE PROJECT. WORK INCLUDES ALL MEASURES NECESSARY TO COMPLY WITH ADA STANDARDS AND REQUIREMENTS.

41 COMPLETE AS-BUILT INFORMATION RELATIVE TO LOCATION, SIZE AND DEPTH OF NEW PIPES, EXFILTRATION TRENCH MANHOLES, INLETS, ETC, SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED (SIGNED AND SEALED BY A FLORIDA REGISTERED L.S.) PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL RECORD INFORMATION ON EXISTING UTILITY CROSSINGS ENCOUNTERED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPES, INLETS, MANHOLES, ETC., SHALL BE RECORDED BY A FLORIDA REGISTERED SURVEYOR AND SHOWN ON THE RECORD DRAWINGS. THE COST OF SIGNED AND SEALED AS-BUILTS SHALL BE INCLUDED IN THE COST OF THE OVERALL BID.

42 DURING CONSTRUCTION, THE PROJECT SITE, STAGING AREA, AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN AND WASHED WITH A WATER TRUCK AT THE END OF EACH WORK SHIFT.

43 WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, GRAVITY SEWER, 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 PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

44 THE CONTRACTOR SHALL GIVE THE ENGINEER OF RECORD AT LEAST 48 HOURS ADVANCE NOTICE PRIOR TO BACKFILLING OR COMPLETING THE INSPECTION OF THE FOLLOWING ITEMS SO THE ENGINEER OF RECORD CAN PERFORM FIELD OBSERVATIONS:

A. STORM DRAINAGE.

B. SUBGRADE; SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK

C. LIMEROCK BASE; SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT.

D. ASPHALTIC CONCRETE.

E. FINAL.

IF THE CONTRACTOR FAILS TO NOTIFY THE ENGINEER OF RECORD PRIOR TO COMPLETING THE ABOVE, THE ENGINEER RESERVES THE RIGHT TO ISSUE ANY CERTIFICATIONS OR FINAL INSPECTIONS."

45 PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS: POLLUTION RETARDANT BAFFLES, INLETS GRATES, FRAMES AND CATCH BASINS AND ALL OTHER DRAINAGE STRUCTURES, DRAINAGE PIPE, BALLAST ROCK, EXFILTRATION TRENCH FILTER FABRIC, ASPHALT, LIMEROCK, ETC.

46 ALL ONSITE STORM DRAINAGE MATERIALS AND INSTALLATION SHALL CONFORM TO THE APPLICABLE MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

A. GEOTEXTILE FABRIC SHALL BE APPROVED BY THE MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT. IT SHALL BE USED TO WRAP ALL SIDES, BOTTOM AND TOP OF THE EXFILTRATION TRENCH. THE TOP SECTION OF THE MATERIAL SHALL BE LAPPED A MINIMUM OF 12 INCHES AND THE CONTRACTOR SHALL TAKE EXTREME CARE IN BACKFILLING TO AVOID BUNCHING OF THE FABRIC.

B. PROVIDE A MINIMUM PROTECTIVE COVER OF 24 INCHES OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.

C. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS PER MIAMI-DADE COUNTY STANDARD DETAILS AND AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.

D. SEE DETAIL FOR ADDITIONAL INFORMATION."

47 ALL DISPOSAL OF MATERIALS, RUBBISH AND DEBRIS ARE TO BE MADE AT A LEGAL DISPOSAL SITE OR BY OTHER PRE-APPROVED MANNER. MATERIAL CLEARED FROM THE SITE AND DISPOSED OF ON ADJACENT AND/OR NEARBY PROPERTY WILL NOT BE CONSIDERED AS HAVING BEEN DISPOSED OF SATISFACTORILY. REMOVAL OF ALL MATERIAL WILL BE AT THE CONTRACTOR'S EXPENSE.

48 ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUBGRADE SHALL BE PERFORMED BY AN INDEPENDENT SOIL TESTING LABORATORY CERTIFIED IN THE STATE OF FLORIDA AND PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER AND THE CITY OF DORAL PRIOR TO THE PLACING THE LIMEROCK BASE MATERIAL.

49 CONTRACTOR SHALL SAWCUT EXISTING ASPHALT NEATLY AND IN A STARIGHT LINE PRIOR TO REMOVAL WHERE UNDER GROUNDWORK IS REQUIRED (MIAMI DADE COUNTY SPECIFICATIONS). IF ADJACENT ASPHALT BASE IS DAMAGED, CONTRACTOR SHALL REMOVE DAMAGED ASPHALT AND REWORK EXISTING BASE AS DIRECTED BY ENGINEER.

50 CONTRACTOR SHALL SAWCUT EXISTING CONCRETE SIDEWALK, CURB AND GUTTER AT THE NEAREST FLAG OR JOINT PRIOR TO REMOVAL OR AS DIRECTED BY ENGINEER. ANY DAMAGE CONCRETE SIDEWALK OR CURB AND GUTTER SHALL BE REPLACED TO THE NEAREST FLAG AT CONTRACTOR'S EXPENSE.

51 PAYMENT FOR FRENCH DRAIN INCLUDES THE REMOVAL OF EXISTING DRAINAGE SYSTEMS IN DIRECT CONFLICT WITH THE PROPOSED, ELSE LEAVE IN PLACE. THE PAYMENT DOES NOT INCLUDE THE SUBBASE, BASE AND ASPHALT USED DURING PAVEMENT RESTORATION.

52 PAY-ITEM CORE DRILL (MODIFY) EXISTING STRUCTURE INCLUDES THE WORK NEEDED TO CONNECT TO OTHER EXISTING DRAINAGE COMPONENTS SUCH AS BUT NOT LIMITED TO PIPES OR FRENCH DRAIN. WHEN 4 LF OF PIPE, USED TO CONNECT TO EXISTING DRAINAGE STRUCTURES, IS CALLED OUT IN PLANS, THE WORK SHALL BE DONE AS PER FDOT STANDARD PLAN INDEX 430-001.

53 CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY PRECAUTION AND OSHA COMPLIANCE. CONTRACTOR IS TO REFER TO ARTICLE 3.21 OF THE CONTRACT TERMS AND CONDITIONS.

54 CONTRACTOR SHALL PREPARE AND MAINTAIN A PROJECT SCHEDULE AND UPDATED MONTHLY FOR SUBMITTAL TO THE CITY.

55 THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH WASD FOR ADJUSTMENTS FOR THE FACILITIES. PRIOR TO PLACING THE LAST LIFT OF ASPHALT.

56 AT AREAS WHERE THE ROADWAY BASE IS EXPOSED DUE TO MILLING OPERATIONS, THE CONTRACTOR WILL RE-ESTABLISH THE BASE BY REWORKING THE TOP 3', AND PLACE 1' OF SP-9.5.

57 TRENCH RESTORATION WILL BE DONE IN ACCORDANCE TO MIAMI-DADE COUNTY R21.1, AND THE ROADWAY TYPICAL SECTION - NEW CONSTRUCTION SHOWN IN THE ROADWAY AND DRAINAGE DETAILS.

58 WHERE LIMEROCK BASE IS EXPOSED DUE TO MILLING OPERATIONS, THE CONTRACTOR IS TO REWORK THE BASE TO AVOID LONG EXPOSURE, AND PLACE THE STRUCTURAL PAVEMENT WITHIN 24 HOURS OF THE EXPOSURE. THE LENGTH OF BASE EXPOSURE IS LIMITED TO 1,000 FT.

59 DENSITY TESTS MUST BE PERFORMED AT NO MORE THAN 100 FT INTERVALS FOR EACH RUN. ADDITIONALLY, DENSITY TESTS SHALL BE TAKEN AT SIDE OF EACH PROPOSED DRAINAGE STRUCTURE LOCATION.

60 ALL EXCAVATED AREAS SHOULD BE RESTORED TO DRIVABLE CONDITIONS AT THE END OF EACH DAY.

61 THE CONTRACTOR WILL DESILT THE EXISTING DRAINAGE STRUCTURES AND PIPING THAT REMAIN.

SOIL EROSION, SEDIMENT, AND TURBIDITY CONTROL GENERAL NOTES

1 THIS PROJECT IS SUBJECT TO ALL RELATED ENVIRONMENTAL REQUIREMENTS WHICH INCLUDE A CONTROL OF EROSION AND SEDIMENTATION PLAN. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION DUE TO SEDIMENTATION RUNOFF FROM THE SITE PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER AS REQUIRED.

2 EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RAIN FOR DAMAGE AND GENERAL EFFECTIVENESS. ANY DAMAGED OR INEFFECTIVE CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.

3 ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED, IF DEEMED NECESSARY, BY THE ON-SITE INSPECTOR.

4 EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. TEMPORARY AND PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

5 ALL TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL THE AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION.

6 ALL CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOW OF MUD ON TO ANY PUBLIC RIGHT-OF-WAY. THIS SHALL REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS REQUIRE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHT-OF-WAY OR INTO STORM DRAINS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

7 CONTRACTOR SHALL INSTALL AND MAINTAIN INLET PROTECTION SYSTEMS AT EVERY INLET UNTIL THE PROJECT IS COMPLETED.

8 CONTRACTOR SHALL SOD GRASS AREAS DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER.

CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)."

ENVIRONMENTAL NOTES:

1 DURING CONSTRUCTION ANY GENERATED DEBRIS SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. APPROPRIATE SCREENS AND BARRIERS SHALL BE ERECTED TO PROTECT PEDESTRIAN, BICYCLE AND VEHICULAR TRAFFIC. ALL DEBRIS SHOULD BE REMOVED WITHIN 48 HOURS (OR SOONER IF SO DIRECTED BY THE CITY) FROM THE CONSTRUCTION AND STAGING AREAS, IF ANY.

SIGNING AND PAVEMENT MARKING GENERAL NOTES:

1 ALL EXISTING SIGNS AND SUPPORTS WITHIN THE PROJECT LIMITS SHALL REMAIN UNLESS OTHERWISE SPECIFIED.

2 ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE CURRENT EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS. ALL SIGN PANELS SHALL BE FABRICATED TO COMPLY WITH THE MOST RECENT EDITION OF THE FEDERAL HIGHWAY AND ADMINISTRATION STANDARD HIGHWAY SIGNS.

3 SIGN ASSEMBLY LOCATIONS SHOWN ON THE PLANS WHICH ARE IN CONFLICT WITH LIGHTING UTILITIES, DRIVEWAYS, LANDSCAPING, WHEELCHAIR RAMPS, ETC, MAY ONLY BE ADJUSTED WITH APPROVAL BY THE ENGINEER.

4 ALL STOP BARS SHALL BE LOCATED 4 FT FROM THE PROPOSED CROSSWALK, UNLESS OTHERWISE DIMENSIONED IN THE PLANS, ALL CROSSWALKS SHALL BE 10FT WIDE UNLESS OTHERWISE DIMENSIONED IN THE PLANS.

5 MATCH EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND THE END OF THE PROJECT AND AT ALL SIDE STREETS WITHOUT JOGS AND OFFSETS.

6 INCORRECTLY PLACED THERMOPLASTIC OR PAIN MARKINGS OVER FRICTION COURS WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 INCHES AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.

7 THE CONTRACTOR IS TO PLACE REFLECTIVE PAVEMENT MARKERS (RPM'S) ALONG ALL LOCATIONS INDICATED IN THE PLANS, ONLY 4 INCH BY 4 INCH RETRO-REFLECTIVE PAVEMENT MARKERS WILL BE PERMITTED.

8 THE CONTRACTOR IS TO PLACE BLUE RPM'S AT THE CENTER OF THE OUTSIDE LANE ALONG EACH BOUND, AT LOCATIONS OF THE EXISTING FIRE HYDRANTS.

EXISTING IRRIGATIONS SYSTEM NOTES:

1 THE CONTRACTOR SHOULD BE AWARE THAT THERE MAY BE PRIVATE IRRIGATION SYSTEMS WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL COORDINATE WITH PROPERTY OWNERS TO AVOID ANY DAMAGE TO THESE IRRIGATION SYSTEMS. ANY REPAIRS TO ANY DAMAGE TO ANY IRRIGATION SYSTEM WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

MAINTENANCE OF TRAFFIC

1 TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2 THE ENGINEER RESERVES THE RIGHT TO REOPEN ANY LANE CLOSURES RESULTING FROM THE PROJECT THAT MAY CAUSE EXTENDED TRAFFIC DELAYS.

3 THE TRAVEL LANES SHALL NOT BE ALTERED BY THE CONTRACTOR UNTIL ALL LABOR AND MATERIALS ARE AVAILABLE FOR CONSTRUCTION IN THAT AREA.

4 THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH INTENDED TRAFFIC CONTROL.

5 AT THE END OF EACH WORKDAY, ANY DROP-OFF ADJACENT TO THE TRAVEL WAY SHALL BE BACKFILLED PER INDEX 102-600 OR SHALL OTHERWISE BE PROTECTED WITH A TEMPORARY BARRIER AT THE CONTRACTORS EXPENSE.

6 THE CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES THROUGHOUT THE PROJECT DURATION. THE CONTRACTOR IS TO SHARE THE PROPOSED METHOD FOR ACCESS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

7 IN AREAS OF UNEVEN SURFACES DURING CONSTRUCTION, THE VERTICAL DROP-OFF SHALL NOT EXCEED 3 INCHES IN HEIGHT BETWEEN ADJACENT SURFACES.

8 THE CONTRACTOR SHALL MAINTAIN ACCESS FOR GARBAGE PICK-UP ALONG THE PROJECT LIMITS.

9 PEDESTRIAN, BICYCLE, AND HANDICAP ACCESS SHALL BE GUIDED AND MAINTAINED USING APPROVED WARNING LIGHTS, SIGNING, AND CHANELIZATION DEVICES. SUCH TRAVEL PLANS ARE TO BE PROTECTED WITH BARRICADES, TEMPORARY BARRIER WALL, OR APPROVED HANDRAIL.

LEGEND:

- EXISTING FIRE HYDRANT
- EXISTING MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING FPL MANHOLE
- EXISTING CONCRETE POLE
- EXISTING LIGHT POLE
- EXISTING WOOD POLE
- EXISTING CATCH BASIN
- EXISTING ELECTRIC BOX
- EXISTING WATER VALVE
- EXISTING IRRIGATION VALVE
- EXISTING WATER METER
- EXISTING SIGN
- EXISTING TRAFFIC SIGNAL BOX
- EXISTING CLEAN-OUT
- EXISTING SPOT LIGHT
- EXISTING PARKING METER
- EXISTING PRESSURE VACUUM BREAKER
- EXISTING 4" GAS VALVE
- EXISTING SANITARY VALVE
- EXISTING TRAFFIC LIGHT POLE
- EXISTING WALK LIG

SUMMARY OF QUANTITIES						
PAY ITEM NO.	DESCRIPTION	UNIT	COMPONENT			
			ROADWAY		SPM	
			PLAN	FINAL	PLAN	FINAL
0101 1	MOBILIZATION	LS	1			
0102 1	MAINTENANCE OF TRAFFIC	LS	1			
0104 18	INLET PROTECTION	EA	23			
0327 70 1	MILLING EX. ASPHALT PAVEMENT, 1" AVG DEPTH	SY	7535			
0334 1 52	SUPERPAVE ASPHALTIC CONCRETE, SP-9.5, PG-76-22	TN	40			
0337 7 30	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, RUBBER	TN	415			
0425 11	COREDRILL (MODIFY) EXISTING STRUCTURE	EA	2			
0425 1361	INLETS, CURB, TYPE P-6, <10'	EA	2			
0425 2 41	MANHOLES, P-7, <10'	EA	6			
0425 2 42	MANHOLES, P-7, >10'	EA	6			
0425 6	VALVE BOXES, ADJUST	EA	1			
0425 6 1	METER BOXES, ADJUST	EA	1			
0430175112	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 12"S/CD	LF	8			
0430175115	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"S/CD	LF	70			
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	16			
0430175124	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	LF	140			
0430175136	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 36"S/CD	LF	20			
0443 70 4	24" HDPE FRENCH DRAIN	LF	434			
0443 70 6	36" HDPE FRENCH DRAIN	LF	340			
0520 1 10	CONSTRUCT CONCRETE CURB AND GUTTER, TYPE F	LF	44			
0520 3	VALLEY GUTTER- CONCRETE (REMOVE AND REPLACE)	LF	200			
0522 1	CONSTRUCT 4" CONCRETE SIDEWALK	LF	240			
0570 1 2	PERFORMANCE TURF, SOD	SY	1250			
0706 3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	EA			255	
0710 11101	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	GM			0.83	
0710 11124	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR DIAGONAL OR CHEVRON, 18"	LF			355	
0710 11125	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR STOP LINE OR CROSSWALK, 24"	LF			128	
0710 11131	PAINTED PAVEMENT MARKINGS, STANDARD, SKIP, 6"	GM			0.12	
0710 11170	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS	EA			24	
0710 11201	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6"	GM			0.71	
0710 11224	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID FOR DIAGONAL OR CHEVRON, 18"	LF			180	
0710 12231	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6"	GM			0.44	
0711 11111	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	GM			0.83	
0711 11124	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18" FOR DIAGONALS AND CHEVRONS	LF			355	
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF			128	
0711 11131	THERMOPLASTIC, STANDARD, WHITE, SKIP, 6"	GM			0.12	
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA			24	
0711 11211	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6"	GM			0.71	
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18"	LF			180	
0711 11231	THERMOPLASTIC, STANDARD, YELLOW, SKIP, 6"	GM			0.44	
1060 16	REMOVAL OF EXISTING STORMWATER MANHOLE	EA	4			

MIAMI DADE COUNTY ENGINEERING STANDARDS		
FOR	SEE DETAIL	SHEET
WATER AND GRAVITY SEWER MAIN CROSSINGS	GS 1.5	1 & 2 OF 2
MANHOLE AND INLET (TYPE P)	SD 2.7	2 OF 4
EXFILTRATION TRENCH (FRENCH DRAIN)	SD 1.1	1 OF 2
EXFILTRATION TRENCH (PIPE CULVERT NOTES)	SD 1.1	2 OF 2
PAVEMENT RESTORATION TYPE V	A 1.1	1 OF 1
ABBREVIATIONS FOR DEPARTMENT'S PROJECTS	A 10.0	1, 2 & 3 OF 3

NOTES:

1. THE ABOVE LIST SHALL NOT BE CONSIDERED AS NECESSARILY COMPLETE, NOR SHALL THE STANDARD DETAILS WHICH MAY BE INCLUDED ELSEWHERE HEREIN BE CONSIDERED AS FORMING A COMPLETE LISTING OF ALL STANDARD DETAILS WHICH MAY APPLY TO THIS PROJECT.
2. ALL STANDARD DETAILS ARE INCORPORATED IN THE ABOVE LIST BY REFERENCE AND ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE MDWASD STANDARD DETAILS.

FDOT STANDARDS CONSTRUCTIONS		
FOR	SEE DETAIL	SHEET
CURB INLET TOP TYPES 5 & 6	425-021	1, 2, 3, 4, 5, 6 & 7 OF 7
CURB AND GUTTER	520-001	2 OF 3
CONCRETE SIDEWALK	522-001	1 & 2 OF 2
PAVEMENT MARKINGS	711-001	1, 2, 8 & 10 OF 13

NOTES:

1. THE ABOVE LIST SHALL NOT BE CONSIDERED AS NECESSARILY COMPLETE, NOR SHALL THE STANDARD DETAILS WHICH MAY BE INCLUDED ELSEWHERE HEREIN BE CONSIDERED AS FORMING A COMPLETE LISTING OF ALL STANDARD DETAILS WHICH MAY APPLY TO THIS PROJECT.
2. ALL STANDARD DETAILS ARE INCORPORATED IN THE ABOVE LIST BY REFERENCE AND ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FDOT STANDARD DETAILS.

TABLE OF QUANTITIES
SUB-BASIN D-3-1 DRAINAGE IMPROVEMENTS

NW 29TH STREET		
DESCRIPTION	UNIT	QUANTITY
NEW MANHOLE	EA	7
NEW 24" HDPE EXF. TRENCH	LF	434
NEW 24" HDPE SOLID PIPE	LF	140
CORE & DRILL	EA	2
24" HDPE PIPE REMOVAL	LF	500
MANHOLE STRUCTURE REMOVAL	EA	4
POLLUTION RETARDANT BAFFLE	EA	9
NW 79TH AVENUE		
DESCRIPTION	UNIT	QUANTITY
NEW MANHOLE	EA	5
NEW TYPE 6 CURB INLET	EA	2
NEW 36" HDPE EXF. TRENCH	LF	340
NEW 36" HDPE	LF	20
NEW 15" HDPE SOLID PIPE	LF	70
POLLUTION RETARDANT BAFFLE	EA	4

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

SUMMARY OF QUANTITIES

NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.D.
2	8/25/22	60% SUBMISSION	D.J.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

WILLIAM JAMES SCHWERDTFEGER
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER

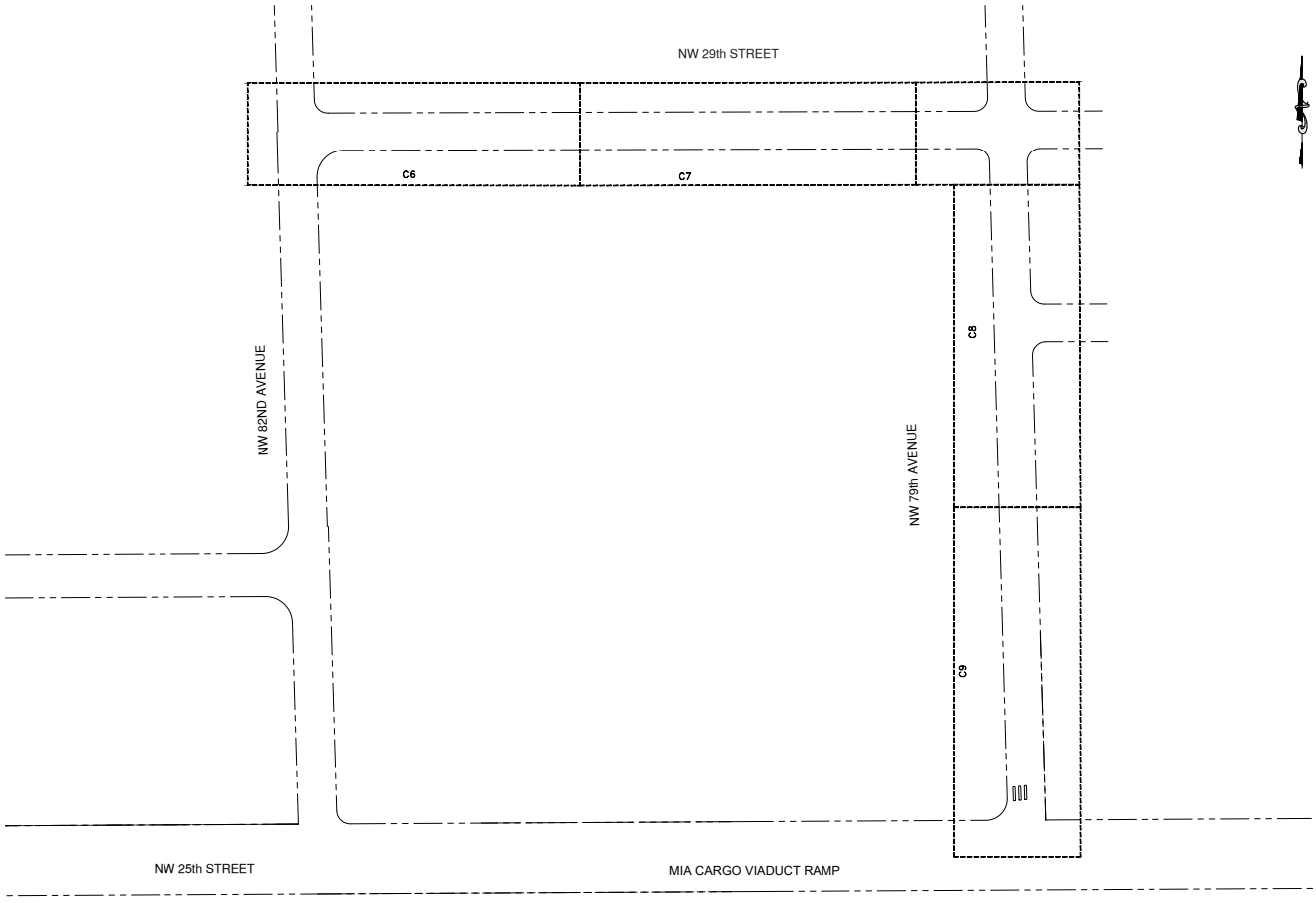
7/10/2024

Dillon Schwerdtfegar Sobo, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C3		FILE NO.	



KEY PLAN
N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

KEY PLAN PROJECT

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

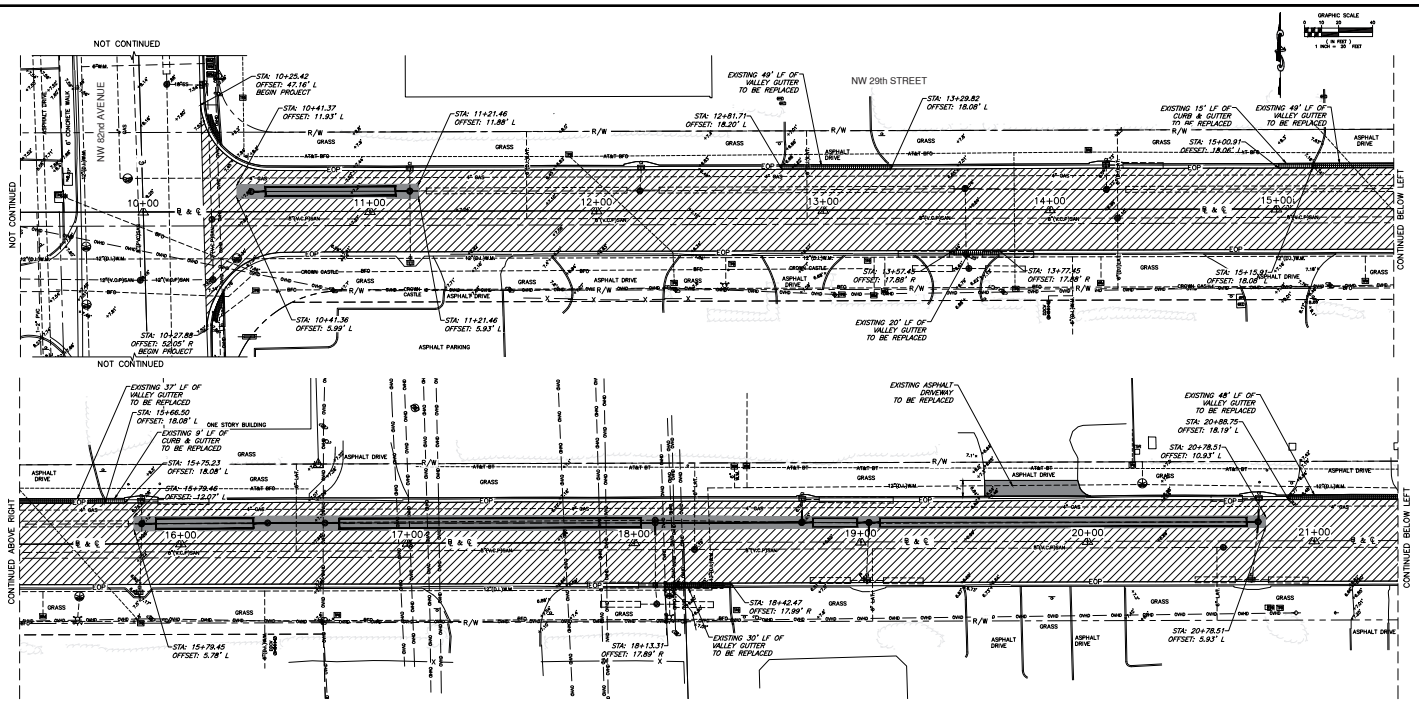
DILLON SUDIERVAL SUAREZ
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER

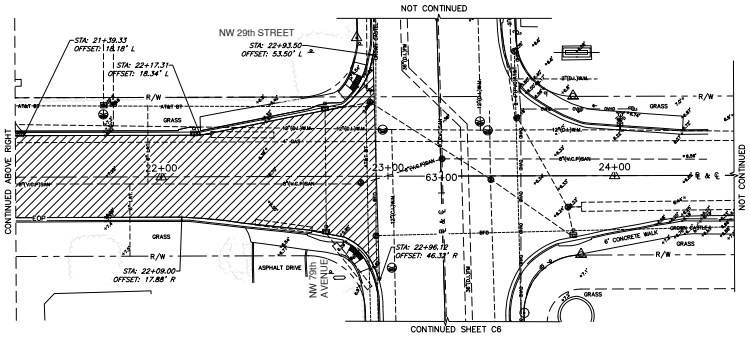
7/10/2024
Dillon Sudiervial Suárez, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

3GC Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C4		FILE NO.	





LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- SAN — EXISTING SANITARY SEWER PIPE
- F.M. — EXISTING FORCE MAIN PIPE
- W.M. — EXISTING WATER MAIN PIPE
- SS — EXISTING STORM DRAIN PIPE
- GAS — EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED TRENCH RESTORATION
- PROPOSED MILLING AND RESURFACING
- CURB & GUTTER REPLACEMENT
- VALLEY GUTTER REPLACEMENT

NOTES

1. EXISTING DAMAGED CONCRETE VALLEY GUTTER ALONG DRIVEWAY APPROACHES AND TYPE F CURB AND GUTTER TO BE REPLACED, AS SPECIFIED ON PLANS ALONG NW 29TH STREET.

PAVING & GRADING NOTES:

1. ALL AREAS DAMAGED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, SIDEWALKS, PAVEMENT MARKINGS, DRIVEWAYS, SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
2. ALL ASPHALT REMOVED SHALL BE SAW CUT ADJACENT TO THE EXISTING PAVEMENT SECTION.
3. ALL EXISTING DRIVEWAY & SIDEWALKS WHERE IMPACTS FROM THE PROPOSED WORK ANTICIPATED SHALL BE REPLACED IN-KIND.
4. ALL EXISTING SIGNS IMPACTED BY CONSTRUCTION SHALL BE PROVIDED, AS NECESSARY, AT THE CONTRACTORS EXPENSE.
5. ALL EXISTING TREES SHALL BE MAINTAINED AND PROTECTED SO AS TO MINIMIZE IMPACTS. SHOULD TREE RELOCATION/REMOVAL BE REQUIRED, IT SHALL BE COORDINATED BY THE CONTRACTOR TO OBTAIN NECESSARY PERMITS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA

CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

PAVING & GRADING PLAN

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	6/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

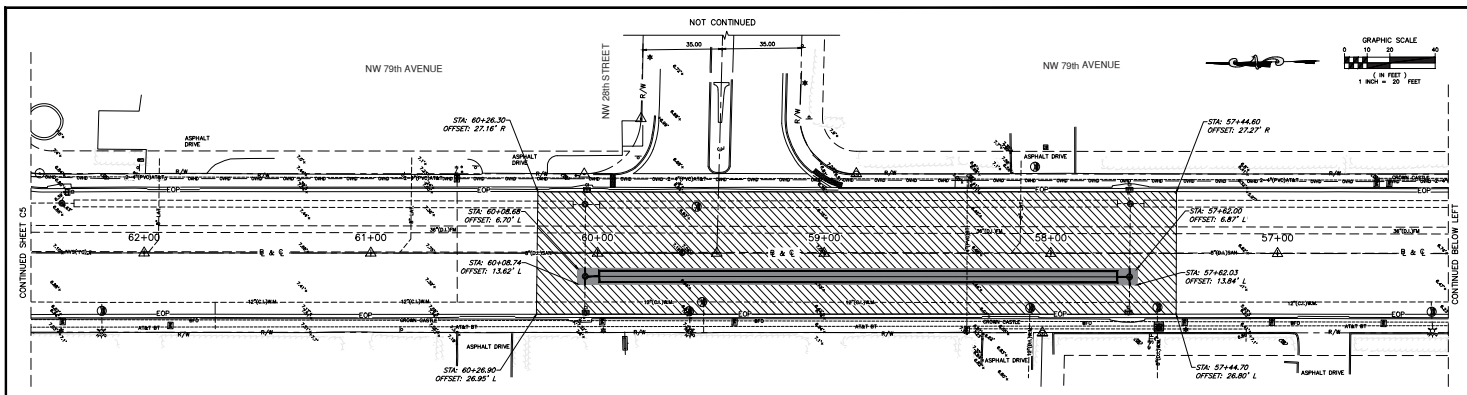
7/10/2024

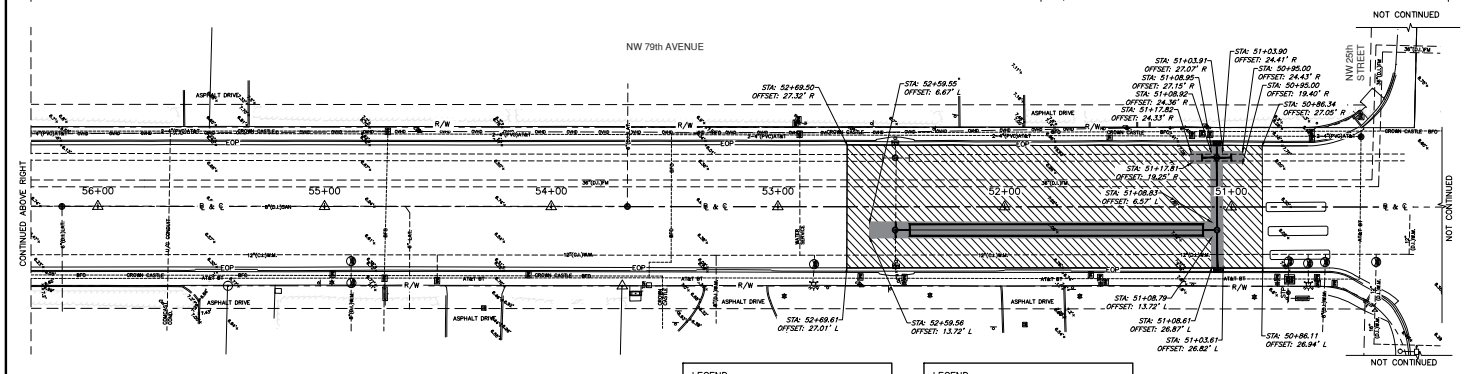
Dillon Subirana Soto, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE: 7/10/2024	
SHEET NO. C5		FILE NO.	





LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- SAN — EXISTING SANITARY SEWER PIPE
- F.M. — EXISTING FORCE MAIN PIPE
- W.M. — EXISTING WATER MAIN PIPE
- SS — EXISTING STORM DRAIN PIPE
- GAS — EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED TRENCH RESTORATION
- PROPOSED MILLING AND RESURFACING

LEGEND

- CURB & GUTTER REPLACEMENT
- VALLEY GUTTER REPLACEMENT

NOTES

1. EXISTING DAMAGED CONCRETE VALLEY GUTTER ALONG DRIVEWAY APPROACHES AND TYPE F CURB AND GUTTER TO BE REPLACED, AS SPECIFIED ON PLANS ALONG NW 29TH STREET.
2. EXISTING FPL PULL BOX TO BE READJUSTED TO GRADE. ROOT BARRIER TO BE PROVIDED.

PAVING & GRADING NOTES:

1. ALL AREAS DAMAGED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, SIDEWALKS, PAVEMENT MARKINGS, DRIVEWAYS, SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
2. ALL EXISTING SIDEWALKS SHALL BE SAW CUT ADJACENT TO THE PROPOSED IMPROVEMENTS.
3. ALL EXISTING DRIVEWAY APPROACHES WHERE IMPACTS FROM THE PROPOSED WORK AVOIDED SHALL BE REPLACED IN-KIND.
4. ALL EXISTING SIGNS IMPACTED BY CONSTRUCTION SHALL BE PROVIDED, AS NECESSARY, AT THE CONTRACTORS EXPENSE.
5. ALL EXISTING TREES SHALL BE MAINTAINED AND PROTECTED SO AS TO ELIMINATE IMPACTS. SHOULD TREE RELOCATION/REMOVAL BE REQUIRED, IT SHALL BE COORDINATED BY THE CONTRACTOR TO OBTAIN NECESSARY PERMITS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA

CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

PAVING & GRADING PLAN

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOLIS, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

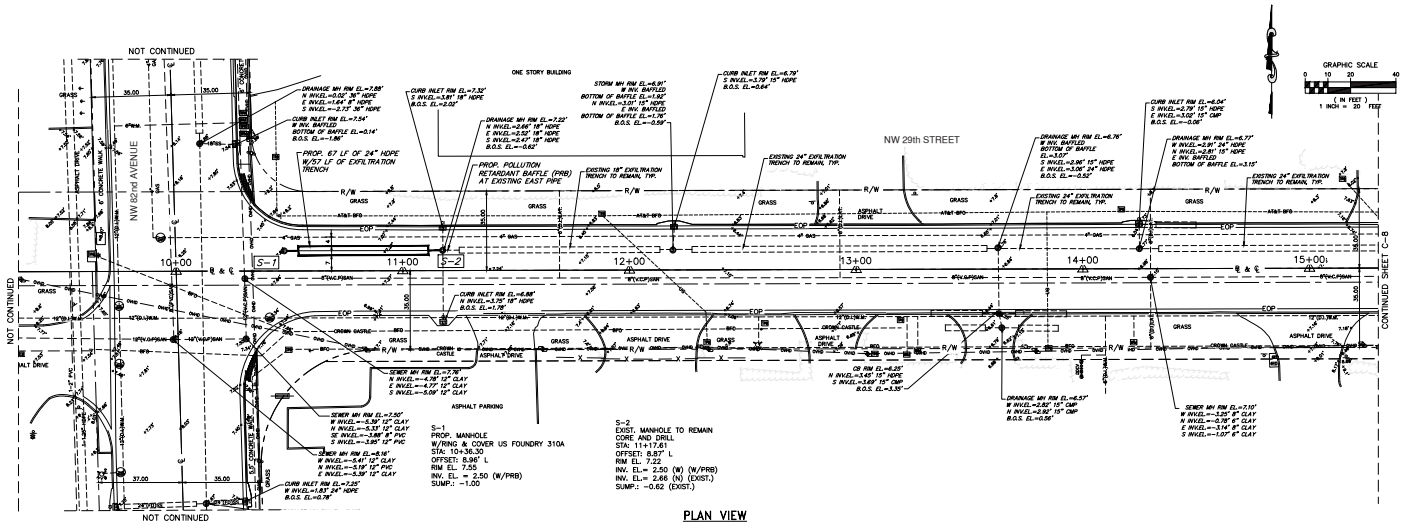
7/10/2024

Dillon Subirana Solis, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

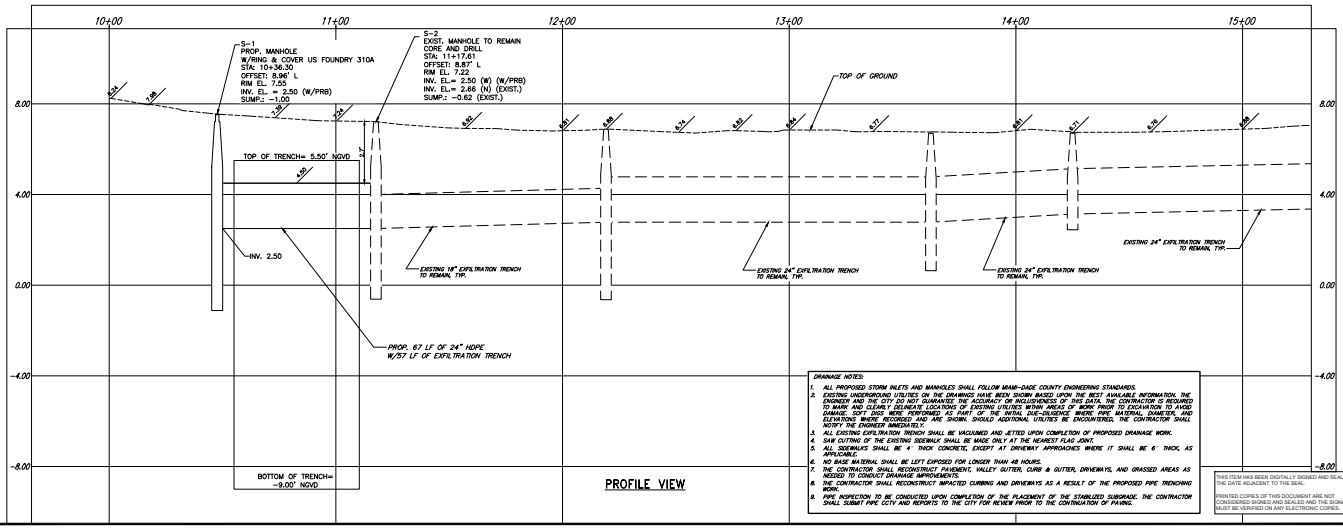
CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.D.L.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S.
F.B.	SCALE 1:20	DATE: 7/10/2024	
SHEET NO. C6		FILE NO.	



PLAN VIEW



PROFILE VIEW

DRAINAGE NOTES:

1. ALL PROPOSED STORM INLETS AND MANHOLES SHALL FOLLOW MIAMI-DADE COUNTY ENGINEERING STANDARDS.
2. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS REQUIRED TO VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. SOFT DIGS WERE PERFORMED AS PART OF THE INITIAL DUE-DILIGENCE WHERE PIPE MATERIAL, DIAMETER, AND ELEVATIONS WHERE RECORDED AND ARE SHOWN. SHOULD ADDITIONAL UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
3. ALL EXISTING EXFILTRATION TRENCH SHALL BE VACUUMED AND JETTED UPON COMPLETION OF PROPOSED DRAINAGE WORK.
4. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINT.
5. ALL SIDEWALKS SHALL BE 4" THICK CONCRETE, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK, AS APPLICABLE.
6. NO BASE MATERIAL SHALL BE LEFT EXPOSED FOR LONGER THAN 48 HOURS.
7. THE CONTRACTOR SHALL RECONSTRUCT PAVEMENT, VALLEY GUTTER, CURB & GUTTER, DRIVEWAYS, AND GRASSED AREAS AS NEEDED TO CONDUCT DRAINAGE IMPROVEMENTS.
8. THE CONTRACTOR SHALL RECONSTRUCT IMPACTED CURBING AND DRIVEWAYS AS A RESULT OF THE PROPOSED PIPE TRENCHING WORK.
9. PIPE INSPECTION TO BE CONDUCTED UPON COMPLETION OF THE PLACEMENT OF THE STABILIZED SUBGRADE. THE CONTRACTOR SHALL SUBMIT PIPE CCTV AND REPORTS TO THE CITY FOR REVIEW PRIOR TO THE CONTINUATION OF PAVING.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

DRAINAGE PLAN & PROFILE

NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.B.
2	8/25/22	60% SUBMISSION	D.J.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.J.S.
4	4/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER

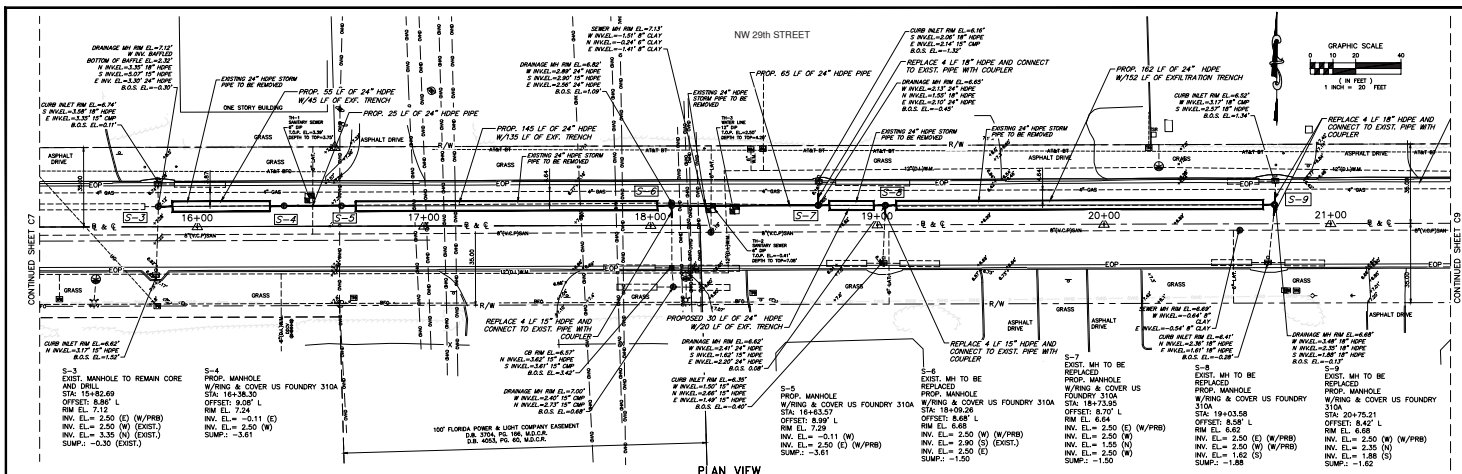
7/10/2024

Dillon Subirana Soto, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

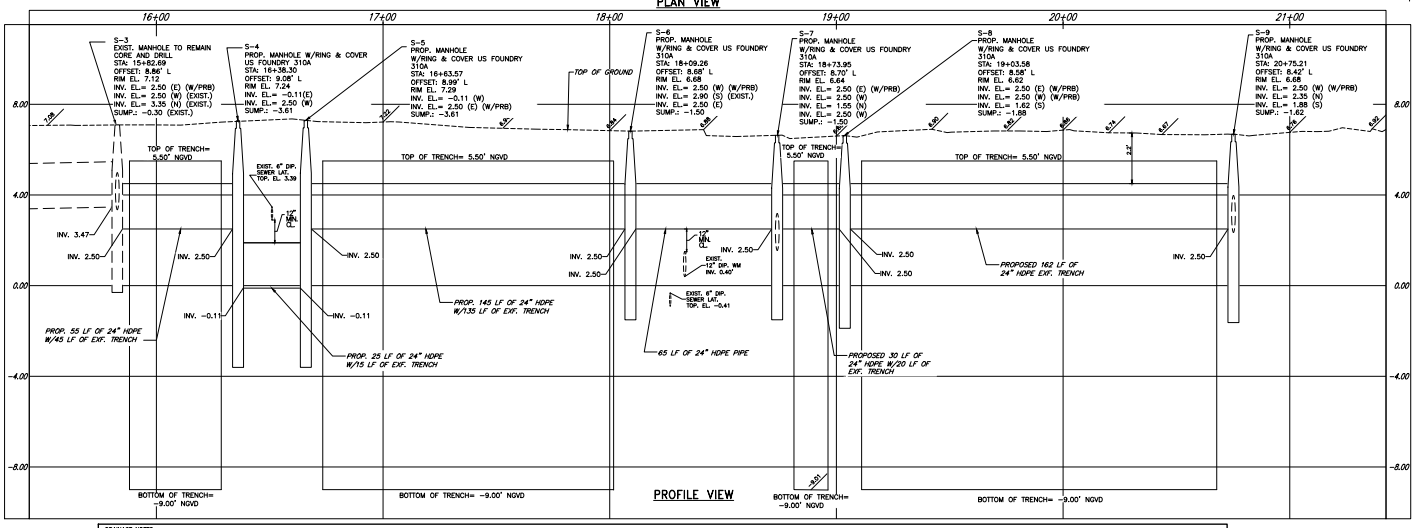
CONSULTANT

2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE: 7/10/2024	
SHEET NO. C7		FILE NO.	



PLAN VIEW



PROFILE VIEW

DRAINAGE NOTES:

1. ALL PROPOSED STORM INLETS AND MANHOLES SHALL FOLLOW MIAMI-DADE COUNTY ENGINEERING STANDARDS.
2. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. SOFT DIGS WERE PERFORMED AS PART OF THE INITIAL DUE-DILIGENCE WHERE PIPE MATERIAL, DIAMETER, AND ELEVATIONS WERE RECORDED AND ARE SHOWN. SHOULD ADDITIONAL UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
3. ALL EXISTING EXFILTRATION TRENCH SHALL BE VACUUMED AND JETTED UPON COMPLETION OF PROPOSED DRAINAGE WORK.
4. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINT.
5. ALL SIDEWALKS SHALL BE 4" THICK CONCRETE, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK, AS APPLICABLE.
6. NO BASE MATERIAL SHALL BE LEFT EXPOSED FOR LONGER THAN 48 HOURS.
7. THE CONTRACTOR SHALL RECONSTRUCT PAVEMENT, VALLEY GUTTER, CURB & GUTTER, DRIVEWAYS, AND GRASSED AREAS AS NEEDED TO CONDUCT DRAINAGE IMPROVEMENTS.
8. THE CONTRACTOR SHALL RECONSTRUCT IMPACTED CURBING AND DRIVEWAYS AS A RESULT OF THE PROPOSED PIPE TRENCHING WORK.
9. PIPE INSPECTION TO BE CONDUCTED UPON COMPLETION OF THE PLACEMENT OF THE STABILIZED SUBGRADE. THE CONTRACTOR SHALL SUBMIT PIPE CCTV AND REPORTS TO THE CITY FOR REVIEW PRIOR TO THE CONTINUATION OF PAVING.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

DRAINAGE PLAN & PROFILE

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	4/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SOLDEVILA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

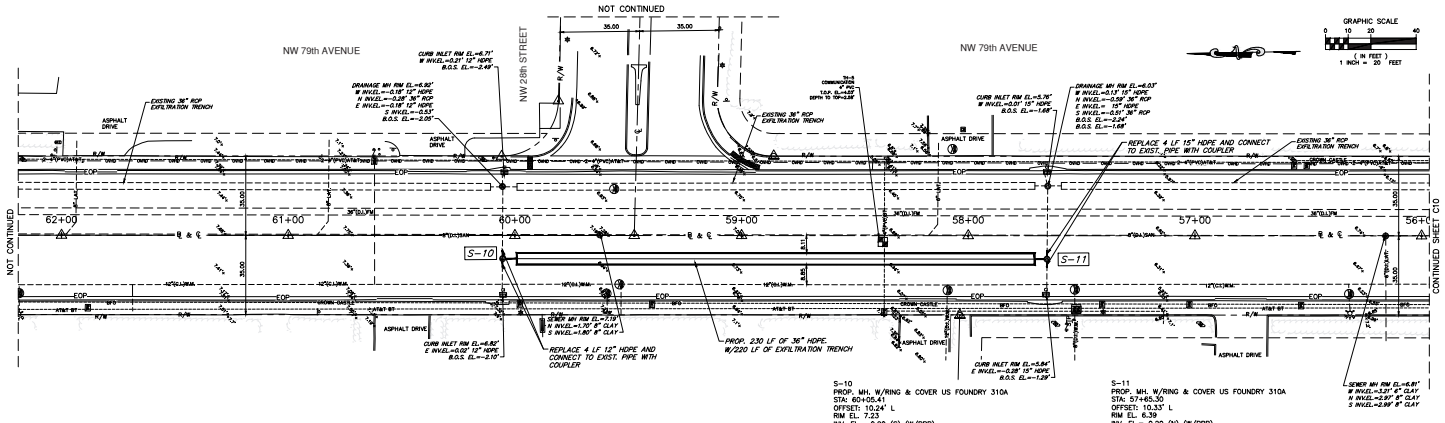
7/10/2024

Dillon Soldevila Soto, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

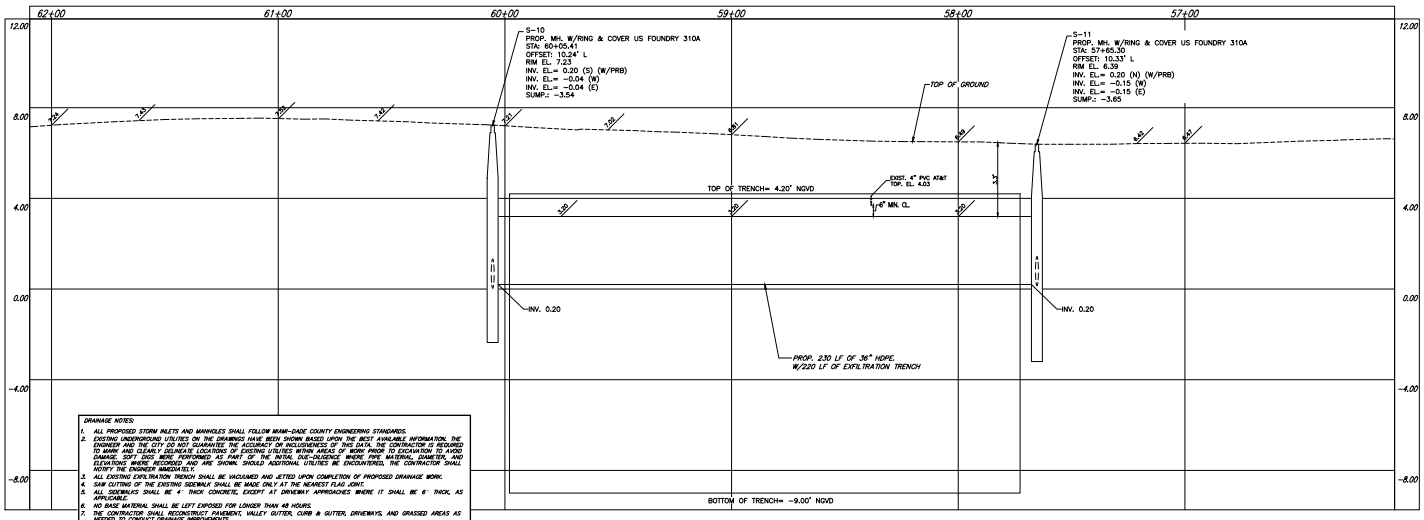
PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE: 7/10/2024	
SHEET NO. C8		FILE NO.	



S-10
PROP. MH. W/RING & COVER US FOUNDRY 310A
STA: 60+05.41
OFFSET: 10.24' L
RIM EL. 7.23
INV. EL.= 0.20 (S) (W/PRB)
INV. EL.= -0.04 (W)
INV. EL.= -0.04 (E)
SUMP.: -3.54

S-11
PROP. MH. W/RING & COVER US FOUNDRY 310A
STA: 57+65.30
OFFSET: 10.33' L
RIM EL. 6.39
INV. EL.= 0.20 (N) (W/PRB)
INV. EL.= -0.15 (W)
INV. EL.= -0.15 (E)
SUMP.: -3.65

PLAN VIEW



DRAINAGE NOTES:

1. ALL PROPOSED STORM INLETS AND MANHOLES SHALL FOLLOW MIAMI-DADE COUNTY ENGINEERING STANDARDS.
2. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND THE CITY DO NOT GUARANTEE THE ACCURACY OR INCLUSIVENESS OF THIS DATA. THE CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. SOFT DIGS WERE PERFORMED AS PART OF THE INITIAL DUE-DILIGENCE WHERE PIPE MATERIAL, DIAMETER, AND ELEVATIONS WHERE RECORDED AND ARE SHOWN. SHOULD ADDITIONAL UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
3. ALL EXISTING EXFILTRATION TRENCH SHALL BE VACUUMED AND JETTED UPON COMPLETION OF PROPOSED DRAINAGE WORK.
4. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINT.
5. ALL SIDEWALKS SHALL BE 4" THICK CONCRETE, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK, AS APPLICABLE.
6. NO BASE MATERIAL SHALL BE LEFT EXPOSED FOR LONGER THAN 48 HOURS.
7. THE CONTRACTOR SHALL RECONSTRUCT PAVEMENT, VALLEY GUTTER, CURB & GUTTER, DRIVEWAYS, AND GRASSED AREAS AS NEEDED TO CONDUCT DRAINAGE IMPROVEMENTS.
8. THE CONTRACTOR SHALL RECONSTRUCT IMPACTED CURBING AND DRIVEWAYS AS A RESULT OF THE PROPOSED PIPE TRENCHING WORK.
9. PIPE INSPECTION TO BE CONDUCTED UPON COMPLETION OF THE PLACEMENT OF THE STABILIZED SUBGRADE. THE CONTRACTOR SHALL SUBMIT PIPE CCTV AND REPORTS TO THE CITY FOR REVIEW PRIOR TO THE CONTINUATION OF PAVING.

PROFILE VIEW

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

DRAINAGE PLAN & PROFILE

NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.B.
2	8/25/22	60% SUBMISSION	D.J.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

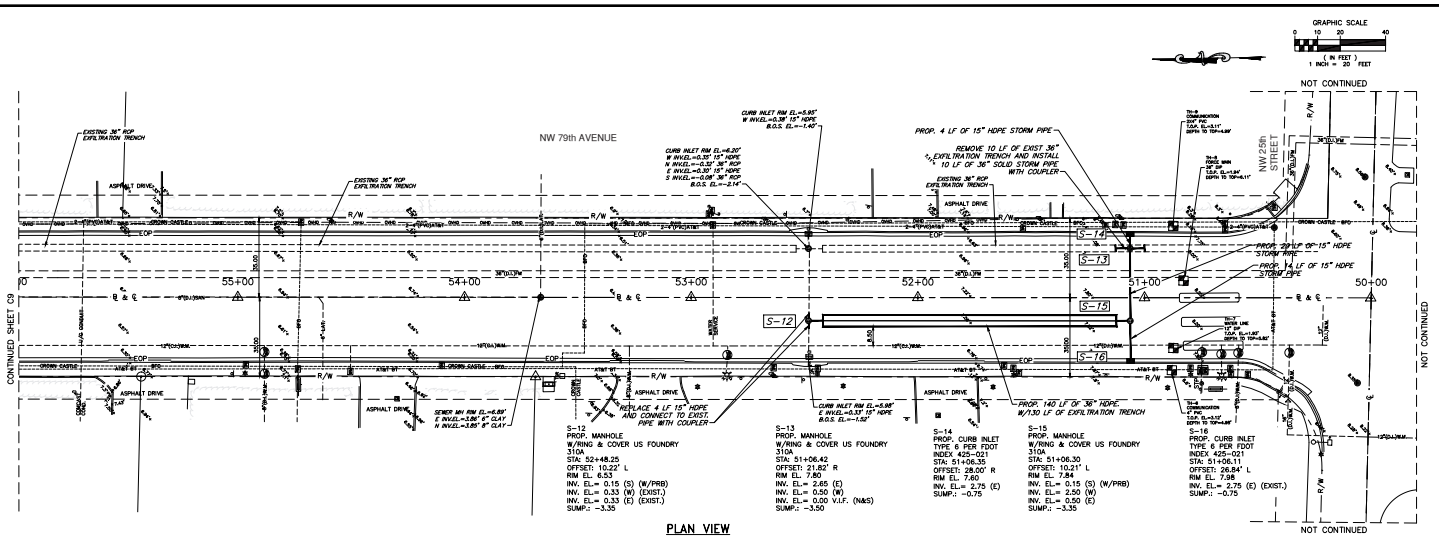
7/10/2024

Dillon Subirana Soto, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

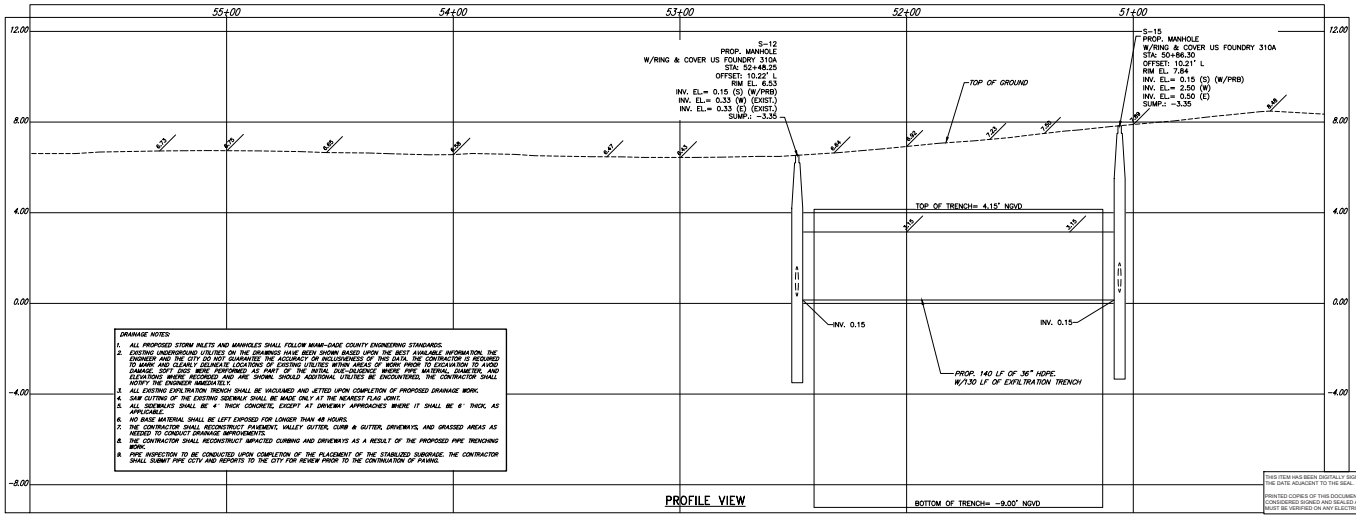
CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.CL.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C9		FILE NO.	



PLAN VIEW



PROFILE VIEW

DRAINAGE NOTES:

1. ALL PROPOSED STORM INLETS AND MANHOLES SHALL FOLLOW MIAMI-DADE COUNTY ENGINEERING STANDARDS.
2. EXISTING UNDERGROUND UTILITIES ON THE DRAWINGS HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE ENGINEER AND OWNER DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS DATA. CONTRACTOR IS REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. SOFT DIGS WERE PERFORMED AS PART OF THE INITIAL DUE-DILIGENCE WHERE PIPE MATERIAL, DIAMETER, AND ELEVATIONS WHERE RECORDED AND ARE SHOWN. SHOULD ADDITIONAL UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
3. ALL EXISTING EXFILTRATION TRENCH SHALL BE VACUUMED AND JETTED UPON COMPLETION OF PROPOSED DRAINAGE WORK.
4. SAW CUTTING OF THE EXISTING SIDEWALK SHALL BE MADE ONLY AT THE NEAREST FLAG JOINT.
5. ALL SIDEWALKS SHALL BE 4" THICK CONCRETE, EXCEPT AT DRIVEWAY APPROACHES WHERE IT SHALL BE 6" THICK, AS APPLICABLE.
6. NO BASE MATERIAL SHALL BE LEFT EXPOSED FOR LONGER THAN 48 HOURS.
7. THE CONTRACTOR SHALL RECONSTRUCT PAVEMENT, VALLEY GUTTER, CURB & GUTTER, DRIVEWAYS, AND GRASSED AREAS AS NEEDED TO CONDUCT DRAINAGE IMPROVEMENTS.
8. THE CONTRACTOR SHALL RECONSTRUCT IMPACTED CURBING AND DRIVEWAYS AS A RESULT OF THE PROPOSED PIPE TRENCHING WORK.
9. PIPE INSPECTION TO BE CONDUCTED UPON COMPLETION OF THE PLACEMENT OF THE STABILIZED SUBGRADE. THE CONTRACTOR SHALL SUBMIT PIPE CCTV AND REPORTS TO THE CITY FOR REVIEW PRIOR TO THE CONTINUATION OF PAVING.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

DRAINAGE PLAN & PROFILE

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	4/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

WILLIAM JAMES SWIGERT-SMITH
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER

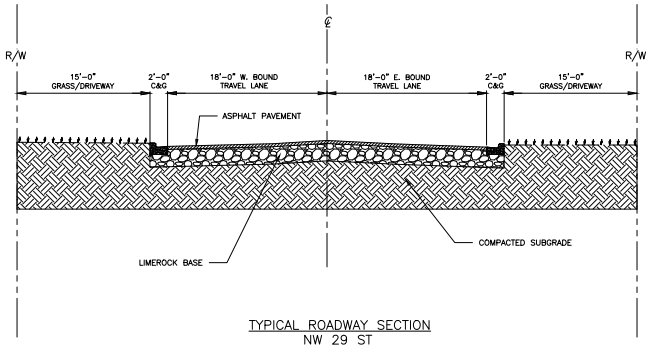
7/10/2024

Dillon Sukhenandsingh, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

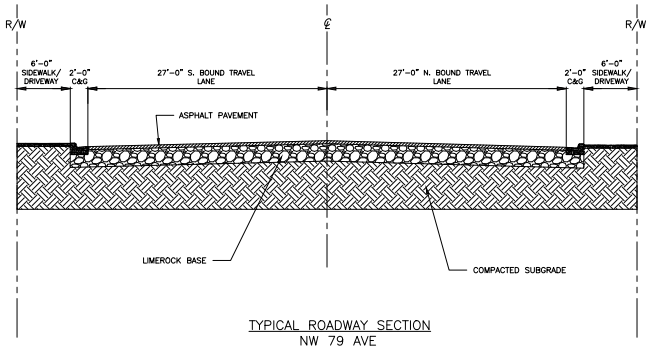
CONSULTANT

3GC Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C10		FILE NO.	



TYPICAL ROADWAY SECTION
NW 29 ST
N.T.S.



TYPICAL ROADWAY SECTION
NW 79 AVE
N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

TYPICAL ROADWAY SECTIONS

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	6/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

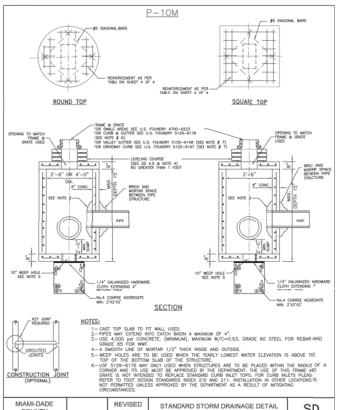
WILLIAM JAMES SNIDERMAN III
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/10/2024
Dillon Sniderman Sabo, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

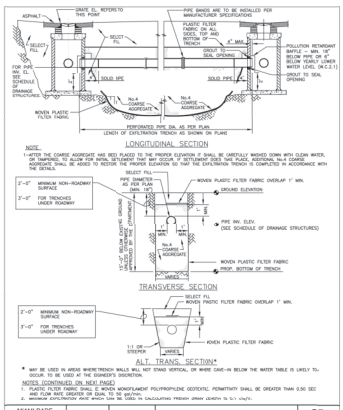
3GS Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C11		FILE NO.	



NOTES:
1.- CAST TOP SLAB TO FIT WALL USED.
2.- PIPES MAY EXITING INTO CATCH BASIN A MAXIMUM OF 4".
3.- USE 4,000 psi CONCRETE. (MINIMUM). MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
4.- A SMOOTH FINISH WITH A STRAW 1/2" THICK INSIDE AND OUTSIDE.
5.- WEEP HOLES ARE TO BE USED WHEN THE LOWEST LOWEST WATER ELEVATION IS ABOVE THE TOP OF THE BOTTOM SLAB OF THE STRUCTURE.
6.- USF S139-6176 MAY ONLY USED WHEN STRUCTURES ARE TO BE PLACED WITHIN THE RADIUS OF A CURVE AND WHERE THE CURVE CAN NOT BE ACCOMPLISHED WITHOUT USING THE USF S139-6176 AND GRATE IS NOT INTENDED TO REPLACE STANDARD CURB INLET TOPS. FOR CURB INLETS PLEASE REFER TO FDOT DESIGN STANDARDS INDEX 310 AND 311. INSTALLATION IN OTHER LOCATIONS IS PROHIBITED UNLESS APPROVED BY THE DEPARTMENT AS A RESULT OF MITIGATING CIRCUMSTANCES.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	APPROVED 5/9/2018	REVISED 5/9/2018	STANDARD STORM DRAINAGE DETAIL MANHOLE AND INLET (TYPE P)	SD 2.7 SHEET 2 OF 2



NOTE:
1.-AFTER THE COARSE AGGREGATE HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WACKED DOWN WITH CLEAN WATER, SUFFICIENT TO FILL THE VOIDS BELOW THE PERFORATED PIPE. AFTER THE WATER HAS DRAINED AWAY, ADDITIONAL COARSE AGGREGATE SHALL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.

* MAY BE USED IN AREAS WHERE TRENCH WALLS WILL NOT STAND VERTICAL, OR WHERE CASE-IN BELOW THE WATER TABLE IS LIKELY TO-OCCUR. TO BE USED AT THE ENGINEER'S DISCRETION.

NOTES (CONTINUED ON NEXT PAGE):
1. PLASTIC FILTER FABRIC SHALL BE WOVEN MONOFILAMENT POLYPROPYLENE GEOTEXTILE PERMITTIVITY SHALL BE GREATER THAN 0.50 SEC AND FLOW RATE GREATER OR EQUAL TO 50 gal/min.
2. MINIMUM EXFILTRATION AREAS WHICH MAY BE USED IN CALCULATING TRENCH DRAIN LENGTH TO 5.1 sf/LF.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	APPROVED 09/18/2013	REVISED 02/08/2011 09/28/2012 10/18/2012	STANDARD STORM DRAINAGE DETAIL EXFILTRATION TRENCH (FRENCH DRAIN)	SD 1.1 SHEET 1 OF 2

NOTES CONTINUED

3. THE MINIMUM PIPE DIAMETER FOR DRAINAGE SYSTEM WITHIN THE ROADWAY RIGHT-OF-WAY SHALL BE 18 INCHES. 15 INCH PIPE MAY BE USED IN WHERE ASSUMPTIONS.
4. TYPE "P" S.D. 2.8 STRUCTURE IS RECOMMENDED WITHIN 5 FEET OF THE EDGE OF THE TRENCH.
5. TYPE "P" S.D. 2.8 STRUCTURE IS RECOMMENDED FOR SMALL DRAINAGE AREAS LESS THAN 0.2 ACRE PER EATCH BASIN.
6. TYPE "J" S.D. 2.8 STRUCTURE IS RECOMMENDED FOR AREAS LARGER THAN 0.2 ACRE.
7. PIPES CAN BE ALLOWED BELOW WATER TABLE DUE TO UTILITY CONFLICTS OR IN ORDER TO PROVIDE THE REQUIRED MINIMUM COVER.
8. PIPES CAN BE ALLOWED BELOW WATER HIGH OCTOBER WATER TABLE DUE TO UTILITY CONFLICTS OR IN ORDER TO PROVIDE THE REQUIRED MINIMUM COVER.
9. FILTER FABRIC IS REQUIRED FOR BAFFLES ON ALL CONTACT EDGES MOUNTED ON WALL.
10. OIL AND GREASE BAFFLE IS REQUIRED FOR ALL DRAINAGE STRUCTURES PRECEDING AN OUTFALL OR EXFILTRATION TRENCHES. IN PROJECTS LOCATED IN WELLFIELD PROTECTION AREAS, ROAD INTERSECTIONS WITH TRAFFIC LIGHTS, AND LARGE PARKING LOTS WHICH MAY CONTAIN HAZARDOUS WASTE.
11. OIL AND GREASE BAFFLE MAY BE WAIVED IN SUBURBAN RESIDENTIAL AREAS.

GENERAL NOTES FOR PIPE CULVERTS

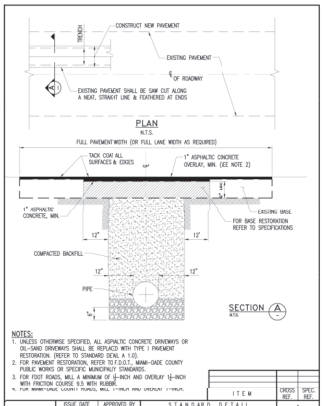
CONTRACTOR HAS THE OPTION OF INSTALLING ANY PIPE MEETING THE REQUIREMENTS OF SECTION 443-2 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS LONG AS THE MANUFACTURER IS LISTED, AT THE TIME OF PIPE INSTALLATION, IN FDOT'S LIST OF PRODUCERS WITH ACCEPTED QUALITY CONTROL PROGRAMS. PIPES WITH LESS THAN A 100-YEAR CERTIFICATION CANNOT BE USED ON SECTION LINE, HALF SECTION LINE, COLLECTOR ROADWAYS, AND ARTERIALS. 50-YEAR PIPE CERTIFICATION REQUIRED FOR ALL OTHER MINOR/LOCAL ROADWAYS.

MINIMUM NUMBER OF PERFORATION IN PIPE CULVERTS

PIPE DIAMETER (Inches)	OUTER SHELL No. of 3/8" Dia. Holes (PER LIN. FT. OF PIPE)	LINER No. of 3/8" Dia. Holes (PER LIN. FT. OF PIPE)
15	100	50
18	120	60
24	160	80
30	200	100
36	240	120
42	275	140
48	315	150
54	355	180
60	395	200
72	470	235
84	550	275

NOTE:
PERFORATIONS SHALL BE UNIFORMLY SPACED AROUND THE FULL PERIPHERY OF THE PIPE. TO WITHIN 4" OF EACH END OF EACH LENGTH OF PIPE. THE NUMBER OF PERFORATIONS PER LINEAR FOOT OF PIPE AND THE DIAMETER OF THE PERFORATIONS SHALL BE AS SHOWN ON THE ABOVE TABLE.

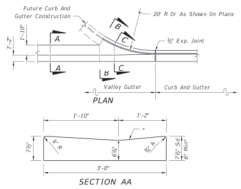
MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	APPROVED 09/18/2013	REVISED 08-04-88 10-21-13 05-02-81	STANDARD STORM DRAINAGE DETAIL EXFILTRATION TRENCH (PIPE CULVERT NOTES)	SD 1.1 SHEET 2 OF 2



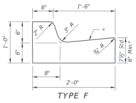
NOTES:
1. UNLESS OTHERWISE SPECIFIED, ALL ASPHALTIC CONCRETE DRIVEWAYS OR OIL-SAND DRIVEWAYS SHALL BE REPLACED WITH TYPE I PAVEMENT RESTORATION. (REFER TO STANDARD DEWL A 1.0).
2. FOR PAVEMENT RESTORATION, REFER TO F.D.O.T., MIAMI-DADE COUNTY PUBLIC WORKS OR SPECIFIC MUNICIPALITY STANDARDS.
3. FOR FDOT ROADS, MILL A MINIMUM OF 1-INCH AND OVERLAY 1½-INCH WITH FRICTION COURSE 9.5 WITH RUBBER.
4. FOR MAINTENANCE COUNTY PURPOSE, MILL 1"TRUCK AND OVERLAY 1"TRUCK.

ISSUE DATE	APPROVED BY	STANDARD DETAIL	A
08/02/2013	J.B.F.	PAVEMENT RESTORATION TYPE V	1.1 SHEET 1 OF 1

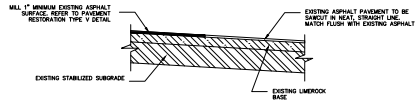
NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.D.
2	6/25/22	60% SUBMISSION	D.L.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.L.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.L.S.
5	7/10/24	BID SET	D.L.S.



VALLEY GUTTER
N.T.S.



CURB & GUTTER
N.T.S.



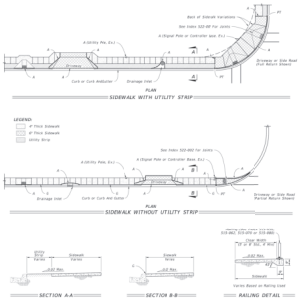
ASPHALT MILLING AND RESURFACING DETAIL
N.T.S.

LOCATION OF PUBLIC WATER SYSTEM MAINS ACCORDANCE WITH F.A.C. RULE 62-555.314

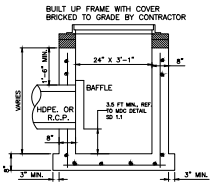
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS FULL LENGTH OF PIPE CENTERED)
Storm Sewer; Stormwater Force Main; Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum.	Alternate: 3 ft. minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate: 3 ft. minimum Water Main
Gravity or Pressure: Sanitary Sewer; Sanitary Sewer Force Main; Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 19 inches is the minimum	Alternate: 6 ft. minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum	-	-

NOTES:
(1) WATER MAIN SHOULD BE ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(3) 3 FT. GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
(4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

ITEM	CROSS REF.	SPEC. REF.
STANDARD DETAIL WASTEWATER & STORM SEWER CONFLICT	GS 1.5	SHEET 1 OF 2

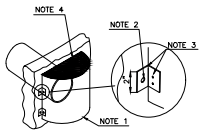


SIDEWALK DETAIL
N.T.S.



NOTES
1) MINIMAL CONC. STRENGTH FOR ALL CATCH BASINS AND MANHOLE STRUCTURES SHALL BE 4000 PSI.
2) CONTRACTOR IS RESPONSIBLE FOR FINAL ELEVATION AND LOCATION ADJUSTMENTS OF CATCH BASINS, GRATES, MANHOLES DUE TO FIELD CONSTRAINTS.
3) REFER TO MDC DETAIL SD 1.1, NOTE 5, ON THIS SHEET FOR WEEP HOLE REQUIREMENTS.

POLLUTION RETARDANT BASIN & BAFFLE DETAIL FOR NEW STORM SEWERS



BAFFLE DETAIL BRACKET DETAIL

NOTES
1) BAFFLE SHALL BE C.M.P. OR C.A.P. SECTION (OUTFALL DIAMETER PLUS 6").
2) 1/2" GALV. WEDGE ANCHORS (ULT. PULLOU 6000, ULT. SHEAR 5900.)
3) WELD OR 2-3/8" THRU BOLTS
4) BOLTED TO WALL WITH TOP CAPPED. (WATER TIGHT)

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

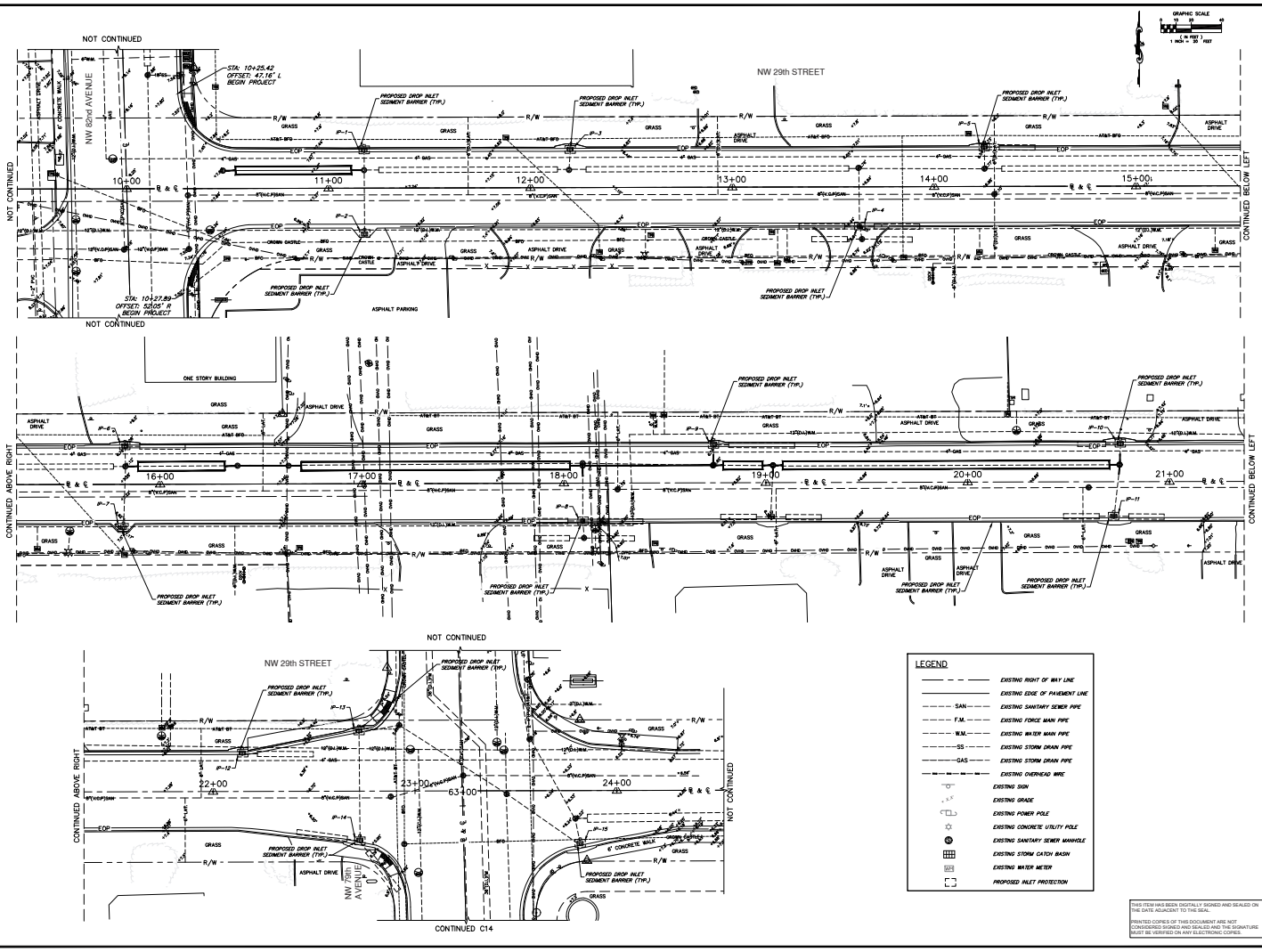
SHEET TITLE
MISCELLANEOUS DETAILS

ENGINEER OF RECORD
WILLIAM JAMES SWIERCZEWSKI
No. 90406
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7/10/2024
Dillon Sadanand Sobo, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT
3GC Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ. NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C12		FILE NO.	

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



LEGEND

	EXISTING RIGHT OF WAY LINE
	EXISTING EDGE OF PAVEMENT LINE
SAN	EXISTING SANITARY SEWER PIPE
F.M.	EXISTING FORCE MAIN PIPE
W.M.	EXISTING WATER MAIN PIPE
SS	EXISTING STORM DRAIN PIPE
GAS	EXISTING STORM DRAIN PIPE
	EXISTING OVERHEAD WIRE
	EXISTING SIGN
	EXISTING GRADE
	EXISTING POWER POLE
	EXISTING CONCRETE UTILITY POLE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM CATCH BASIN
	EXISTING WATER METER
	PROPOSED INLET PROTECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA

CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

STORMWATER POLLUTION PREVENTION PLANS

NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.B.
2	8/25/22	60% SUBMISSION	D.J.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

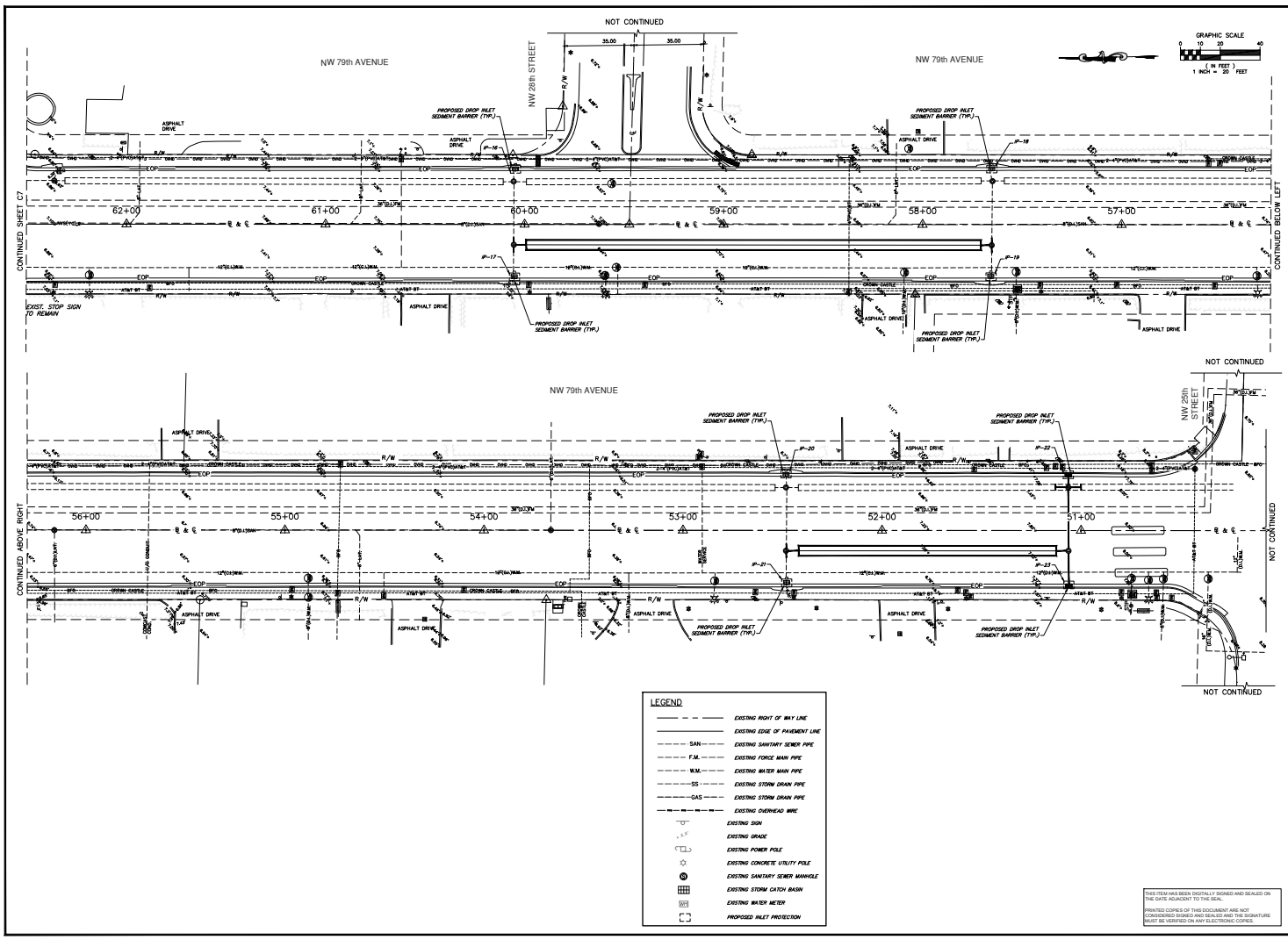
7/10/2024

Dillon Subiranà Soto, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Engineering Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C13		FILE NO.	



LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- SAN — EXISTING SANITARY SEWER PIPE
- F.M. — EXISTING FORCE MAIN PIPE
- W.M. — EXISTING WATER MAIN PIPE
- SS — EXISTING STORM DRAIN PIPE
- GAS — EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- WM — EXISTING WATER METER
- PROPOSED INLET PROTECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA

CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

STORMWATER POLLUTION PREVENTION PLANS

NO.	DATE	REVISIONS	BY:
1	2/22/22	30% SUBMISSION	A.B.
2	8/25/22	60% SUBMISSION	D.J.S.
3	12/22/22	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/10/2024

Dillon Subirana Soto, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.	DRAWN	CHECK	APPR
	Y.Z.	M.F.	D.J.S
F.B.	SCALE	DATE	
	1:20	7/10/2024	
SHEET NO.		FILE NO.	
C14			

A. DEMOLITION NOTES

1. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THE PLAN SET.
2. THE PLANS ARE BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE FOR THIS SITE. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMO/ROW PERMITS.
4. ALL MATERIALS FROM THE SITE THAT ARE DEEMED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE. AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
6. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM THE SITE TO ENSURE THE SAFETY OF THE PUBLIC HAUL ROUTE. TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJACENT ROADWAYS. ANY DEBRIS ON ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
7. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
8. SEE SITE PLAN FOR LIMITS OF RESURFACED ROADWAY.
9. CONTRACTOR TO MAINTAIN DRAINAGE FLOW DURING AND AFTER CONSTRUCTION.
10. SEE EROSION CONTROL PLAN FOR INLET PROTECTION AND EROSION AND SEDIMENTATION CONTROL MEASURES.

CONTRACTOR TO MAINTAIN PEDESTRIAN TRAFFIC FLOW DURING REMOVAL/REINSTALLATION OF SIDEWALKS.

B. BEST MANAGEMENT PRACTICES (BMPS)

1. THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF THE MIAMI---DADE COUNTY LAND DEVELOPMENT REGULATIONS, THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), CHAPTER 17-25, F.A.C., THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), CHAPTER 40D-4, F.A.C. AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) DOCKET NO. EPA 832/R-92-005 (SEPTEMBER 1992). THE PLAN ADDRESSES THE FOLLOWING:

a. PREVENT LOSS OF SOIL DURING CONSTRUCTION BY STORMWATER RUNOFF AND/OR WIND EROSION, INCLUDING PROTECTING TOPSOIL BY STOCKPILING FOR REUSE.
b. SEDIMENTATION PROTECTION OF WATERWAYS.
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 MEASURES SUFFICIENT TO COMPLY WITH THE REQUIREMENTS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) 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.

C. GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THESE EROSION CONTROL DRAWINGS, THE STANDARD DETAILS, THE NPDES PERMIT (TO BE OBTAINED BY CONTRACTOR) AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. 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.
3. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.
4. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP) IN ALL CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

A. FUEL SPILLS AND LEAKS PREVENTION
B. PREVENT/REDUCE VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
C. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
D. PROPER OUTDOOR LOADING/UNLOADING OF MATERIALS
E. PREVENT/REDUCE OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND BY---PRODUCTS
F. SOLID WASTE MANAGEMENT
G. HAZARDOUS WASTE MANAGEMENT
H. CONCRETE WASTE MANAGEMENT
I. SANDBLASTING WASTE MANAGEMENT
J. STRUCTURE CONSTRUCTION AND PAINTING
K. SPILL PREVENTION AND CONTROL
L. CONTAMINATED SOIL MANAGEMENT
M. SANITARY/SEPTIC WASTE MANAGEMENT
N. SOIL EROSION CONTROL
O. STORM WATER TURBIDITY MANAGEMENT

5. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
6. BEST MANAGEMENT PRACTICES (BMP'S) AND CONSTRUCTION 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.
7. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. CONTRACTOR MUST MAINTAIN ALL BUFFERS FROM CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS ON SITE AT ALL TIMES.
8. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
9. 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.
10. CONTRACTOR SHALL PROTECT ALL STORM DRAIN INLETS TO MINIMIZE SOIL EROSION AND POTENTIAL CANAL DISCHARGES. SILT FENCE, HAY BALE OR SIMILAR TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION.
11. 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.
12. SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BMP'S IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.
13. IT SHOULD BE NOTED THAT THE MEASURE IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMP'S. THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES NECESSARY TO CONFORM TO CURRENT CITY, FDEP AND SFWMD CODES AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION ACTIVITIES.

D. STORM WATER EROSION CONTROL PRACTICES

1. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
2. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
3. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (COMPOST SOCK DEVICES, ETC.) TO PREVENT EROSION.
4. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.
5. 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:

a. GENERAL: EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
b. 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.
c. WHEN NEEDED A TEMPORARY SEDIMENT TRAP SHOLD BE CONSTRUCTED TO DETAIN SEDIMENT--LADEN RUNOFF FROM DISTURBED AREAS.
6. 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.
7. 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.
8. SOD SHALL BE PLACED ON ALL AREAS WHICH ARE DISTURBED DURING CONSTRUCTION AND AROUND INLETS. SOD SHALL BE PLACED BEYOND SILT BARRIERS AND REMOVED.
9. WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED.
10. FILTER FABRIC SHOULD BE USED FOR STORM DRAIN INLET PROTECTION BEFORE FINAL STABILIZATION.
11. FLOATING TURBIDITY BARRIERS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND INSTALLATION OF DRAINAGE OUTFALL PIPE AND ENDWALL.
12. EXISTING DRAINAGE FLOW PATTERNS AND POSITIVE DRAINAGE TO EXISTING OUTFALLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

ALL NEW INLETS INSTALLED UNDER THIS PROJECT SHALL RECEIVE INLET PROTECTION

E. WIND EROSION CONTROL PRACTICES

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

A. 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.
B. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HASPERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED (SEE PERMANENT STABILIZATION 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 SHREDDED AND PERIODICALLY WATERED SUFFICIENTLY TO STABILIZE THE TEMPORARY GROUNDCOVER (SEE TEMPORARY STABILIZATION PRACTICES FOR DETAILS).
C. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WORKING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, ADDITIONAL WIND EROSION CONTROL PRACTICES SHALL BE EMPLOYED. THESE METHODS SHALL INCLUDE BUT NOT BE LIMITED TO: SOIL BINDERS, SILT FENCE, GEOTEXTILE FILTER FIBER SHOULD BE HANGING AGAINST THE EXISTING CHAIN LINK FENCE AND GATE.
2. 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.

F. STABILIZATION PRACTICES

1. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO 62--621.300(4)(A).
2. DISTURBED PORTIONS OF SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA.
3. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY PERMANENTLY CEASE SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

G. STRUCTURAL PRACTICES

1. SHALL BE IN ACCORDANCE WITH DEP DOCUMENT NO 62--621.300(4)(A)

H. WASTE DISPOSAL

1. 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 SHALL BE BURIED OR BURNED ON SITE. ALL PERSONS ON THE SITE 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.
2. 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 PROCEDURES.
3. 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 SITE.
4. 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.

I. OFFSITE TRACKING

1. 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 EXITING THE PROJECT SHALL BE CLEANED OF ANY EXCESS MUD.
2. GENERAL CONSTRUCTION SITE, DEMOLITION AND TEMPORARY PARKING AND STORAGE AREA (WHICH SHALL ALSO BE USED FOR 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 ON HAND FOR USE, ABSORBENT FILTER FACE TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.
3. ALL WASH WATER FROM CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC. SHALL BE DETAINED ON SITE AND SHALL BE PROPERLY TREATED OR DISPOSED.
4. 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.
5. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM WATER MUST BE REMOVED IMMEDIATELY.

J. MAINTENANCE

1. 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 TO FULFILL THE PURPOSE FOR WHICH THEY WERE INTENDED OR UNTIL THE PROJECT IS FINALLY STABILIZED. ALL MEASURES SHALL BE INSPECTED 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 AS NECESSARY 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 COMPOST ROCK FILTRATION DEVICE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF DEVICE. COMPOST SOCK SHALL BE REPAIRED TO ITS ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE COMPOST SOCK WHEN IT REACHES ONE---THIRD THE HEIGHT OF THE COMPOST SOCK.
D. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC ROADS. 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. IF APPLICABLE, 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 (7) DAYS FOLLOWING THE INSPECTION. DRAINAGE DITCHES SHALL BE INSPECTED MONTHLY AND AFTER EACH RAINFALL EVENT.

H. 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.

I. ALL REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.
J. THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES AND MAINTAIN RECORDS OF INSPECTIONS AND REPORTS.
K. IF APPLICABLE, 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.

2. THE EROSION CONTROL FEATURES INSTALLED BY THE CONTRACTOR SHALL BE ACCEPTABLY MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.

K. 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:

1. GOOD HOUSEKEEPING

G. SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
H. STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
I. ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
J. ALL CONSTRUCTION MATERIALS SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
K. PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER. 1. ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
L. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

2. HAZARDOUS PRODUCTS

A. 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.
B. PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.
3. PRODUCT SPECIFIC PRACTICES

A. 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.
B. 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 UNUSED PORTION OF FERTILIZER USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
C. PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
D. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
E. CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

L. SPILL CLEAN UP

1. IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED ABOVE, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

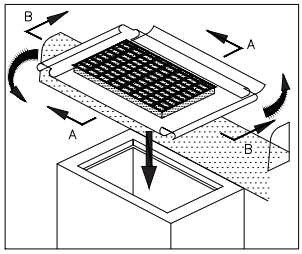
H. SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
I. THE FOLLOWING CLEAN---UP EQUIPMENT MUST BE KEPT ON---SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
J. 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.
K. ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
L. WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
M. TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
N. 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.
O. THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

M. SEQUENCE OF CONSTRUCTION

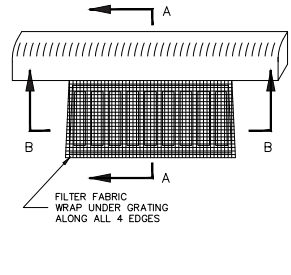
1. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN AREA, WASHOUT, WASH---CONCRETE WASHOUT, FUEL AND TRAILER, STORAGE CONTAINERS, POST TO MARKER LOCATIONS, ETC. THE CONTRACTOR SHALL REVIEW THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

L. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, AND INSTALL INLET PROTECTION, TURBIDITY BARRIERS, SILT FENCE, AS APPLICABLE.
M. DEMOLISH EXISTING DRAINAGE STRUCTURES AND REMOVE STORM PIPING.
N. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES TO ENSURE CONTINUOUS DRAINAGE (DIKES, CHECK DAMS, OUTLET TRAPS, ETC.)
O. PREPARE THE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
P. INSTALL NEW DRAINAGE STRUCTURES (INLETS & MANHOLES) AND STORM PIPING.
Q. BACKFILL TRENCHES PER MIAMI---DADE COUNTY SPECIFICATIONS.
R. RECONSTRUCT CONCRETE CURBING, SIDEWALKS, AND DRIVEWAYS AS APPLICABLE.
S. PERFORM RESURFACING OF ROADWAY REPAVING EXTENTS PER PLANS.
T. TEMPORARILY SOD/SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY GENERIC PERMIT.
2. IN THE EVENT OF BMP ISSUES, HALT ALL ACTIVITES AND CONTACT THE CIVIL ENGINEER CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE---CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

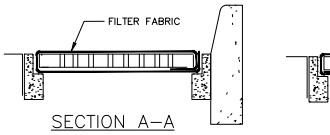
CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION.



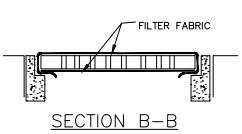
TOP OF CURB



PROPOSED DROP INLET
SEDIMENT BARRIER
N.T.S.



SECTION A—A



SECTION B—B

NOTE:

1. CONTRACTOR SHALL PERFORM DAILY INSPECTIONS TO ENSURE GEO--TEXTILE FABRIC IS NOT RIPPED OR BROKEN. CONTRACTOR SHALL INSPECT AFTER RAIN STORM EVENTS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

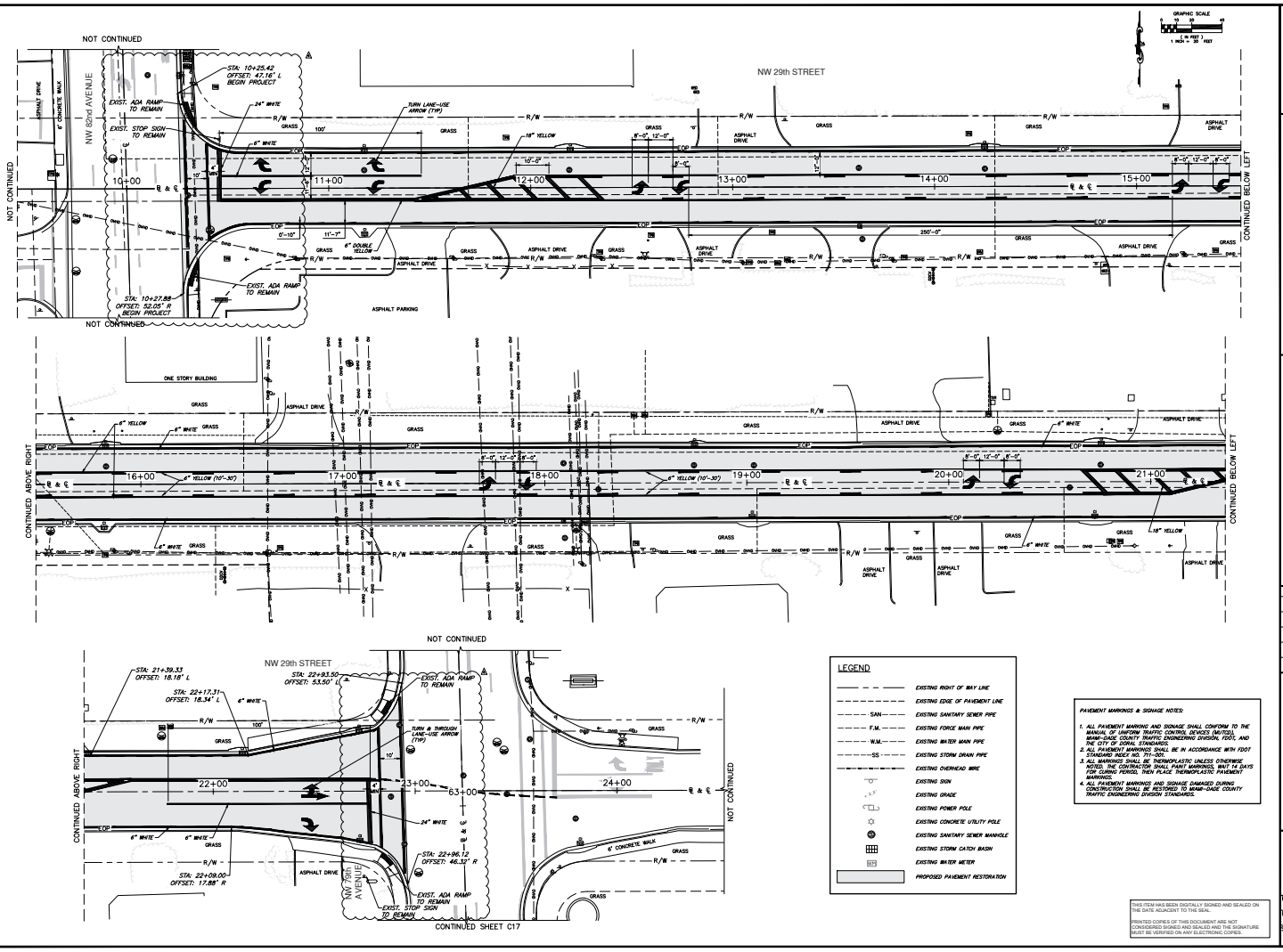
DORAL
FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

STORMWATER POLLUTION PREVENTION DETAILS

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBM



LEGEND

- EXISTING RIGHT OF WAY LINE
- EXISTING EDGE OF PAVEMENT LINE
- SAN — EXISTING SANITARY SEWER PIPE
- F.M. — EXISTING FORCE MAIN PIPE
- W.M. — EXISTING WATER MAIN PIPE
- SS — EXISTING STORM DRAIN PIPE
- EXISTING OVERHEAD WIRE
- EXISTING SIGN
- EXISTING GRADE
- EXISTING POWER POLE
- EXISTING CONCRETE UTILITY POLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM CATCH BASIN
- EXISTING WATER METER
- PROPOSED PAVEMENT RESTORATION

PAVEMENT MARKINGS & SIGNAGE NOTES:

1. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION, FDOT, AND THE CITY OF DORAL STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 711-001.
3. ALL MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PAINT MARKINGS, WAIT 14 DAYS FOR CURING PERIOD, THEN PLACE THERMOPLASTIC PAVEMENT MARKINGS.
4. ALL PAVEMENT MARKINGS AND SIGNAGE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

PAVEMENT MARKING & SIGNAGE PLANS

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	4/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBRAMANI SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

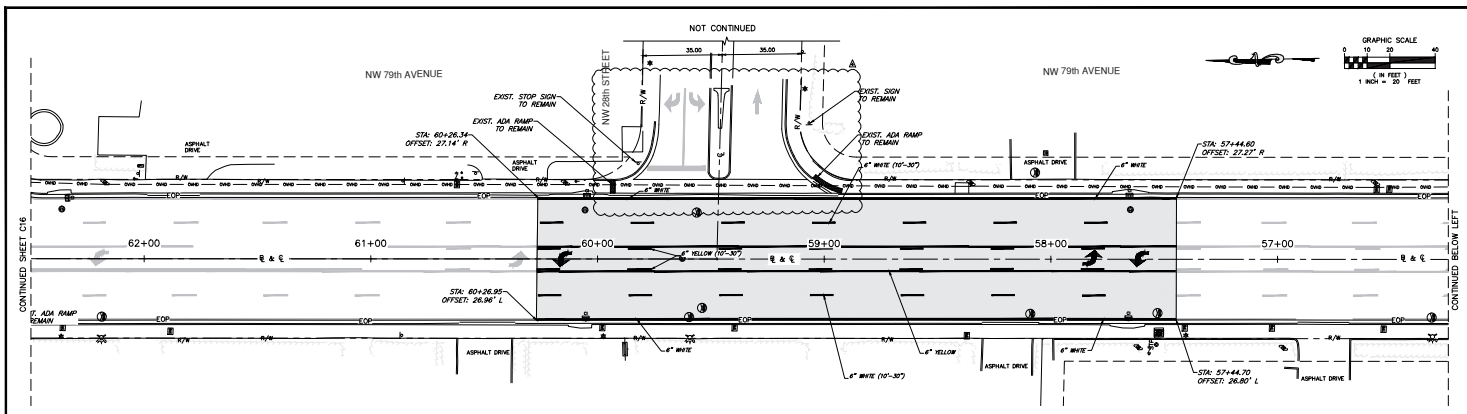
7/10/2024

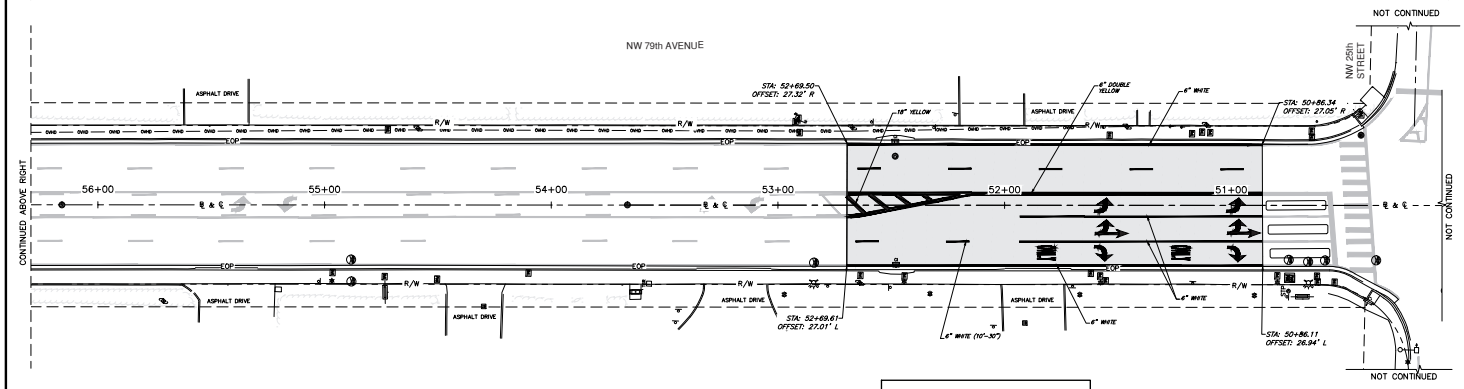
Dillon Subramani Soto, P.E.
Civil Engineer
State of Florida – License No. 90406
2222 Ponce De Leon Blvd., suite 300.
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300.
CORAL GABLES, FL 33134
305-602-4602

PROJ.NO.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE: 7/10/2024	
SHEET NO. C16		FILE NO.	





LEGEND

	EXISTING RIGHT OF WAY LINE
	EXISTING EDGE OF PAVEMENT LINE
SAN	EXISTING SANITARY SEWER PIPE
F.M.	EXISTING FORCE MAIN PIPE
W.M.	EXISTING WATER MAIN PIPE
SS	EXISTING STORM DRAIN PIPE
	EXISTING OVERHEAD WIRE
	EXISTING SIGN
	EXISTING GRADE
	EXISTING POWER POLE
	EXISTING CONCRETE UTILITY POLE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM CATCH BASIN
	EXISTING WATER METER
	PROPOSED PAVEMENT RESTORATION

PAVEMENT MARKINGS & SIGNAGE NOTES:

1. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION, FDOT, AND THE CITY OF DORAL STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 711-001.
3. ALL MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PAINT MARKINGS, WAIT 14 DAYS FOR CURING PERIOD, THEN PLACE THERMOPLASTIC PAVEMENT MARKINGS.
4. ALL PAVEMENT MARKINGS AND SIGNAGE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO MIAMI-DADE COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DORAL FLORIDA
CITY OF DORAL

STORMWATER IMPROVEMENTS TO SUB-BASINS D-3-1 AT NW 29TH STREET AND NW 79ST AVENUE

SHEET TITLE

PAVEMENT MARKING & SIGNAGE PLANS

NO.	DATE	REVISIONS	BY:
1	2/22/23	30% SUBMISSION	A.B.
2	8/25/23	60% SUBMISSION	D.J.S.
3	12/22/23	90% SUBMISSION (PERMIT SET)	D.J.S.
4	6/11/24	DTPW TRAFFIC COMMENTS	D.J.S.
5	7/10/24	BID SET	D.J.S.

ENGINEER OF RECORD

DILLON SUBIRANA SOTO, P.E. No. 90406 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/10/2024

Dillon Subirana Soto, P.E.
Civil Engineer
State of Florida - License No. 90406
2222 Ponce De Leon Blvd., suite 300,
Coral Gables, FL 33134
(305) 602-4602

CONSULTANT

360 Design Group, L.L.C.
2222 PONCE DE LEON BLVD, SUITE 300,
CORAL GABLES, FL 33134
305-602-4602

PROJ.D.L.	DRAWN Y.Z.	CHECK M.F.	APPR. D.J.S
F.B.	SCALE 1:20	DATE 7/10/2024	
SHEET NO. C17		FILE NO.	