



**INVITATION TO BID (ITB)
BID # FY 2018-2019-006**

**44TH YEAR COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT**

EXHIBIT C – PROJECT DRAWINGS

**PREPARED BY:
CITY OF HALLANDALE BEACH
DEPARTMENT OF PUBLIC WORKS
AND
PROCUREMENT DEPARTMENT**

HALLANDALE BEACH STORMWATER 44 YEAR CDBG

HALLANDALE BEACH, FLORIDA

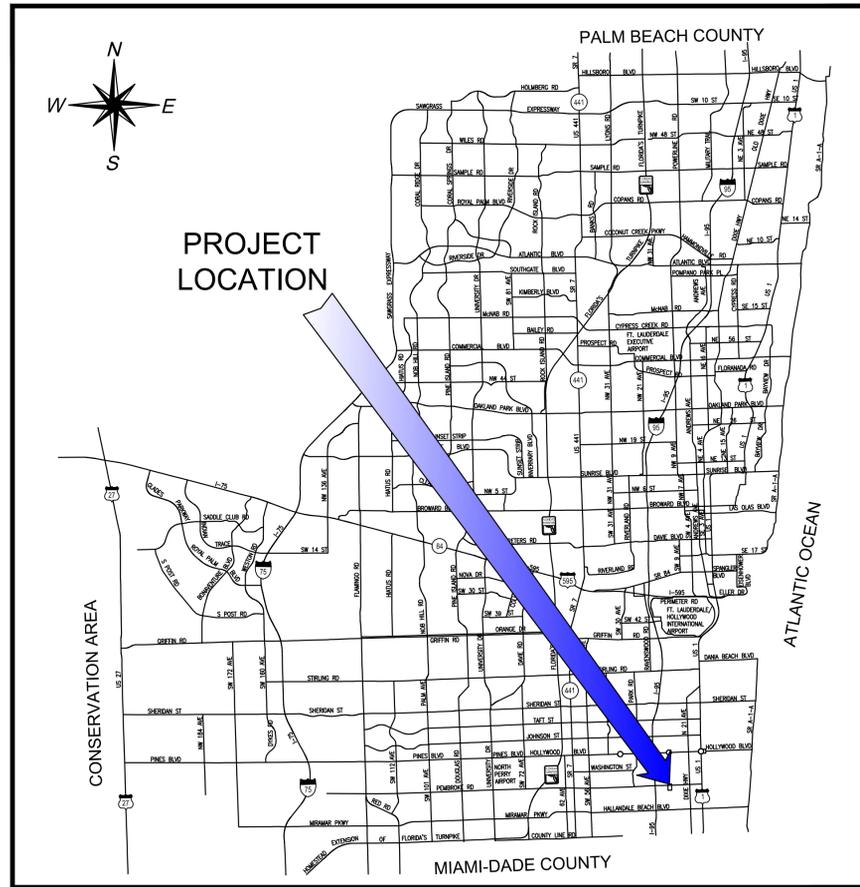


Hallandale Beach
PROGRESS. INNOVATION. OPPORTUNITY.

CITY OFFICIALS

MAYOR: JOY ADAMS
VICE MAYOR: SABRINA JAVELLANA
COMMISSIONERS: MIKE BUTLER, ANABELLE LIMA-TAUB, MICHELE LAZAROW
INTERIM CITY MANAGER: GREG CHAVARRIA

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THE PROJECT IS LOCATED IN PORTION OF SECTION 21, TOWNSHIP 51 SOUTH, RANGE 42 EAST. LYING WITHIN THE CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA.

LOCATION MAP
Scale: 1" = 300'

LEGAL DESCRIPTION:

A PORTION OF SECTION 21, TOWNSHIP 51 SOUTH, RANGE 42 EAST. LYING WITHIN THE CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA.

NOTES:

- RESPONSIBILITY FOR THE USE OF THESE PLANS FOR ANY PURPOSE PRIOR TO SECURING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THIS PROJECT WILL FALL SOLELY UPON THE USER.
- AN ELECTRONIC CAD FILE WILL BE PROVIDED FOR SURVEY LAYOUT.

BENCHMARK:

THE ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND REFERENCED TO THE NATIONAL GEODETIC SURVEY (NGS) DESIGNATION - MORRIS AZ MK, ELEVATION= 12.30' (NAVD88); BEING A "NGS BRASS DISK" IN THE CONCRETE SIDEWALK 62' WEST OF N.W. 9TH AVENUE CENTERLINE, 23' SOUTHWEST OF AND LEVEL WITH THE CENTERLINE OF FOSTER RD.

MOHAMMED SHARIFUZZAMAN, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 67640
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MOHAMMED SHARIFUZZAMAN, P.E. ON 03-22-2019.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



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BID SET
ELEVATIONS ARE NAVD 88



File Name: P:\Projects\2018\182589 Hallandale Beach CDBG 44\CADD Files\Drawings\182589-C-COVR.dwg (Plotted by: Katharine Kupsky on Friday, March 22, 2019 1:21:12 PM)

PERMITTING AGENCIES	DATE SUBMITTED	CGA INITIALS	DATE APPROVED	PERMIT NUMBER
BROWARD COUNTY SURFACE WATER MANAGEMENT GENERAL LICENSE	01-25-2019	MS	02-25-2019	GL2019-011
BROWARD COUNTY TRAFFIC ENGINEERING DIVISION	02-05-2019	MS	03-14-2019	BCTED#190205060

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

CURRENT REV No.: ---- - ----	MOHAMMED SHARIFUZZAMAN, P.E. STATE OF FLORIDA PROFESSIONAL ENGINEER LICENSE No. 67640	SHEET: G1
	DATE: 03/22/19	

ABBREVIATION LEGEND

ARV	AIR RELEASE VALVE
BE	BURIED ELECTRIC
BFP	BACKFLOW PREVENTOR
BFV	BUTTERFLY VALVE
BM	BENCHMARK
BOP	BOTTOM OF PIPE
BSP	BACTERIOLOGICAL SAMPLING POINT
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
DE	DRAINAGE EASEMENT
DIP	DUCTILE IRON PIPE
E	EAST
EL	ELEVATION
EW	EDGE OF WATER
EXIST	EXISTING
EXFILT	EXFILTRATION
FF EL	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FM	FORCE MAIN
GALV	GALVANIZED
GV	GATE VALVE
HORZ	HORIZONTAL
INV	INVERT
JB	JUNCTION BOX
LF	LINEAR FEET
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH
NTS	NOT TO SCALE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
OE	OVERHEAD ELECTRIC
PCAP	PERFORATED CORRUGATED ALUMINUM PIPE
PRB	POLLUTION RETARDANT BAFFLE
PROP	PROPOSED
PSI	POUNDS PER SQUARE INCH
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCW	RECLAIMED WATER
RED	REDUCER
R/W	RIGHT-OF-WAY
S	SOUTH
SAN	SANITARY
SB	SOIL BORING
STA	STATION
TOB	TOP OF BANK
TOP	TOP OF PIPE
TYP	TYPICAL
UE	UTILITY EASEMENT
VERT	VERTICAL
W	WEST
WM	WATER MAIN

LINE TYPE LEGEND

---	LOT LINE
----	SECTION LINE
-----	R/W OR PROPERTY LINE
.....	CENTERLINE
//////	NVAL
- - - - -	EXIST. CHAIN LINK FENCE
-----	PROPOSED CHAIN LINK FENCE
-----	EXISTING WOOD FENCE
-----	EXISTING PICKET FENCE
=====	TO BE DEMOLISHED
-----	EXISTING SANITARY SEWER
-----	EXISTING WATER MAIN
-----	EXISTING STORM SEWER
-----	EXISTING FORCE MAIN
-----	EXISTING FIRE MAIN
-----	EXISTING IRRIGATION
-----	EXISTING OXYGEN
-----	EXISTING UNDERGROUND POWER
-----	EXISTING NATURAL GAS
-----	EXISTING CONDENSATION
-----	EXISTING BURIED FIBER OPTIC
-----	EXISTING UNDERGROUND COMCAST
-----	EXISTING CHILLER
-----	EXISTING AT&T UNDERGROUND
-----	EXISTING FUEL LINE
-----	EXISTING OVERHEAD ELECTRIC
-----	EXISTING UNDERGROUND ELECTRIC
-----	EXISTING UNKNOWN UTILITY
-----	EXISTING BROWARD COMMUNICATION
-----	EXISTING BROWARD FIBER OPTICS

PROPOSED SYMBOL LEGEND

	AIR RELEASE VALVE
	B.S.P. No. BACTERIOLOGICAL SAMPLE POINT
	WATER METER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	SINGLE WATER SERVICE
	DOUBLE WATER SERVICE
	BACKFLOW PREVENTER
	DOUBLE DETECTOR CHECK VALVE
	BLOWOFF
	REDUCER
	GATE VALVE
	90°, 45°, 22.5° & 11.25° BENDS
	TEE
	CROSS
	PLUG
	BLOWOFF
	VERTICAL BENDS
	SANITARY FLOW DIRECTION
	CLEAN OUT
	SINGLE SANITARY LATERAL
	DOUBLE SANITARY LATERAL
	CONFLICT ID
	DRAINAGE FLOW
	SPOT GRADE
	SIGN
	CATCH BASIN
	MANHOLE
	CLEANOUT
	SLOTTED DRAIN
	STORM YARD DRAIN
	P5 STORM INLET
	P6 STORM INLET
	EXFILTRATION TRENCH
	HEADWALL
	MITERED END - RCP
	MITERED END - HDPE
	HAY BALES
	ROCK BAGS W/ HAY BALES
	SILT BARRIER FENCE
	TURBIDITY BARRIER

EXISTING SYMBOL LEGEND

	EXISTING SPOT ELEVATION (FT)
	GUY ANCHOR
	FPL MANHOLE
	CONC. LIGHT POLE
	CONC. UTILITY POLE
	CONC. SIGNAL POLE
	COMMUNICATION MH
	COMMUNICATION RISER
	CABLE TV MANHOLE
	CABLE TV RISER
	ELEC. HANDHOLE
	FPL TRANSFORMER
	GAS METER
	LIGHT POLE
	TRAFFIC CONTROL BOX
	WOOD POWER POLE
	GAS VALVE
	SEWER VALVE
	WATER VALVE
	GATE VALVE
	CLEANOUT
	FIRE HYDRANT
	REDUCER
	IRRIGATION VALVE
	MANHOLE
	FIRE DEPARTMENT
	CATCH BASIN
	GROUND/LANDSCAPING LIGHTING
	SIGN
	WATER METER

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**HALLANDALE BEACH
 STORMWATER 44 YEAR CDBG**
 HALLANDALE BEACH, FLORIDA

LEGEND AND ABBREVIATIONS

BID SET
 ELEVATIONS ARE NAVD 88

MOHAMMED SHARIFUZZAMAN, P.E.
 STATE OF FLORIDA PROFESSIONAL ENGINEER
 LICENSE No. 67640

DATE: 03/22/19

SCALE
 N/A
 PROJECT No.
 182589

SHEET
G2



GENERAL NOTES:

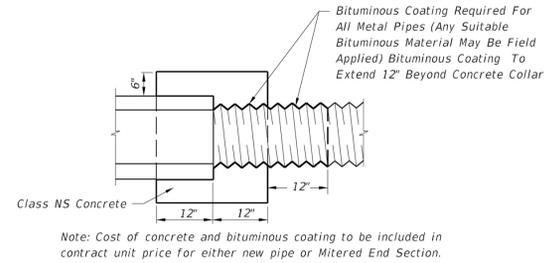
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD, THE CITY OF HALLANDALE BEACH, AND BROWARD COUNTY.
- ALL WORK TO BE PERFORMED TO COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE AGENCIES HAVING JURISDICTION ON THIS PROJECT.
- IT IS THE INTENT OF THESE PLANS TO COMPLY WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING AND CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE CONTRACTOR SHALL MAINTAIN ALL WATER SUPPLY AND SANITARY SEWER SERVICE THROUGHOUT CONSTRUCTION OF THIS PROJECT.
- PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER PRIOR TO THE PRE-CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS/HER COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS/HER COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENHANCED BY THE LEGISLATURE OF THE STATE OF FLORIDA IN EFFECT SINCE OCTOBER 1, 1990.
- THE CONTRACTOR TO ADHERE TO ANY SPECIAL SHORING REQUIREMENTS OF THE STATE OR OTHER POLITICAL SUBDIVISION. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE SAFETY OF THE EXCAVATION OR DESIGN AND CONSTRUCTION OF ANY SHORING.
- AS-BUILT PLANS/DRAWINGS: THE CONTRACTOR SHALL PROVIDE THREE (3) SETS (24"x36" SIZE) OF SIGNED AND SEALED AS-BUILT PLANS BY A REGISTERED PROFESSIONAL SURVEYOR, ONE COMPACT DISC COPY OF AS-BUILT PLANS IN AUTOCAD FORMAT, AND PDF FORMAT. THE AS-BUILT PLANS/DRAWINGS SHALL BEAR THE CERTIFICATION, ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE SURVEYOR AND SHALL BE SUBMITTED AFTER THE COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL APPROVAL.
- THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION THAT WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION.
- ALL WORK, MATERIALS, CONSTRUCTION METHODS, RESTORATION, TESTING AND DISINFECTION SHALL CONFORM TO THE REQUIREMENTS OF CITY OF HALLANDALE BEACH PUBLIC WORKS DEPARTMENT, BROWARD COUNTY, AND DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS.
- TELEPHONE, POWER, CABLE, WATER, SEWER, AND GAS LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE TO EXPOSE ALL CROSSING WITH AT&T, CABLE/CATV, GAS, AND FLORIDA POWER AND LIGHT ELECTRIC CONDUITS PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF THESE FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE PRESENT DURING CONSTRUCTION. A PROFILE OF THE PRIVATE UTILITY FACILITIES ARE NOT PROVIDED IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE APPROXIMATE LOCATION OF THESE FACILITIES.
- SHOP DRAWINGS ARE REQUIRED ON ALL CONSTRUCTION ITEMS.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE PROJECT MANUAL, LOCAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS, THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISION, AND COPY OF ANY REQUIRED CONSTRUCTION PERMITS.
- CONTRACTOR TO UTILIZE "FOR CONSTRUCTION" PLANS ONLY FOR CONSTRUCTION.
- IF HISTORICAL OR ARCHAEOLOGICAL ARTIFACTS ARE DISCOVERED ONSITE, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CITY OF HALLANDALE BEACH AND BROWARD COUNTY.
- CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, AND UTILITIES NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE OWNER.
- ALL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS SHALL BE PROTECTED AND UNDISTURBED. IN THE EVENT THAT A CONTROL POINT IS DISTURBED OR DESTROYED THE POINT SHALL BE RE-ESTABLISHED BY A FLORIDA REGISTERED LAND SURVEYOR.
- ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PREPARE A COMPLETE VIDEO RECORD OF THE PROJECT SITE BEFORE BEGINNING ANY WORK. THE VIDEO RECORD SHALL INCLUDE ALL ROADWAY, DRAINAGE AND UTILITIES POINTS OF CONNECTION AND SHALL EXTEND A MINIMUM OF 100 FEET BEYOND THE WORK LIMITS TO DOCUMENT THE EXISTING CONDITIONS. THE CONTRACTOR SHALL ALSO VIDEO DOCUMENT ALL HAUL ROUTES NEEDED FOR THE OFFSITE MOVEMENT OF EARTHWORK. COPIES OF THE VIDEO RECORD SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO SUBMITTAL OF THE FIRST PAY REQUEST. THE COST FOR ALL ITEMS RELATED TO VIDEO RECORD SHALL BE INCLUDED UNDER MOBILIZATION.
- THE ENGINEER IS NOT RESPONSIBLE FOR COORDINATING THE WORK OF OTHER UTILITIES, SUB-CONSULTANTS OR TRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE COORDINATION FOR, BUT NOT LIMITED TO, THE LOCATION OF WATER, SEWER, AND DRAINAGE UTILITIES, AS WELL AS THE SERVICES, THE LOCATION OF DRIVEWAYS, RAMPS, LANDSCAPING, OTHER INFRASTRUCTURE IMPROVEMENTS AND OTHER SURFACE FEATURES.
- ALL DISPOSAL OF EXCESS AND UNSUITABLE MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.
- PRIOR TO TRENCHING, DIGGING OR DEMOLITION IT IS REQUIRED THAT THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES, IRRIGATION LINES ETC. BE VERIFIED. DAMAGE TO EXISTING INSTALLATION SHALL BE PROPERLY REPAIRED AT NO ADDITIONAL COST TO THE OWNER. WHERE REQUIRED, HAND EXCAVATION SHALL BE PROVIDED. THE RELOCATION AND REMOVAL OF ANY UTILITY AND IRRIGATION LINE REQUIRED TO PERFORM THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AT NO ADDITIONAL COST TO THE OWNER.
- UNLESS OTHERWISE NOTED, FDOT DESIGN STANDARDS (2017-18) SHALL BE UTILIZED. UNLESS OTHERWISE NOTED, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY, 2018) SHALL BE UTILIZED.
- THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN (MOT). THE MAINTENANCE OF TRAFFIC PLAN SHALL CONFORM TO THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) ROADWAY DESIGN STANDARDS TRAFFIC CONTROL THROUGH WORK ZONES (INDEX # 600 THRU 670, AS APPLICABLE). ALL WORK SHALL BE EXECUTED UNDER THE ESTABLISHED PLAN AND FDOT APPROVED PROCEDURES.
- THE MOT PLANS, PROVIDED BY THE CONTRACTOR, SHALL INCLUDE PROVISIONS FOR PEDESTRIAN AND/OR SCHOOL STUDENTS TRAFFIC AS WELL AS VEHICULAR TRAFFIC. THE MINIMUM REQUIREMENTS BY BROWARD COUNTY TRAFFIC ENGINEERING DIVISION ARE SHOWN ON SHEET PMS3.
- ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ENSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS SHALL BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE MUNICIPALITY.
- THE CONTRACTOR SHALL COMPLY WITH THE WATER QUALITY STANDARDS OF THE STATE OF FLORIDA. ADEQUATE SILT CONTAINMENT PROCEDURES AND/OR EQUIPMENT SHALL BE USED TO CONTROL TURBIDITY AT ALL TIMES. THERE SHALL BE NO DIRECT DISCHARGE OF WATER TO ANY OFFSITE DITCH, WATER BODY OR PRESERVATION AREA.
- THE CONTRACTOR SHALL OBSERVE THE SPECIAL, LIMITING, GENERAL AND SPECIFIC CONDITIONS OF ALL PERMITS APPLICABLE TO THIS WORK (COPIES OF WHICH WILL BE PROVIDED BY THE OWNER).

INSPECTIONS:

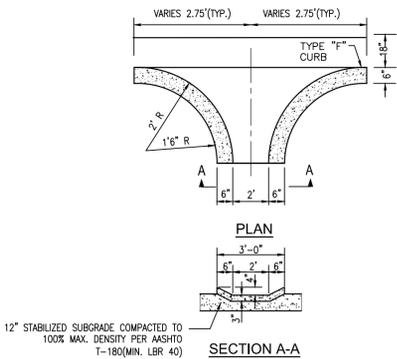
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCY HAVING JURISDICTION, TO SCHEDULE INSPECTIONS AND TESTS A MINIMUM OF 24 HOURS IN ADVANCE FOR THE INSPECTION OF THE FOLLOWING GENERAL ITEMS, WHERE APPLICABLE:
 - CLEARING, EXCAVATION, AND EMBANKMENT
 - STORM DRAINAGE SYSTEM
 - SUBGRADE
 - LIMEROCK BASE
 - ASPHALT PAVING, SIDEWALK
 - PAVEMENT MARKING AND SIGNING
 - FINAL

DEWATERING NOTES:

- IN ACCORDANCE WITH SFWMD CRITERIA CONTAINED IN 406-2.061 F.A.C., A DEWATERING PERMIT IS NOT REQUIRED PROVIDED THE FOLLOWING PROVISIONS ARE MET:
 - MAXIMUM DAILY PUMPAGE IS LESS THAN 5 MILLION GALLONS (MG) AND A MAXIMUM TOTAL PROJECT PUMPAGE OF LESS THAN 100 MG OVER A ONE YEAR PERIOD;
 - ALL DISCHARGE SHALL REMAIN ON THE PROJECT SITE.
 - NO DEWATERING SHALL OCCUR TO A DEPTH BELOW ELEVATION 0.0 FEET NGVD WITHIN 1,000 FEET OF SALINE WATER, EXCEPT WHEN DEWATERING WATER WITH A CHLORIDE CONCENTRATION OF GREATER THAN 1,000 MILLIGRAMS PER LITER;
 - NO DEWATERING SHALL OCCUR WITHIN 100 FEET OF A WASTEWATER TREATMENT PLANT RAPID-RATE LAND APPLICATION SYSTEM PERMITTED UNDER PART IV OF CHAPTER 62-610, F.A.C.
 - NO DEWATERING SHALL OCCUR WITHIN 1,000 FEET OF A KNOWN LANDFILL OR CONTAMINATION.
 - NO DEWATERING SHALL OCCUR WITHIN 1,000 FEET OF A FRESHWATER WETLAND UNLESS DEWATERING ACTIVITIES ARE COMPLETED WITHIN 60 DAYS.
 - ALL DEWATERING OPERATIONS ARE SUBJECT TO THE PERMIT CONDITIONS IN SECTION 5.0 OF THE SFWMD APPLICANT'S HANDBOOK FOR WATER USE PERMIT APPLICATIONS (07-16-2014), INCLUDING RESPONSIBILITY FOR MITIGATING ANY HARM THAT MAY OCCUR AS A RESULT OF THE DEWATERING TO EXISTING LEGAL USES, OFF-SITE LAND USES, OR NATURAL RESOURCES.
- THE CONTRACTOR SHALL APPLY FOR A DEWATERING PERMIT THROUGH THE SFWMD IF ANY OF THE ABOVE CONDITIONS CANNOT BE MET.

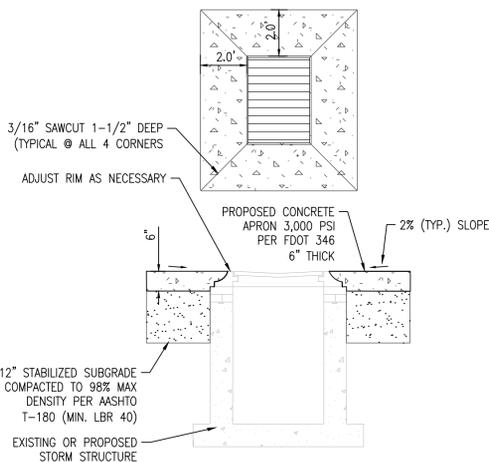


CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE

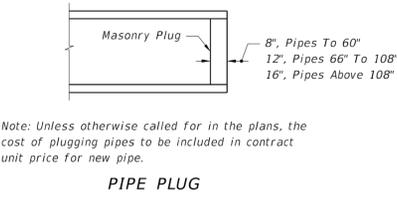


NOTE:
CONTRACTOR TO EXTEND FLUME TO CONCRETE APRON

1 FLUME DETAIL
SCALE: N.T.S.



2 CATCH BASIN CONCRETE APRON
SCALE: N.T.S.



Note: Unless otherwise called for in the plans, the cost of plugging pipes to be included in contract unit price for new pipe.

3 MISCELLANEOUS DRAINAGE DETAILS
FDOT INDEX # 280
SCALE: N.T.S.

HP STORM DUAL WALL FABRICATED END CAPS
12" - 60" (PLAIN END)

PART #	PIPE SIZE	A
1201ANP	12 in (300 mm)	11.8 in (299 mm)
1501ANP	15 in (375 mm)	13.1 in (333 mm)
1801ANP	18 in (450 mm)	13.2 in (336 mm)
2401ANP	24 in (600 mm)	12.7 in (323 mm)
3001ANP	30 in (750 mm)	11.9 in (303 mm)
3601ANP	36 in (900 mm)	15.7 in (400 mm)
4201ANP	42 in (1050 mm)	15.4 in (391 mm)
4801ANP	48 in (12000 mm)	15.7 in (399 mm)
6001ANP	60 in (1500 mm)	18.0 in (457 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

ADVANCED DRAINAGE SYSTEMS, INC.

DRAWING # HP 13300
DRAWN BY: T.J.R. 8/24/2010
APPROVED BY: T.J.R.
REVISIONS: T.J.R. 5/13/2014

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HALLANDALE BEACH
STORMWATER 44 YEAR CDBE
HALLANDALE BEACH, FLORIDA

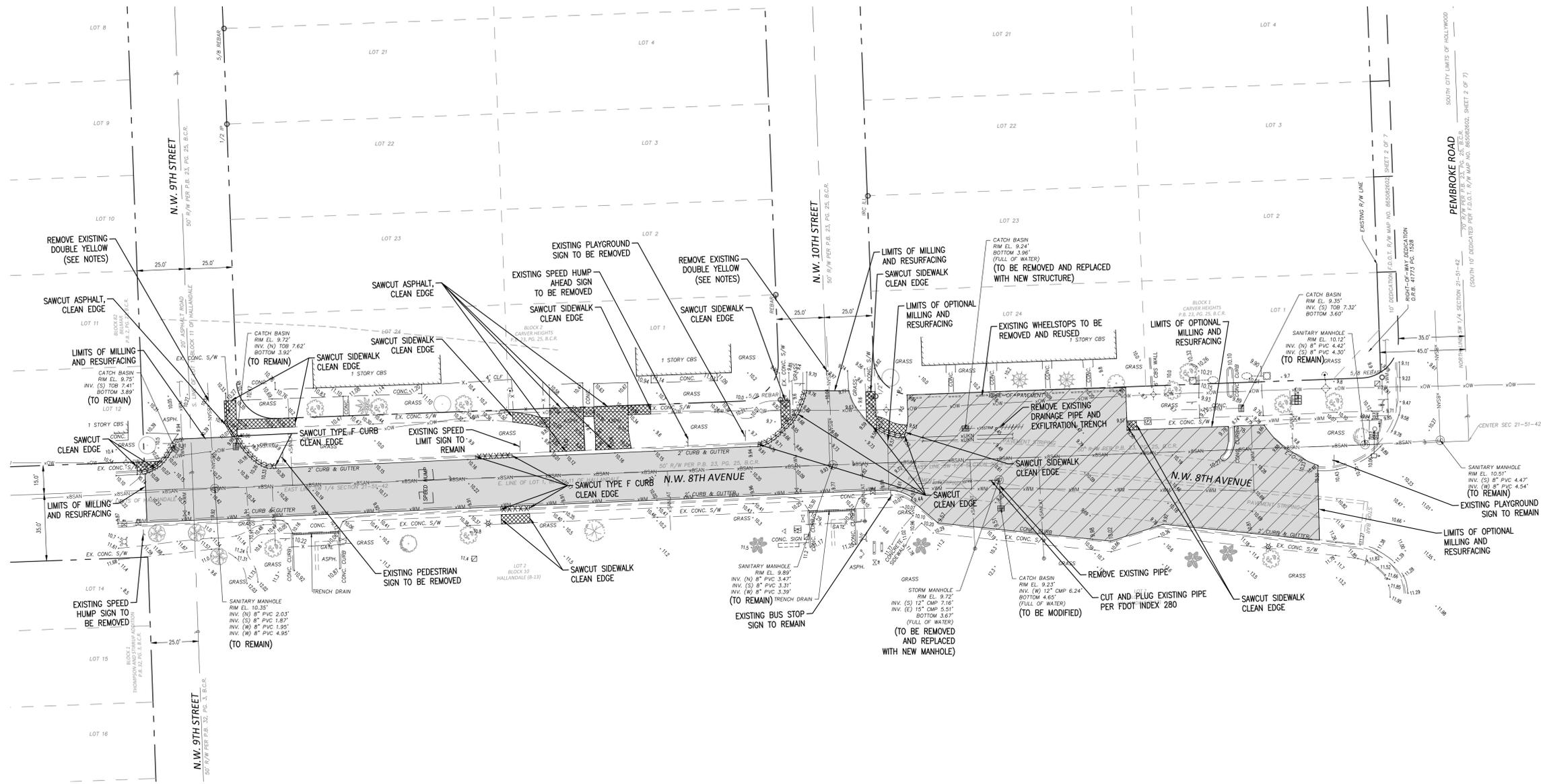
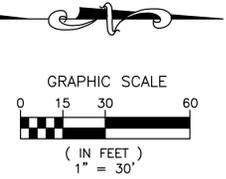
GENERAL NOTES AND DETAILS

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LICENSE No. 67640
DATE: 03/22/19

SCALE	SHEET
AS SHOWN	G3
PROJECT No:	182589





STORMWATER POLLUTION PREVENTION NOTES

1. THIS PROJECT WILL DISTURB LESS THAN (1) ACRE. THE CONTRACTOR WILL NOT BE REQUIRED TO HAVE A FORMAL STORMWATER POLLUTION PREVENTION PLAN OR OBTAIN A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (COP) FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). HOWEVER, THE CONTRACTOR WILL BE REQUIRED TO FOLLOW BEST MANAGEMENT PRACTICES (BMP'S) FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS AS DICTATED BY THE LOCAL AGENCY HAVING JURISDICTION (AHJ).
2. DISTURBANCES INCLUDING ASPHALT CUTTING, DIGGING, CLEARING, GRADING, AND EXCAVATING WILL REQUIRE BMP'S WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, DAMS, TRAPS, BARRIERS, MULCH, HAY BALES AND APPURTENANCES THAT WILL ENSURE SEDIMENTATION POLLUTION WILL BE EITHER ELIMINATED OR MAINTAINED WITHIN ACCEPTABLE LIMITS AS ESTABLISHED BY THE AHJ.
3. THE CONTRACTOR WILL BE SUBJECT TO AHJ FINES IF BMP'S ARE NOT IMPLEMENTED AND MAINTAINED.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY FLOATING TURBIDITY BARRIER, SILT BARRIER, INLET PROTECTIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED FOR THE PROPOSED CONSTRUCTION ACTIVITIES.
5. FURTHER INFORMATION ABOUT BMP'S VISIT:
WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES/.

DEMOLITION NOTES:

1. THE DEMOLITION AS SHOWN IS GENERAL IN NATURE; LIMITS OF DEMOLITION SHALL BE DETERMINED BY THE FIELD CONDITIONS IN CONFORMANCE WITH ROADWAY RECONSTRUCTION REQUIREMENTS.
2. TREE PROTECTION SHALL BE IN PLACE PRIOR TO ANY WORK COMMENCING.
3. WHEN SAW CUTTING EXIST SIDEWALK, SAW CUT TO THE NEAREST JOINT.
4. CONTRACTOR SHALL KEEP EXISTING AND PROPOSED DRAINAGE PIPES AND CATCH BASINS CLEAN DURING CONSTRUCTION AND IMPLEMENT BEST MANAGEMENT PRACTICES.
5. EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS (WHERE NO MILLING/RESURFACING TO BE CONSTRUCTED).

LEGEND

- EXISTING ASPHALT, DRIVEWAY AND SIDEWALK REMOVAL
- ASPHALT PAVEMENT MILLING
- ASPHALT PAVEMENT MILLING-OPTIONAL
- ***** EXISTING CURBING REMOVAL

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NO	DATE	REVISION	BY	NO	DATE	REVISION	BY



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Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

**HALLANDALE BEACH
STORMWATER 44 YEAR CDBG**
HALLANDALE BEACH, FLORIDA

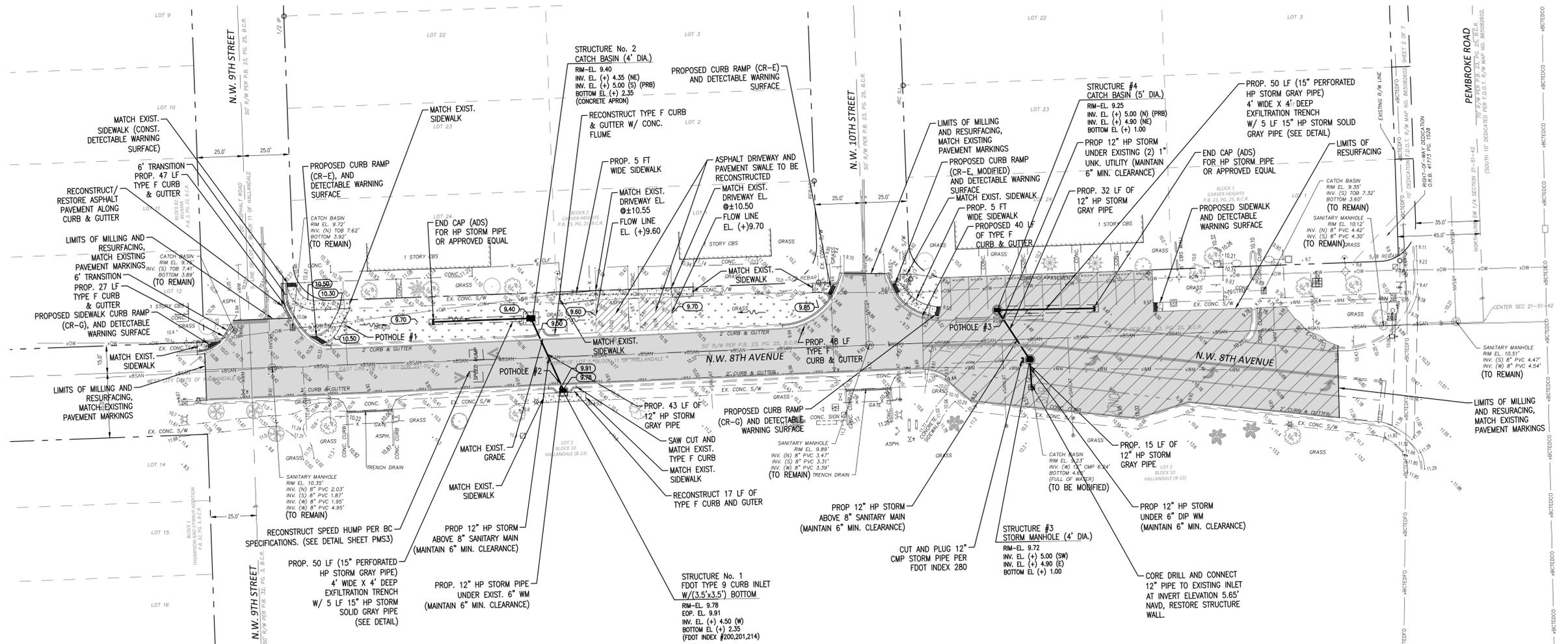
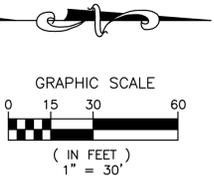
DEMOLITION PLAN

BID SET
ELEVATIONS ARE NAVD 88
MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 67640
DATE: 03/22/19

SCALE AS SHOWN	SHEET D1
PROJECT No. 182589	



DRAINAGE STRUCTURES											
STRUCTURES NUMBER	GRATE/RIM ELEVATION	PIPE INV. ELEV. (SOLID)	PIPE INV. ELEV. (PERFORATED)	PIPE DIRECTION	BOTTOM ELEV.	EXFILTRATION TRENCH TOP ELEV.	EXFILTRATION TRENCH BOTTOM ELEV.	EXFILTRATION TRENCH WIDTH	STRUCTURE SIZE/ INSIDE DIM. (TYPE)	FRAME & GRATE OR COVER	BAFFLE/PRB
1	(+19.78)	(+4.50)	N/A	W	(+2.35)	N/A	N/A	N/A	FDOT TYPE '9' (3.5x3.5')	USF 5130-6016	N/A
2	(+19.40)	(+4.35)	N/A	S	(+2.35)	N/A	N/A	N/A	TYPE 'C-4' 4' DIAMETER	USF 4155-6209	N/A SOUTH
3	(+19.72)	(+4.90)	N/A	E	(+1.00)	N/A	N/A	N/A	4' DIA. MANHOLE	USF 420-C	N/A
4	(+19.25)	(+4.90)	N/A	NE	(+1.00)	N/A	N/A	N/A	TYPE 'C-5' 5' DIAMETER	USF 4155-6209	N/A NORTH



GENERAL NOTES

- THE CONTRACTOR TO RESTORE, INCLUDING BUT NOT LIMITED TO, ALL DISTURBED ASPHALT PAVEMENT, PAVEMENT MARKINGS AND RPM, STREET SIGNS, SOD, LANDSCAPE, IRRIGATION, CURB, CURB & GUTTER, GUARD RAILS, FENCES, PAVEMENT BRICKS, SIDEWALKS, MAIL BOXES, ANY DISTURBED UNDERGROUND OR ABOVE GROUND UTILITIES.
- THIS PLAN WAS DESIGNED BASED UPON THE INFORMATION AS CONTAINED IN THE TOPOGRAPHIC SURVEY BY CALVIN, GIORDANO & ASSOCIATES, INC.
- THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, UTILITIES, SIDEWALKS, ASPHALT PAVEMENT NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST OF SUCH REPAIR WORK.
- WHERE PROPOSED, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
- THE CONTRACTOR TO ADJUST ALL EXISTING/PROPOSED VALVE BOXES, METER BOXES, PULL BOXES, CLEAN-OUTS, MANHOLE COVERS TO MATCH PROPOSED GRADES IF NOT TO BE REMOVED.
- THE CONTRACTOR SHALL INSTALL SOD FOR ALL DISTURBED AREAS. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
- CONTRACTOR SHALL BE RESPONSIBILITY TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
- CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY OF POWER LINES.

- ALL PAVING REPAIRS TO BE STRAIGHT.
- ALL UNSUITABLE AND EXCESS SOIL SHALL BE DISPOSED BY THE CONTRACTOR. ANY SUITABLE REPLACEMENT SOIL IS TO BE INCLUDED IN THE BID.
- ALL DAMAGED AREAS SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE DETECTABLE WARNING SURFACE FOR CURB RAMPS SHALL BE CAST IN PLACE (FDOT STANDARD INDEX #304, FDOT DESIGN STANDARDS (2017-18)).
- ANY PAVEMENT MARKINGS OR SIGNS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED ACCORDING TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS.
- SIGNS SHALL BE MADE WITH TYPE XI RETROREFLECTIVE SHEETING EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
- EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS.
- ALL STOP BARS TO BE 4' BEHIND CROSSWALK OR CURB RAMP. (TYPICAL)
- ALL PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING MARKINGS, WHERE APPLICABLE.
- EDGE LINE MARKINGS SHALL NOT BE INSTALLED IN CROSSWALK AREAS OR IN FRONT OF CURB RAMPS. EXISTING MARKINGS IN THESE AREAS SHALL BE COMPLETELY REMOVED.
- ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE MUTCD AND BCTD COMPLIANT.
- ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC EXCEPT FOR STRIPING FOR PARKING SPACES.

HATCHING LEGEND

- DETECTABLE WARNING (DWS)
- PAVEMENT MILLING AND RESURFACING
- PAVEMENT MILLING AND RESURFACING-OPTIONAL
- PROP. CONCRETE SIDEWALK
- REGRADE SWALE/INSTALL SOD
- ASPHALT DRIVEWAY/ASPHALT ROADWAY RECONSTRUCTION
- PROP. ELEVATION
- EXIST. ELEVATION

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**HALLANDALE BEACH
 STORMWATER 44 YEAR CDBG**
 HALLANDALE BEACH, FLORIDA

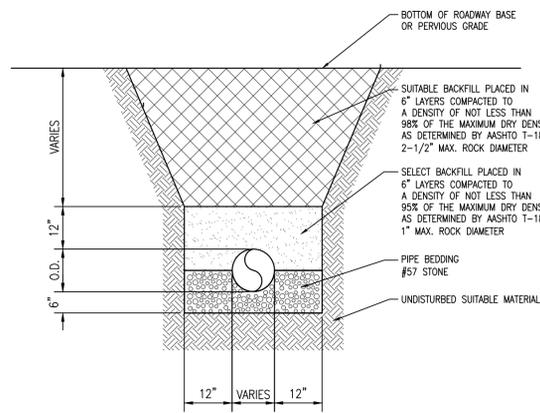
PAVING, GRADING AND DRAINAGE PLAN

**BID SET
 ELEVATIONS ARE NAVD 88**
 MOHAMMED SHARIFUZZAMAN, P.E.
 STATE OF FLORIDA PROFESSIONAL ENGINEER
 LICENSE No. 67640
 DATE: 03/22/19

SCALE: AS SHOWN
 PROJECT No: 182589
 SHEET: PD1

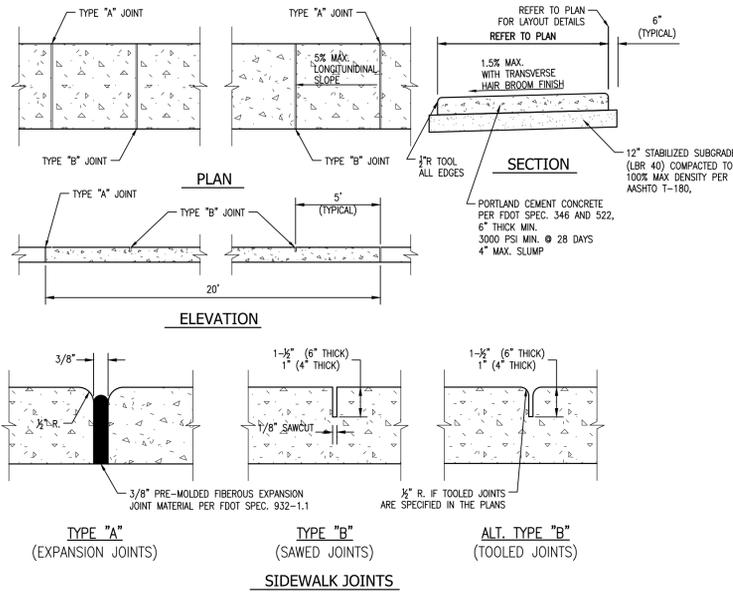


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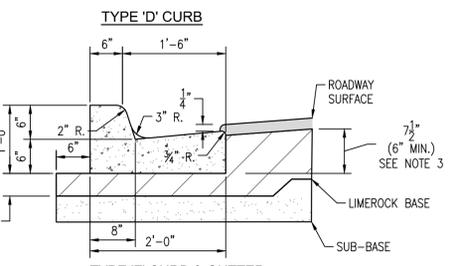
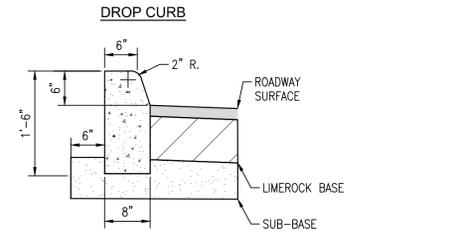
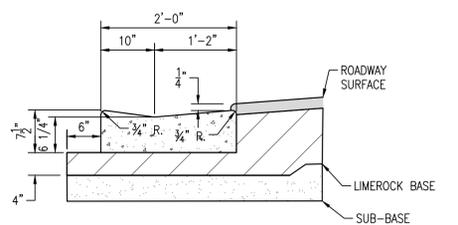
NOTE:
1. ALL UNSATISFACTORY SOILS ENCOUNTERED ARE TO BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR AND REPLACED WITH SATISFACTORY SOILS.

4 TYPICAL PIPE TRENCH IN SATISFACTORY SOILS
SCALE: N.T.S.



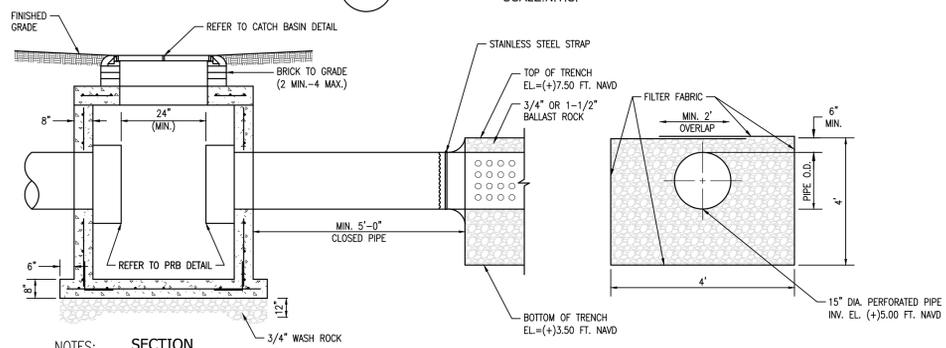
SIDEWALK JOINTS	
TYPE	LOCATION
"A"	20'-0" CENTER TO CENTER P.C. AND P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS, WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES OR AT THE DISCRETION OF THE ENGINEER.
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS THROUGHOUT THE SITE.

6 CONCRETE SIDEWALK (6" THICK)
SCALE: N.T.S.



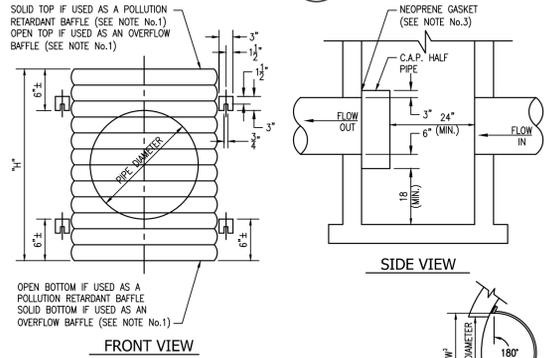
NOTES:
1. ALL CURBS, GUTTERS AND CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARD INDEX 300 AND SPECIFICATION 520.
2. CONCRETE SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 346 HAVING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
3. WHEN USED ON HIGH SIDE OF ROADWAYS, CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE EDGE OF PAVEMENT SHALL MATCH THE LIP OF CURB ELEVATION. THE MINIMUM THICKNESS OF THE LIP SHALL BE 6".
4. BACKFILL BEHIND CURBS TO 2" BELOW TOP OF CURB TO ALLOW FOR SOD OR AS SPECIFIED IN PLANS AND SPECIFICATIONS.
5. SAWCUTS AT 10' CENTERS SHALL BE MADE WITHIN 24 HOURS OF CONCRETE PLACEMENT

5 CONCRETE CURB DETAILS
SCALE: N.T.S. CURRENT



NOTES:
1. PIPES SHALL TERMINATE 2' FROM END OF TRENCH (CAP ENDS OF PIPE) OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
2. SIDES, BOTTOM AND TOP OF TRENCH TO BE LINED WITH FILTER FABRIC. OVERLAP LINDER A MINIMUM OF 2' AT THE TOP OF THE TRENCH.
3. BALLAST ROCK SHALL BE FROM FRESH WATER, WASHED AND FREE OF DELETERIOUS MATTER.
4. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE. (SEE POLLUTION RETARDANT BAFFLE (PRB) DETAIL).
5. TRENCH TO BE LINED WITH MIRAFIL 140N OR APPROVED EQUIVALENT TYPE FILTER FABRIC.

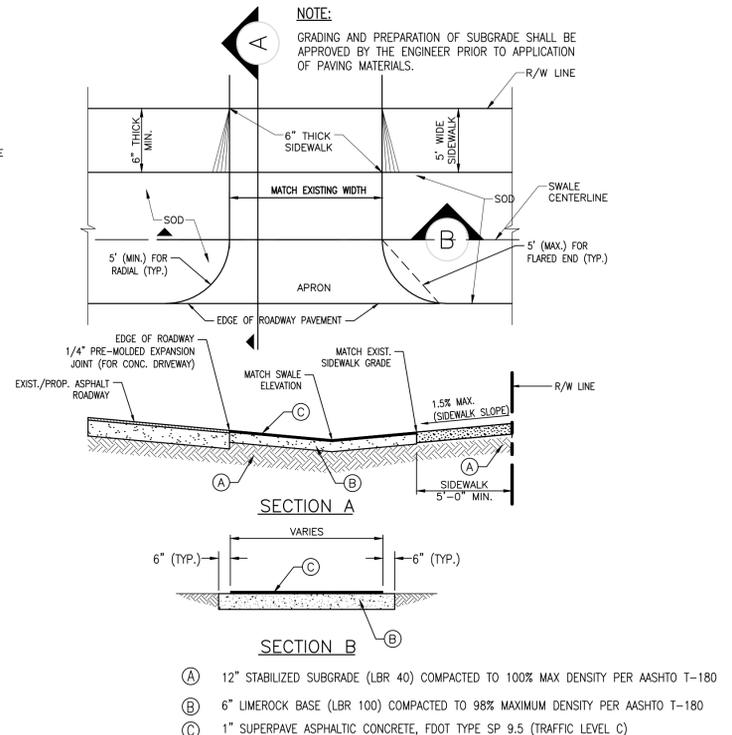
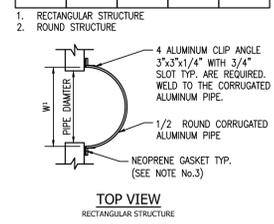
7 EXFILTRATION TRENCH
SCALE: N.T.S.



NOTES:
1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S APPROVAL.
3. NEOPRENE GASKET (3/8" x 2") SHALL BE INSTALLED AT ALL BAFFLES.

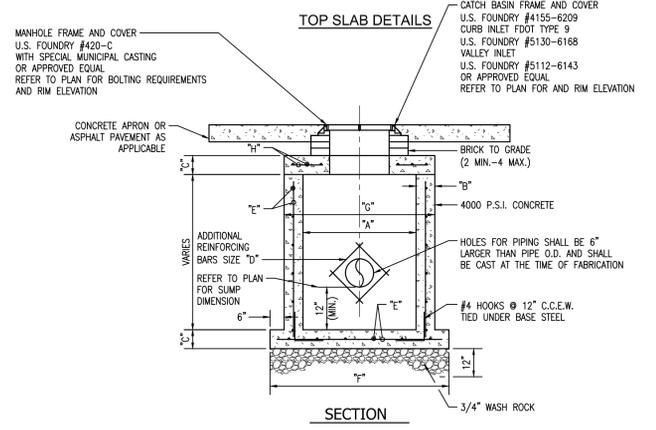
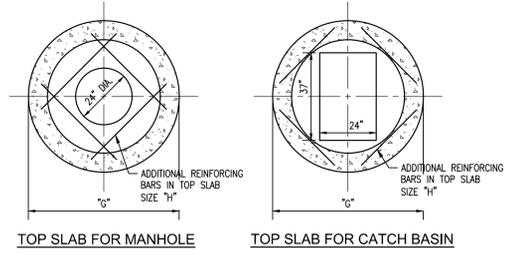
8 POLLUTION RETARDANT BAFFLE (PRB)
SCALE: N.T.S.

PIPE DIA. (INCHES)	W ¹ (INCHES)	W ² (INCHES)	T (GAUGE)	H (INCHES)
12"	21"	30"	16	VARIES
15"	21"	30"	16	VARIES
18"	30"	36"	16	VARIES
24"	36"	42"	16	VARIES
30"	42"	48"	14	VARIES
36"	54"	54"	14	VARIES
42"	60"	60"	14	VARIES
48"	72"	72"	14	VARIES



NOTE:
GRADING AND PREPARATION OF SUBGRADE SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION OF PAVING MATERIALS.

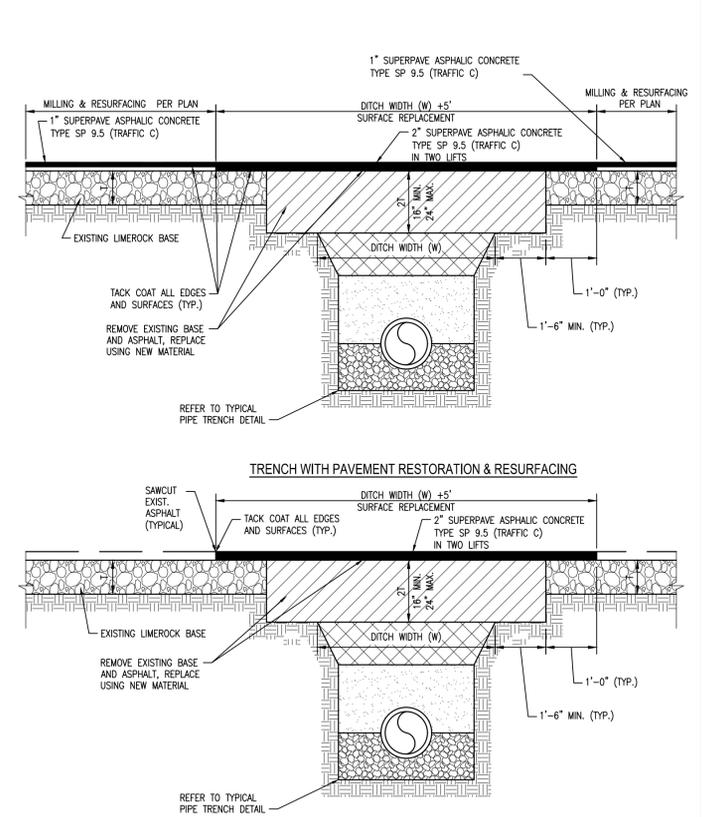
9 RESIDENTIAL DRIVEWAY (RIGHT-OF-WAY) RECONSTRUCTION DETAIL
SCALE: N.T.S.



TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
C-4/M-4	4'-0"	8'	8'	#4 @ 12" C.C.E.W.	#4 @ 12" C.C.E.W.	6'-4"	5'-4"	#4 @ 6" C.C.E.W.
C-5/M-5	5'-0"	8'	8'	#5 @ 12" C.C.E.W.	#5 @ 12" C.C.E.W.	7'-4"	6'-4"	#5 @ 6" C.C.E.W.
C-6/M-6	6'-0"	8'	8'	#5 @ 6" C.C.E.W.	#5 @ 6" C.C.E.W.	8'-4"	7'-4"	#5 @ 6" C.C.E.W.

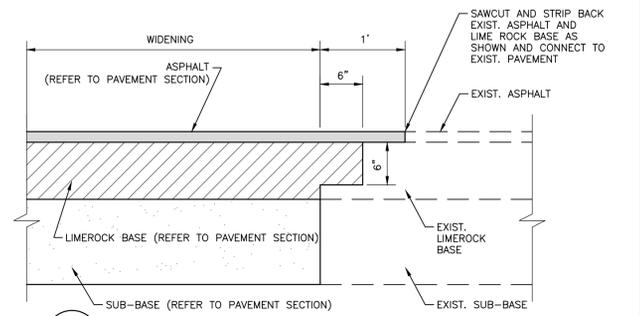
* STEEL DESIGN SHOWN HERE IS A MINIMUM, ALL STEEL DESIGN SHALL MEET OR EXCEED ASTM C478. ALL REBAR SHALL BE 60 KSI.

10 PRECAST CIRCULAR MANHOLE AND CATCH BASIN
SCALE: N.T.S.

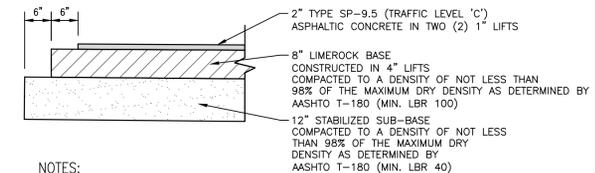


NOTES:
1. REFER TO TYPICAL SECTION, GENERAL NOTES OR SPECIFICATIONS FOR INSTALLATION AND MATERIAL REQUIREMENTS.
2. ALL EDGES OF THE EXISTING ASPHALT PAVEMENT WHERE RESURFACING WILL ABUT, SHALL BE SAWCUT IN STRAIGHT LINES PARALLEL TO OR PERPENDICULAR TO ROADWAY, PRIOR TO RESURFACING.
3. IF THE DITCH IS FILLED TEMPORARILY, IT SHALL COVERED WITH A 2" THICK SP 9.5 ASPHALTIC CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING, UNTIL REPLACED WITH A PERMANENT PAVEMENT PATCH.

11 TRENCH/PAVEMENT RESTORATION
SCALE: N.T.S. CURRENT



12 CONNECTION TO EXISTING PAVEMENT
SCALE: N.T.S. CURRENT



NOTES:
1. APPLY BITUMINOUS PRIME COAT IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION SECTION 300.
2. ASPHALT INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION SECTION 334.

13 ROADWAY PAVEMENT SECTION
SCALE: N.T.S.

BID SET
ELEVATIONS ARE NAVD 88



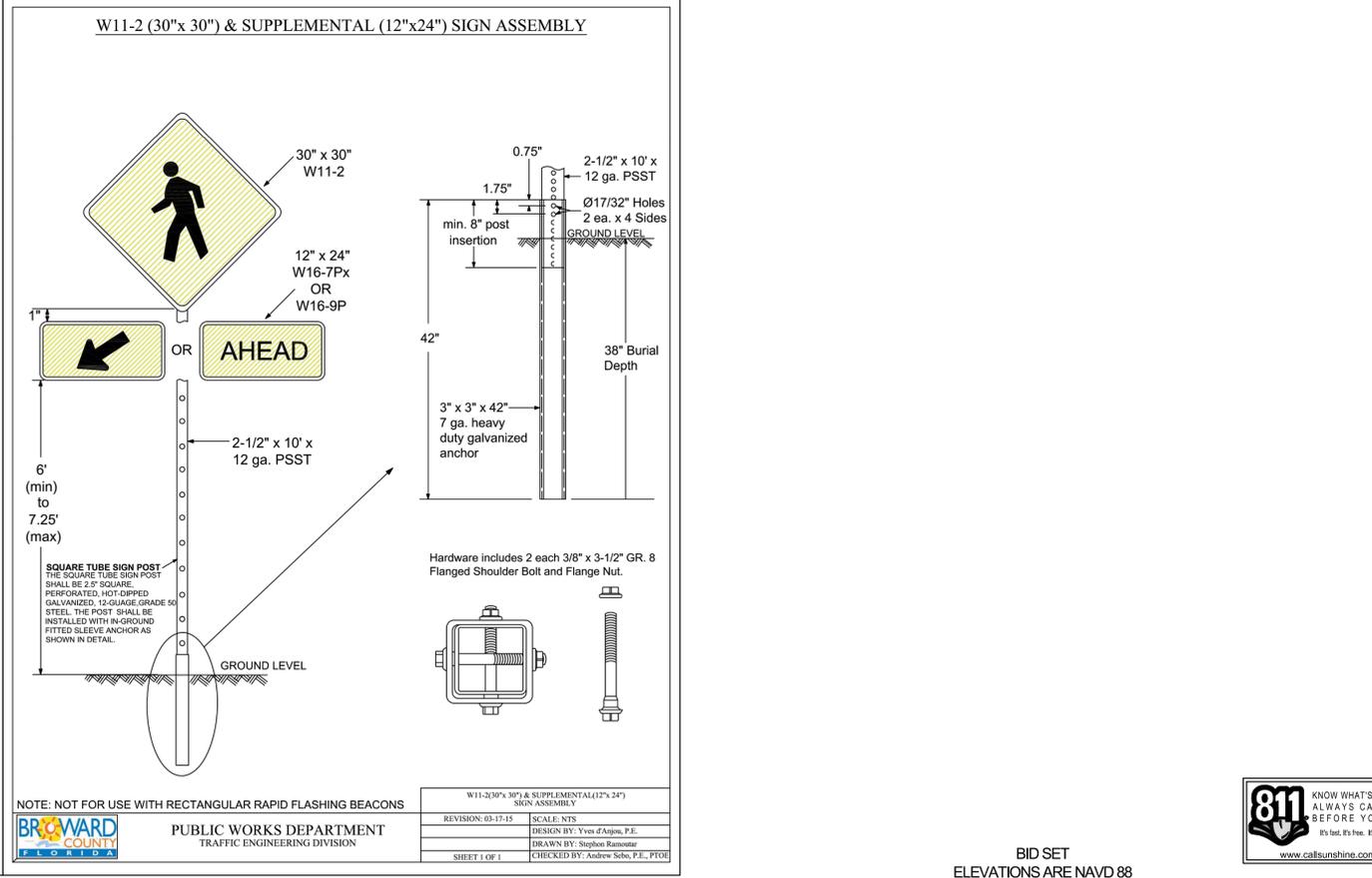
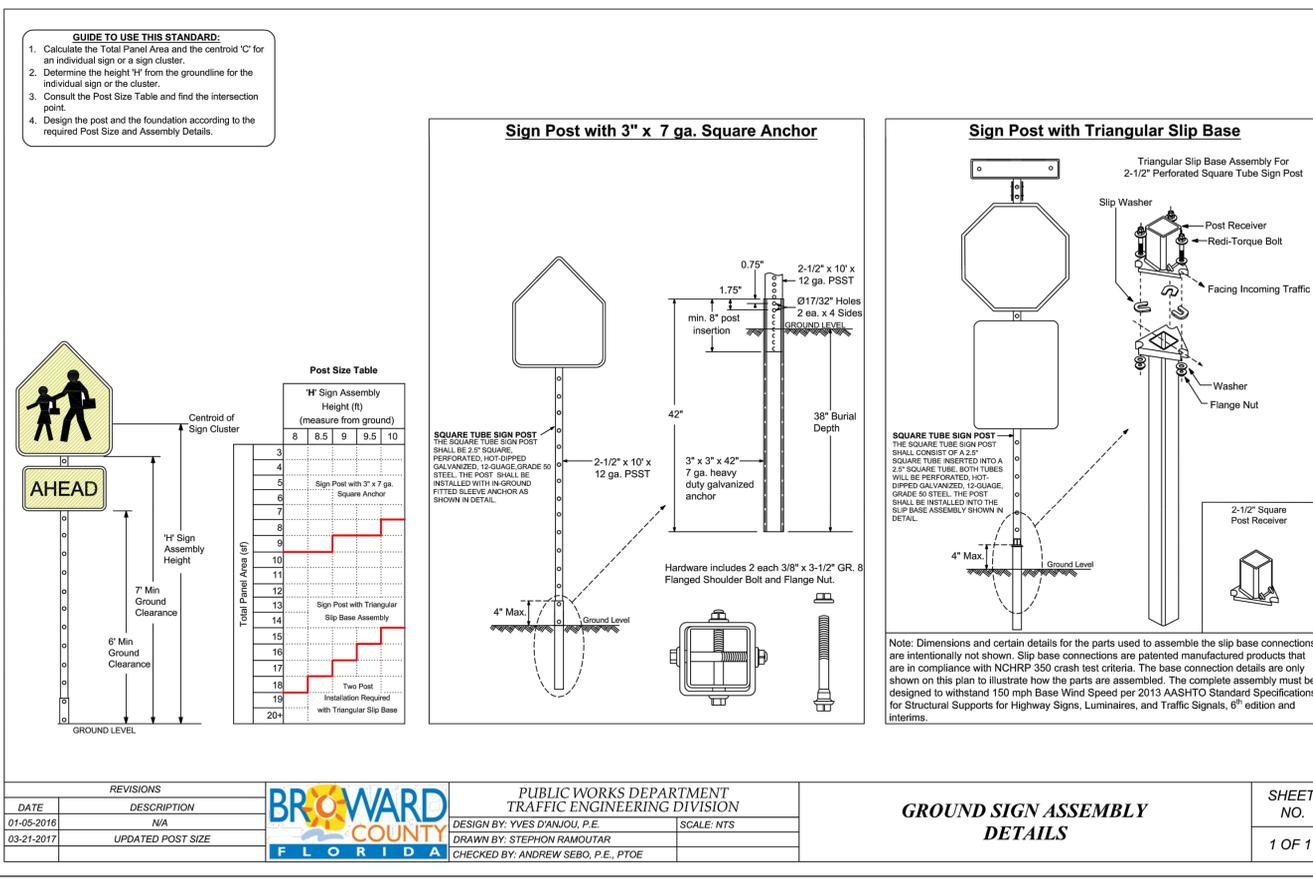
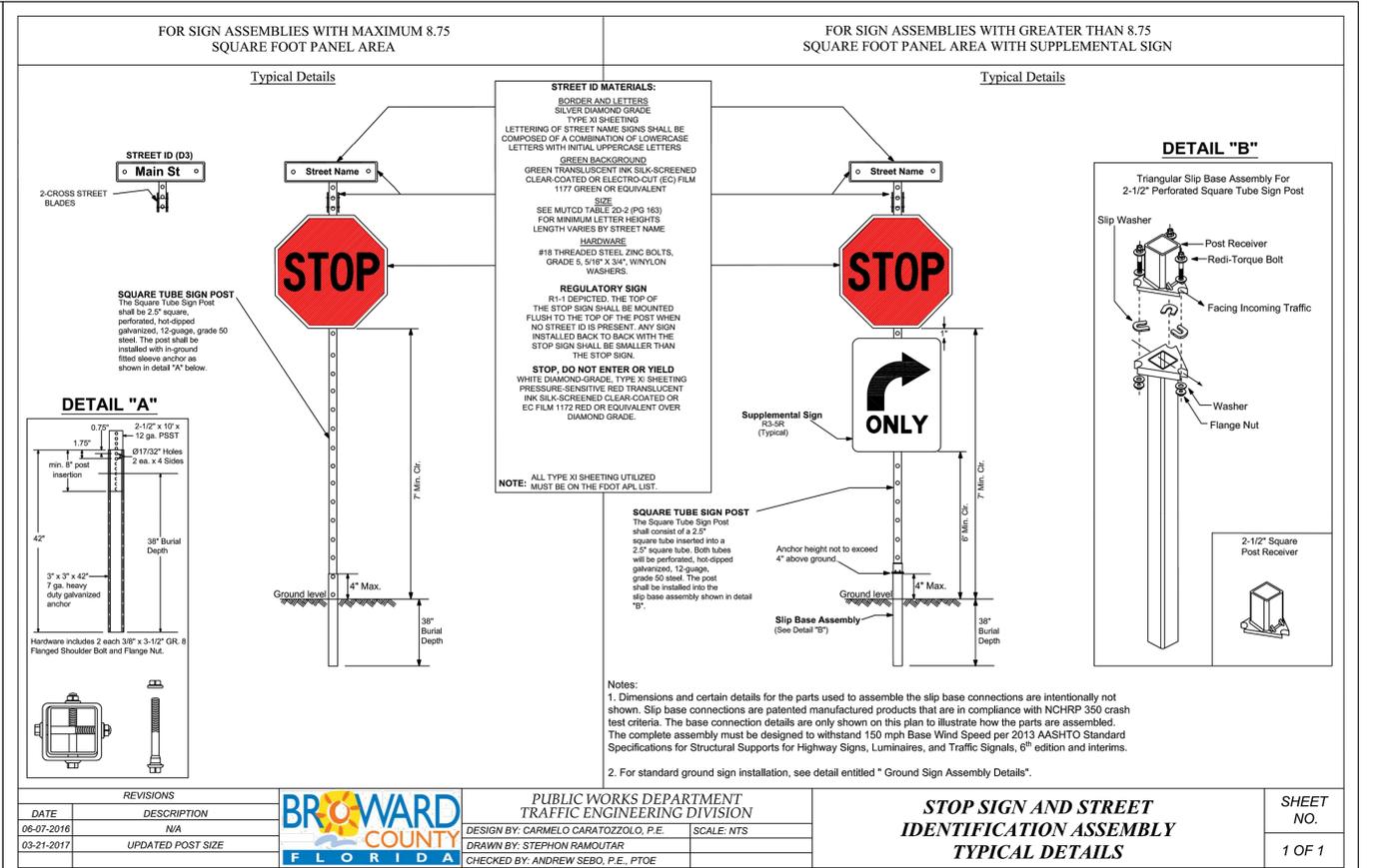
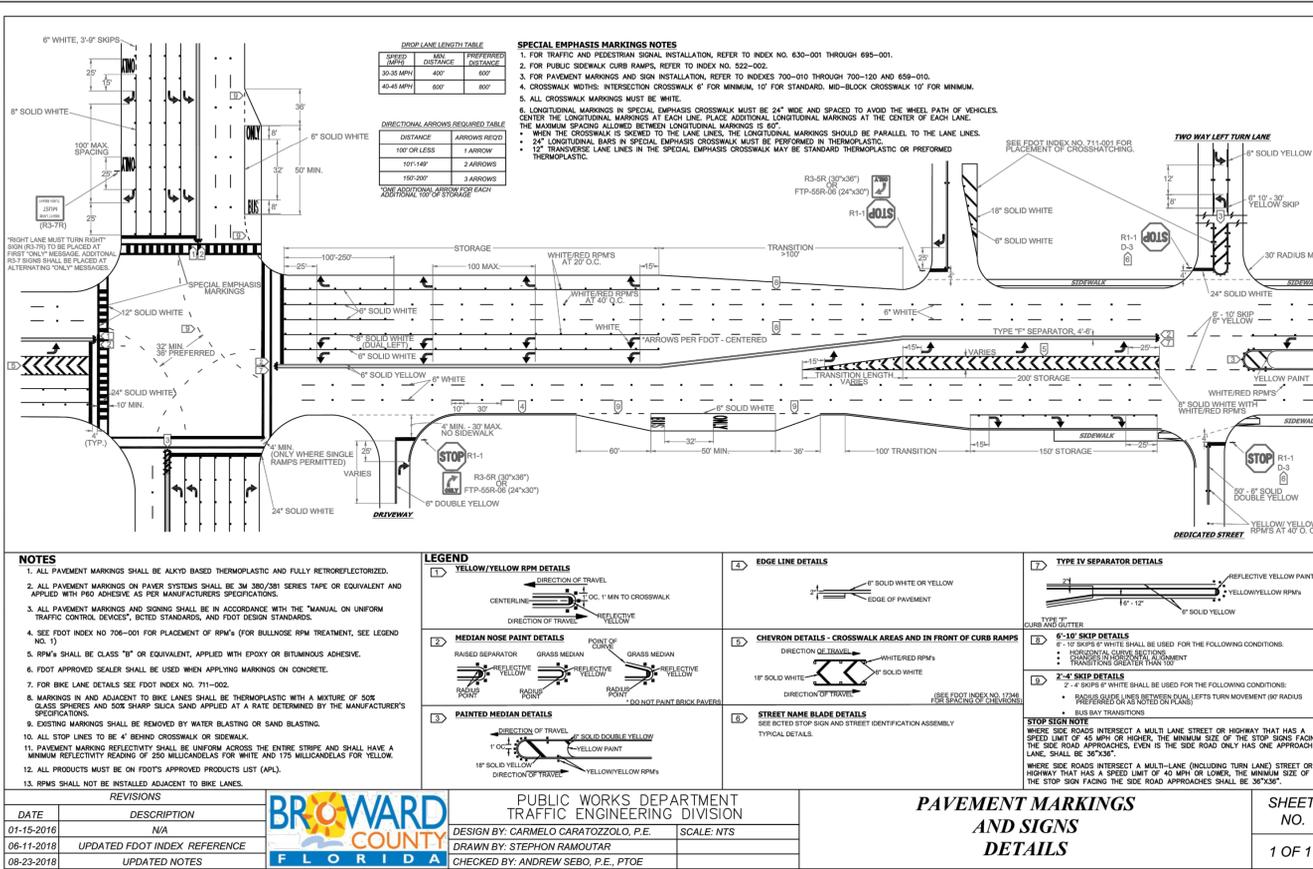
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HALLANDALE BEACH STORMWATER 44 YEAR CDBG
HALLANDALE BEACH, FLORIDA

DRAINAGE DETAILS

MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 67640
DATE: 03/22/19

SCALE: AS SHOWN
PROJECT No: 182589
SHEET: PD2



File Name: P:\Projects\2018\182589 - Stormwater\Drawings\182589-C-STRM-DTL.dwg (Plotted by: Katherine Kupsky on Friday, March 22, 2019 1:25:08 PM)

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Certificate of Authorization 514

HALLANDALE BEACH
STORMWATER 44 YEAR CDBG
HALLANDALE BEACH, FLORIDA

PAVEMENT MARKING AND SIGNAGE DETAILS

BID SET
ELEVATIONS ARE NAVD 88
MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE NO. 67640
DATE: 03/22/19

SCALE: AS SHOWN
PROJECT No: 182589
SHEET: PMS2





PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION
 2300 W. Commercial Boulevard • Fort Lauderdale, Florida 33309 • 954-847-2600 • FAX 954-847-2700

MAINTENANCE OF TRAFFIC - SCHOOL/PEDESTRIAN

The Maintenance of Traffic plan, provided by the Contractor, shall include provisions for pedestrian and/or school student traffic as well as vehicular traffic. The following are minimum requirements:

- The safe walk route for all school students within the vicinity of the construction zone shall be maintained during student arrival and dismissal times. If the current walking surface cannot be maintained, then a temporary walkable surface shall be created. The safe walk route shall be separated from the construction activity during the entire length of the project encompassing the entire walk route with proper pedestrian openings at designated crossings in compliance with FDOT Design Standards Index No. 600 as well as meeting all ADA requirements.
- All construction equipment activity around any designated crosswalk shall cease to operate during the student arrival and dismissal times. All construction equipment activity adjacent to a designated walk route shall cease operating unless satisfactorily barricaded from the walk route.
- In the case that a designated crossing or any portion of the designated walk route cannot be maintained, the Contractor shall notify the Special Projects Coordinator at Broward County Traffic Engineering Division, (954) 847-2600, a minimum of ten (10) working days prior to closing that route in order to establish an alternate crossing/route.
- It shall be the Contractor's responsibility to install any necessary pavement, road rock, pavement markings and signage and/or any pedestrian signalization and/or signal modification to accommodate an existing or alternate walk route throughout the entire length of the project.
- It shall be the Contractor's responsibility to provide State Certified School Crossing Guards or Off Duty Police Officers to cross students at all locations other than those previously designated. The Contractor may use Flagmen, but **ONLY** if they are State Certified as a School Crossing Guard.
- Thirty (30) days prior to the beginning of construction the Contractor shall notify the Special Projects Coordinator at Broward County Traffic Engineering Division, (954) 847-2600 or at broward@traffic.org to discuss all necessary safety measures.
- It shall be the Contractor's responsibility to notify the following Broward County School Board Pupil Transportation Department personnel if construction will impact any bus routes:
 - Ruth Masters Routing (754) 321-4400 Ext. # 2309 ruth.masters@browardschools.com
 - Vincent Harrell Student Transportation & Fleet Service (754) 321-4472 vincent.harrell@browardschools.com
 - Mary Tochtermann Student Transportation & Fleet Service (754) 321-4400 Ext. # 2006 mary.tochtermann@browardschools.com

Revised: 9/24/14

Broward County Traffic Engineering Division's
 Speed Humps Specifications

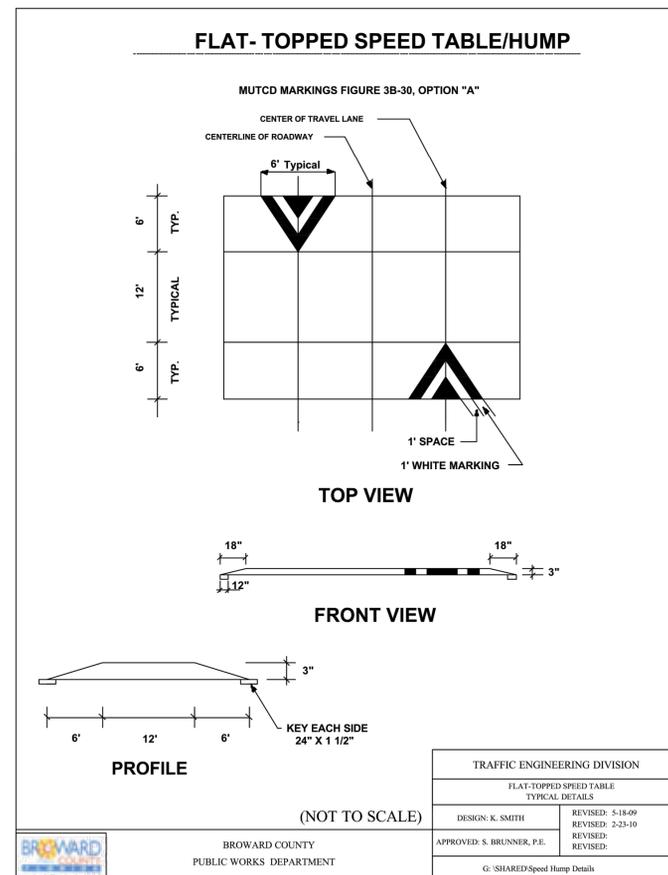
The following is a typical installation of a speed hump within the unincorporated area of Broward County.

- The speed hump shall be twenty-four (24) feet in length for the width of the roadway (typically twenty-four (24) feet), with the following characteristics:
 - Height of three (3) inches
 - Twelve (12) foot flat top
 - Six (6) foot transitions on both the near & far sides
 - Eighteen (18) inch transitions on both curb sides
- Key cut twenty-four (24) inches on both the near & far sides with twelve (12) inches next to speed hump and twelve inches underneath, for a depth of one and a half (1 1/2) inches.
- Key cut twelve (12) inches on both curb side edges, underneath the speed hump, for a depth of one and a half (1 1/2) inches.
- Pavement markings shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Figure 3B-30 Option "A".
 - For each direction of travel, install two (2) Chevrons, one (1) foot white pavement marking, spaced one (1) foot apart for a length of six (6) feet centered on the travel lane, placed on the transition only.
 - Six (6) inch white thermoplastic edge line to be replaced along side of the speed hump, if this edge line previously existed.
 - Centerline to be replaced based on BCTED Pavement Marking Policy:
 - Either a six (6) inch single yellow in thermoplastic as a ten (10) / thirty (30) skip line; or
 - Six (6) inch double yellow solid line in thermoplastic.

Other information:

- All speed humps shall be installed in two (2) lifts of S3 asphalt.
- Tack coat to be applied prior to laying the S3 asphalt.
- An **approved** Maintenance of Traffic Plan shall be established for each speed hump installation.
- Installation shall be in compliance with the **FDOT Standards Specifications for Road and Bridge Construction 2010**.

February 22, 2010; revised February 24, 2010; revised April 11, 2018



Broward County Traffic Engineering Division Communications Notes

To be placed within plan set

(Revised: 10/13/2015)

"Communications Notes"

The agency responsible for maintenance of the traffic signals and related equipment is Broward County Traffic Engineering Division (BCTED). All system communications equipment, cabling and related material shall comply with Broward County's latest edition of the minimum standards as expressed in the "Standards and Specifications - Communication Infrastructure" document. Please refer to (BCTED's) Communications Policies and Procedures for additional information. Broward County Traffic Engineering Division will not accept any projects that do not meet these standards and specifications. If fiber optic pull boxes already exist at an intersection, no additional fiber optic pull boxes will need to be installed. For a copy of these standards refer to the Broward County web site at www.BROWARD.ORG/TRAFFIC under publications.

If there are Copper Interconnect Cable/s within your project limits or within 1500 feet of your project limits, contact the Communications Manager at tecommunications@broward.org or 954-847-2745.

If there are Fiber Optic Cable/s within your project limits or within 1500 feet of your project limits contact the Communications Manager at tecommunications@broward.org or 954-847-2745.

If there are cellular communications within your project limits, contact the Communications Manager at tecommunications@broward.org or 954-847-2745

All BCTED communications cables/conduit shall be located a minimum of 48 hours in advance.

**Broward County Traffic Engineering Division
 Procedure for Notification of Communication Disruption**

Copper Interconnect Cable Notification Contact Person
 When communications to an intersection must be disrupted by a Contractor to perform work, the Contractor shall provide two day advance notice in writing to the Broward County Traffic Engineering Division. This notification shall be conveyed via electronic mail (email) to the Traffic Signal Technician III at tecommunications@broward.org. Notification shall include contact person, telephone number, purpose, location and duration. The disruption shall last for no more than 3 consecutive business days. Where possible, the disruption shall be during off peak hours beginning at 9:00am and ending at 3:00pm.

Fiber Optic Cable Notification Contact Person
 When communications to an intersection must be disrupted by a Contractor to perform work, the Contractor shall provide two day advance notice in writing to the Broward County Traffic Engineering Division. This notification shall be conveyed via electronic mail (email) to the Communications Manager at tecommunications@broward.org. Notification shall include contact person, telephone number, purpose, location and duration. The disruption shall last for no more than 3 consecutive business days. Where possible, the disruption shall be during off peak hours beginning at 9:00am and ending at 3:00pm.

Include the following in any notice of utility ownership or within a "Utility Owners/Contact Person" table:

Interconnect Communications Cables - (Robert Blount) Broward County Traffic Engineering Division (BCTED) 954-847-2745



BID SET
 ELEVATIONS ARE NAVD 88

MOHAMMED SHARIFUZZAMAN, P.E.
 STATE OF FLORIDA PROFESSIONAL ENGINEER
 LICENSE No. 67640

DATE: 03/22/19

SCALE
 AS SHOWN

PROJECT No:
 182589

SHEET
PMS3

File Name: P:\Projects\2018\182589_Hallandale Beach_CDBG_44\CADD Files\Drawings\182589-C-STRM-DTL.dwg -- (Plotted by: Katherine Kupsky on Friday, March 22, 2019 1:25:27 PM)

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**HALLANDALE BEACH
 STORMWATER 44 YEAR CDBG**

HALLANDALE BEACH, FLORIDA

PAVEMENT MARKING AND SIGNAGE DETAILS