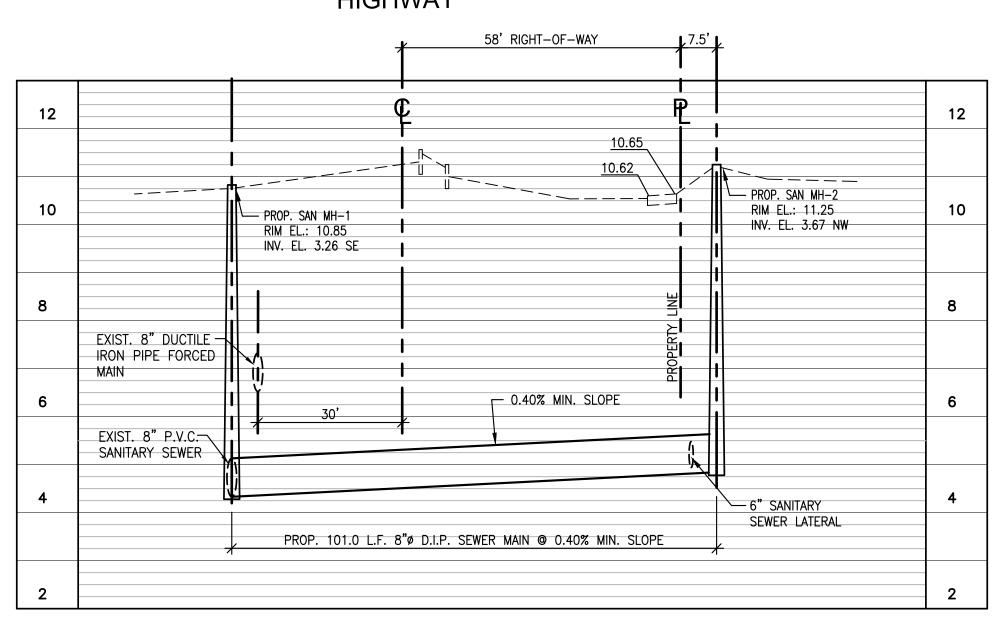
### SOUTH DIXIE HIGHWAY



# SANITARY SEWER MAIN EXTENSION

VERT.: 1"=2'-0" HOR.: 1"=20'-0'



#### **HEALTH DEPARTMENT NOTES**

(NOT A PART OF M-DWASD NOTES OR APPROVAL)

#### WATER MAIN HORIZONTAL SEPARATIONS

SEPARATIONS SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE BETWEEN WATER MAINS AND, STORM SEWERS, STORM WATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT MINIMUM.

BETWEEN WATER MAINS AND VACUUM TYPE SEWER PREFERABLY 10 FT. AND AT LEAST 3 FT. MINIMUM.

GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLY <u>10 FT. AND AT LEASE 6 FT</u>. MAY <u>BE</u> REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAINS IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

10 FT. TO ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.

## WATER MAIN VERTICAL SEPARATIONS

SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO <u>BE PREFERABLY 12 INCHES</u>, OR AT LEAST 6 INCHES ABOVE, OR AT LEAST 12 INCHES IF BELOW\*

PRESSURE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR RECLAIMED WATER, <u>AT LEAST 12 INCHES ABOVE OR BELOW.\*</u>

\*NOTE: CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS; ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM FORCE MAINS. AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER.



#### **RER-DERM WATER-SEWER GENERAL NOTES**

- A horizontal distance of at least 6 feet, and preferably 10 feet (outside to outside), shall be maintained between gravity or pressure sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewers where the top of the sewer pipe is at least 6 inches below the bottom of the water pipe. When the above specified horizontal distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met: a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
- b) The sewer is encased in a watertight carrier pipe or concrete c) The top of the sewer is at least 18 inches below the bottom of the water pipe
- A vertical distance of at least 12 inches (outside to outside) shall be maintained between any water and sewer mains with sewer pipes preferably crossing under water mains. The minimum vertical separation can be reduced to 6 inches for vacuum-type sewers or for gravity sewers where the sewer pipe is below the water main. The crossing shall be arranged so that all water main joints are at least 6 feet from all joints in gravity and pressure sewer pipes. This distance can be reduced to 3 feet for vacuum-type sewers. When the above specified vertical distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following
- a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
- b) The sewer is encased in a watertight carrier pipe or concrete. Air release valves shall be provided at high points of new force main sanitary sewers.
- Gravity sanitary sewers constructed within a public wellfield protection area shall be C-900 PVC or Ductile Iron Pipe. The maximum allowable exfiltration rate of gravity sanitary sewers constructed in a public wellfield protection area shall be: a) Residential Land Uses. Fifty (50) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a
- minimum of two (2) feet of positive head above the crown of the pipe. b) Non-Residential Land Uses. Twenty (20) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test
- having a minimum of two (2) feet of positive head above the crown of the pipe. c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
- The maximum allowable exfiltration rate of gravity sanitary sewers constructed outside a public wellfield protection area shall be one hundred (100) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
- Forcemain sanitary sewers constructed within a public wellfield protection area shall be ductile iron, C-900 PVC, HDPE or reinforced concrete pressure sewer pipes.
- The maximum allowable exfiltration/leakage rate of forcemain sanitary sewers shall be: a) Ductile Iron, C-900 PVC, HDPE and PVC Pipe. The allowable leakage rate specified in American Water Works Association Standard
- (AWWAS) C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours. b) Reinforced Concrete Pressure Pipe. Half (1/2) the allowable leakage rate specified in AWWA C600-82 at a test pressure of 100 psi for a
- c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
- The contractor shall verify nature, depth, and character of existing underground utilities prior to start of construction.
- . In no case shall a contractor install utility pipes, conduits, cables, etc. in the same trench above an existing water or sewer pipe except
- 10. If any area of the work site is found to contain buried solid waste and/or ground or ground water contamination, the following shall apply: a) All work in the area shall follow all applicable safety requirements (e.g., OSHA, etc.) and notification must be provided to the appropriate
- b) Immediately notify the Environmental Monitoring and Restoration Division (EMRD). The EMRD can be contacted at (305) 372-6700. c) If contaminated soils and/or buried solid waste material is excavated during construction, then they require proper handling and disposal in accordance with the local, state and federal regulations. Be advised that the landfill owner/operator is the final authority on disposal and may have requirements beyond those provided by herein. If disposal within a Miami-Dade County owned landfill (Class I landfill) is appropriate and selected, please contact the Miami-Dade County Department of Solid Waste Management at (305) 594-6666
- d) The reuse of contaminated soils that are not returned to the original excavation requires prior approval of a Soil Management Plan from
- the Environmental Monitoring and Restoration Division. The EMRD can be contacted at (305) 372-6700. 1. Pumps must comply with the National Electrical Code (NEC) requirements for Class I, Group D, Division 1 locations (Explosion Proof).

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL

a. RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER (QTY. OF PRINTS AS REQUIRED BY THE DEPARTMENT).

2. "RECORD DRAWING" FORMAT:

1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE

3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.

4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND

6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE

. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE

8. CONTRACTOR MUST CALL MDWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL

BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO

9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF

O. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE

SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE

e. "RECORD DRAWING" PRINTS (24"x 36") SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER

FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH

GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). Submittal of final CAD Files required.

CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.

12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO

13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE

DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING

ITEM

SHEET 1 OF 2

STANDARD DETAIL

STANDARD REQUIREMENTS

WATER AND SEWER

CONSTRUCTION

11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE

HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (No. OF PRINTS: 3-FOR WATER, 4-FOR

THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.

DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.

AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.

5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.

2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.

CHECK VALVE AT THE POINT OF ENTRY.

APPROPRIATE CHARGES HAVE BEEN PREPAID.

. CONTRACTOR'S WAIVER AND RELEASE OF LIEN

d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT)

ii DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).

f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS

APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.

MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND

V.F.C.

TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR

ISSUE DATE | APPROVED BY

UNDER THE SUPERVISION OF THE INSPECTOR.

g. BILL OF SALE SKETCH (8½"x 11") FOR WATER AND SEWER, SEPARATELY

. EASEMENTS, IF REQUIRED

ABSOLUTE BILL OF SALE

- c. CADD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLANE COORDINATES NAD 83 FLORIDA EAST
- d. THE WORDS "RECORD DRAWING" IN LARGE LETTERS
- e. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION
- f. Preferred scale to be 1"= 40' Horizontally and 1"= 4' Vertically\*
- a. STREET NOMENCLATURE h. SEPARATE RECORD DRAWINGS FOR WATER AND SEWER
- i. SEPARATE WATER AND SEWER PROFILE
- i. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E. &, &, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN
- k. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT
- I. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.)
- m. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY RECORD DRAWING INFORMATION REFLECTED IN DRAWINGS
- 3. WATER "RECORD DRAWINGS" MUST INCLUDE:
  - a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED.
  - b. Profile showing top of ground and top of pipe elevations at every 100' station and at any CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.
- 4. SEWER "RECORD DRAWINGS" MUST INCLUDE:
- a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY
- SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS. b. The northerly and easterly coordinates on all field obtained measurements and provided on
- ALL RECORD DRAWING SUBMITTALS
- c. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH, ETC.), AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE.
- 5. FORCE MAIN "RECORD DRAWING" SAME AS WATER MAIN.
- 6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.

\* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED

ı	BI INC DEP	ARIMENI PRIOR IC	PREPARATION OF	DRAWINGS.			
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					ITEM	CROSS REF.	SPE RE
		<u>ISSUE DATE</u>	APPROVED BY	STANDAR	D DETAIL	G	$\overline{c}$
ı		03/11/2009	V.F.C.	CHARGE.	2000	ا ا	2
	MIAMI-DADE COUNTY Delivering Excellence Every Day	07/20/2016	D.V.	"RECORD DRAWING" REQUIREMENTS		0.5	
						SHEET 2 OF	
1	WATER & SEWER DEPARTMENT					SULE! 7	_ UF



NO.	DATE	DESCRIPTION
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CONTRACT DATE: BUILDING TYPE: EXP. LT. MED-40 PLAN VERSION: SITE NUMBER: 309797 STORE NUMBER: 420630

TACO BELL

20711 SO. DIXIE. HWY CUTLER BAY, FL



**SEWER PLAN** 

PLOT DATE: 07-17-2018