

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA

IT'S THE LAW!
811
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

VERTICAL DATUM CONVERSION

GRADING SHOWN UTILIZES N.A.V.D. 88

N.G.V.D. 29

N.A.V.D. 88

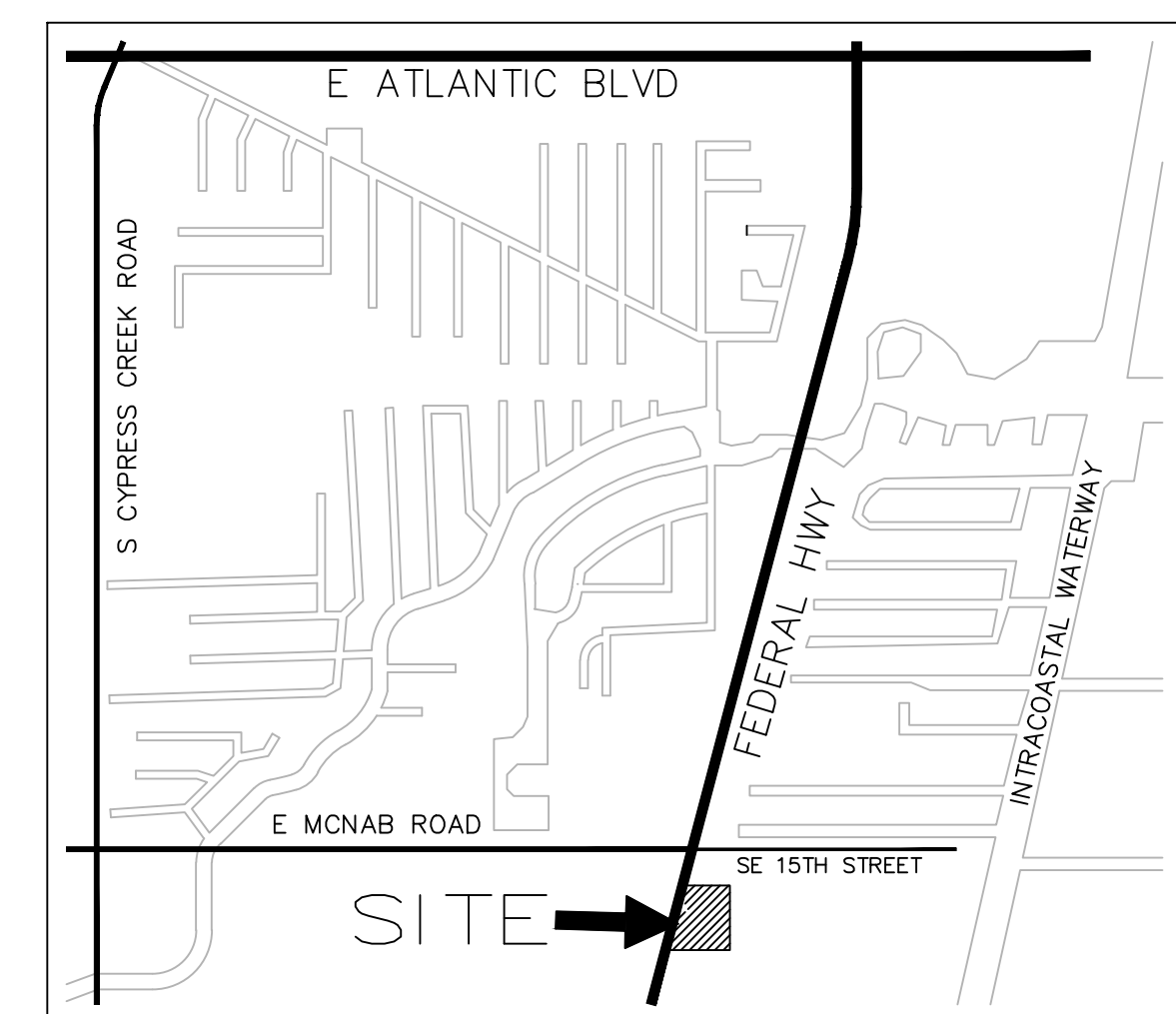
N.A.V.D. 88 = N.G.V.D. 29 - 1.51'

N.G.V.D. 29 = N.A.V.D. 88 + 1.51'

ESTIMATED WATER AND SEWER FLOW:

RESIDENTIAL = 132 UNITS
RESIDENTIAL FLOW ESTIMATED AT 250 GPD/UNIT
COMMERCIAL (RETAIL) = 3,650 SF
COMMERCIAL FLOW ESTIMATED AT 0.1 GPD/SF
132 UNITS X 250 GPD/SF = 33,000 GPD
3,650 SF X 0.1 GPD/SF = 365 GPD
NEW TOTAL FLOW = 33,365 GPD

PUMP STATION START UP, EXFILTRATION TESTING, LAMPING, AND VIDEO SURVEY OF SANITARY SEWER TO BE PERFORMED AND WITNESSED BY CITY INSPECTOR. PRESSURE TESTING AND CANNON FLUSH OF WATER MAIN TO BE PERFORMED AND WITNESSED BY CITY INSPECTOR.



LOCATION MAP

NTS

LEGEND:

PROPOSED ELEVATION (NAVD)	PROPOSED MANHOLE
EXISTING ELEVATION (NAVD)	WATER MAIN
PROPOSED CATCH BASIN	SANITARY FORCE MAIN
PROPOSED PLUG	VALVE
TEE	FIRE HYDRANT
WATER METER	SIAMSE CONNECTION
DOUBLE DETECTOR CHECK W/ WAFER CHECK VALVE ON DOWNSTREAM SIDE	CLEANOUT
REDUCED PRESSURE BACKFLOW PREVENTOR	EDGE OF PROPOSED PAVEMENT (ASPHALT)
DIRECTIONAL FLOW ARROW AND GRAVITY SEWER	DIRECTION OF SURFACE DRAINAGE
	SAMPLE POINT
	EXIST. WATER MAIN
	EXIST. UTILITY LINE TO BE ABANDONED IN PLACE

WATER AND SEWER NOTES:

- CONTRACTOR SHALL PROVIDE FITTINGS (WYES, TEES, REDUCERS, ETC.) AS REQUIRED TO FURNISH A COMPLETE WORKING SYSTEM BASED ON THE LAYOUT SHOWN ON THESE PLANS.
- CONTRACTOR SHALL PROVIDE ANY EASEMENT DOCUMENTATION AROUND MH'S, BACKFLOW PREVENTORS, MAINLINES, METERS, ETC. AS REQUIRED BY THE CITY SO THAT THE OWNER MAY RECORD ANY EASEMENTS WITH THE CITY. CONTRACTOR'S SURVEYOR MUST COORDINATE WITH THE CITY AND PROVIDE ALL NECESSARY EASEMENT DOCUMENTATION TO THE OWNER. THE OWNER MUST THEN PROVIDE ALL RECORDED UTILITY EASEMENT DOCUMENTS TO THE CITY PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE CITY UTILITY DEPT. ANY WATER MAIN CONNECTIONS, UTILITY CONNECTIONS AND SCHEDULE MUST BE APPROVED BY THE CITY PRIOR TO IMPLEMENTATION. THE CONTRACTOR IS REQUIRED TO PAY FOR ALL COSTS ASSOCIATED WITH THIS WORK REGARDLESS OF WHETHER OR NOT THE UTILITY OR THE CONTRACTOR PERFORMS THE WORK.
- SITE UTILITY CONTRACTOR SHALL COORDINATE WITH THE BUILDING PLUMBING CONTRACTOR FOR EXACT LOCATION OF CONNECTION POINTS BETWEEN THE BUILDING AND SITE WATER, SEWER AND DRAINAGE LINES (VERTICALLY AND HORIZONTALLY).
- W.M./S.S. MAINS TO BE LOCATED 5' CLEAR OF ALL OBSTRUCTIONS, POLES, BOXES, CULVERTS, ETC. W.M./S.S. MAINS MUST BE LOCATED 5' FROM TREES. F.H.'S MUST HAVE A 7.5' CLEAR RADIUS FROM ALL OBSTRUCTIONS.
- PRESSURE TESTING AND CERTIFICATION SHALL FOLLOW THE FDEP, CITY OF POMPANO BEACH PUBLIC WORKS DEPARTMENT, AND FLYNN ENGINEERING SERVICES STANDARDS.
- 18" VERTICAL CLEARANCE PREFERRED FOR ALL UTILITY CROSSINGS. MINIMUM OF 12" REQUIRED FOR WM-WM CROSSING AND WM-FM CROSSING. CONTRACTOR SHALL CALL 811 AND LOCATE UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. ALL SANITARY SEWER LATERALS SHALL CROSS UNDER WATER MAINS WHERE ABLE. IF THE WATER MAIN MUST CROSS BELOW THE SEWER, A MINIMUM OF 12" SEPARATION SHALL BE PROVIDED. A 20 FOOT SECTION OF DUCTILE IRON PIPE WATER MAIN CENTERED CROSSING IS REQUIRED IF LESS THAN 18" VERTICAL SEPARATION OCCURS BETWEEN SEWER AND WATER MAIN.
- ALL UNDERGROUND UTILITIES TO BE REMOVED SHALL BE CAPPED OFF AT THE POINT NEAREST TO THE UTILITIES OR DRAINAGE LINES THAT WILL REMAIN IN SERVICE. NOTE: THE ENGINEER OF RECORD BEFORE REMOVING ANY UTILITIES THAT ARE CURRENTLY IN SERVICE, THE CONTRACTOR SHALL NOT REMOVE ANY UTILITY SERVICE TO ANY EXISTING BUILDING THAT WILL REMAIN AND SHALL DIG UP AND COMPLETELY REMOVE AND/OR ABANDON ANY UTILITY SERVICE THAT IS NO LONGER REQUIRED. THE CONTRACTOR SHALL INFORM AND CONSULT THE ENGINEER OF RECORD PRIOR TO REMOVING ANY LINES.
- CONTRACTOR SHALL VERIFY EXISTING WATER MAIN LOCATION AND ELEVATION AND NOTIFY THE ENGINEER OF ANY DIFFERENCE FROM THE DESIGN PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
- CLEANOUTS AND MANHOLES ON SANITARY LINES ARE TO BE ADJUSTED TO BE FLUSH WITH FINISHED GRADE.
- PROPOSED FIRE LINES (I.E. MAINS, SERVICES, SIAMSE CONNECTION LINES, ETC.) TO BE INSTALLED BY A STATE LICENSED FIRE LINE CONTRACTOR PER F.S. 633.
- FIRE LINES TO BE INSPECTED BY A CERTIFIED FIRE LINE INSPECTOR.
- STATE LICENSED FIRE LINE CONTRACTOR, UPON COMPLETION OF REQUIRED TESTING, SHALL ISSUE A "LICENSED UNDERGROUND TEST CERTIFICATE" PRIOR TO ACCEPTANCE FOR PLACING FIRE LINE INTO SERVICE.
- CORING INTO EXISTING MANHOLE MAY RESULT IN COMPLETE RECONSTRUCTION OF EXISTING MANHOLE AT CONTRACTOR'S EXPENSE IF MANHOLE IS IN A DETERIORATED CONDITION.
- ON-SITE MANHOLES TO HAVE STANDARD SANITARY SEWER USF 420 COVER.
- THE MINIMUM COVER DEPTHS FOR PVC AND DIP SEWER MAINS ARE RESPECTIVELY 36 INCHES AND 30 INCHES.
- EXFILTRATION TESTING AND LAMPING OF THE GRAVITY SEWER SHALL BE COORDINATED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF THE PROJECT.
- ALL WATER AND SEWER WORK IN THE PUBLIC RIGHT-OF-WAY, PRIVATE THOROUGHFARES OR UTILITY EASEMENT MUST BE PERFORMED BY A LICENSED ENGINEERING CONTRACTOR OR CERTIFIED UNDERGROUND UTILITY AND EXCAVATION CONTRACTOR IN BROWARD COUNTY.
- FINAL SEWER MANHOLE RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH FINAL PAVEMENT ELEVATIONS AND MATCH PAVEMENT SLOPE AS APPLICABLE.
- ANY EXISTING WATER AND/OR SEWER CONNECTION TO THE SUBJECT LOTS NOT UTILIZED MUST BE CUT AND CAPPED AT THE WATER MAIN IF A WATER SERVICE AND CUT OUT AND SLEEVED IF A SEWER LATERAL. SEWER LATERALS THAT ARE CUT AND CAPPED MUST BE AS-BUILT PER OUR ENGINEERING AS-BUILT STANDARDS. HOW TO RETIRE OLD LATERALS: IF THE EXISTING MAIN IS CLAY PIPE AND A CIPP LINER IS INSTALLED, (INSTALL A SECTIONAL LINER IN THE MAIN OVER THE OLD LATERAL, THUS ELIMINATING THE LATERAL). IF THE EXISTING MAIN IS A CLAY PIPE, (DIG DOWN OLD CLAY PIPE, SLEEVE BACK IN WITH PVC AND CITY-APPROVED COUPLINGS). IF THE EXISTING MAIN IS CLAY PIPE, YOU MUST RETIRE MULTIPLE LATERALS FOR A PROJECT. (IT MAY BE CHEAPER FOR THE CONTRACTOR TO INSTALL A CITY-APPROVED CIPP LINER FROM MANHOLE TO MANHOLE AND NOT CUT OUT THE LATERALS THAT THEY ARE RETIRING). IF THE EXISTING MAIN IS PVC PIPE, (REMOVE THE LATERAL PIPE FROM THE PVC WYE FITTING AND INSTALL A PLUG INTO THE WYE. INSTALL A GREEN LOCATING MARKING BALL AT THE LATERAL LOCATION, NO DEEPER THAN 4 FT. BELOW GRADE).
- PLEASE NOTE ANY PROPOSED METERED SERVICE 3" OR LARGER ARE NOT STOCK ITEMS. THESE METERS ARE SUBJECT TO AN ORDER LEAD TIME. PLEASE ORDER THESE ITEMS IN A TIMELY MANNER TO ENSURE THAT THE SERVICES ARE AVAILABLE FOR INSTALLATION.

This document has been digitally signed and sealed by

Blake M. Kidwell on 05/27/2025.

Printed copies of this document are not considered signed and sealed.

FLYNN ENGINEERING

241 COMMERCIAL BLVD., LAUDERDALE-BY-SEA, FL 33308

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ESP 6578

Sheet Title

1600 S FEDERAL HIGHWAY (MIXED-USE PROJECT)

1600 S FEDERAL HIGHWAY

POMPANO BEACH, FLORIDA 33062

Job Title

CONCEPTUAL WATER & SEWER PLAN

North Arrow

NORTH

Revisions

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Phase:

PERMIT DOCUMENTS

Professional Engineer Seal

BLAKE M. KIDWELL

License No. 91488

STATE OF FLORIDA

PROFESSIONAL ENGINEER

Scale:

1"=20'

Job No. 24-1832.00

Date 12/18/24

Plot Date 05/23/25

Drawn by BMK

Proj. Mgr. BMK

Sheet No. C3

Appr. by BMK

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