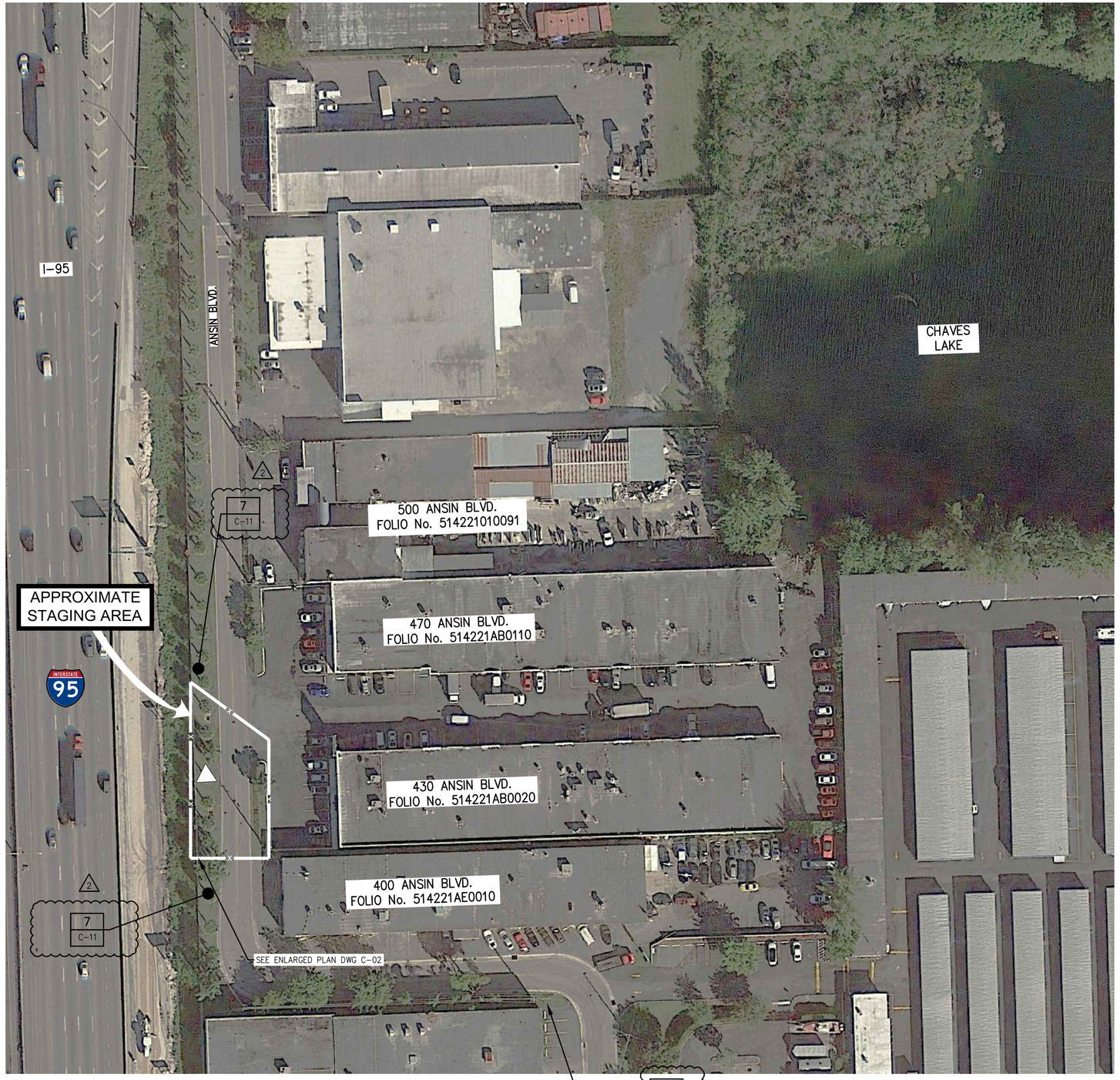

N

GENERAL NOTES:

1. THE SIZE AND LAYOUT OF THE CONSTRUCTION STAGING AREA SHOWN IS FOR CONCEPTUAL PURPOSES. THE ACTUAL SIZE AND LAYOUT OF THE STAGING AREA SHALL BE DESIGNED BY THE CONTRACTOR.
2. ADDITIONAL STAGING AREA AT THE OWNER'S "SLUDGE HANDLING AREA" IS AVAILABLE WITHIN 1 MILE OF THE WELL SITE ON THE NORTH SIDE OF CHAVES LAKE.
3. STAGING AREA SHALL BE WITHIN 50' RIGHT-OF-WAY OF ANSIN BOULEVARD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE STAGING AREA TO ITS ORIGINAL CONDITION (FURNISH AND INSTALL GRADING, SOD, LANDSCAPING, ASPHALT PAVEMEN, ETC.) AT THE END OF CONSTRUCTION AND PRIOR TO FINAL INSPECTION AND ACCEPTANCE BY THE OWNER.
5. SUCH DAMAGE INCLUDES BUT IS NOT LIMITED TO CRACKING AND RUTTING OF PAVED SURFACES AND CURBS, DIRT AND DEBRIS, DAMAGE TO PAVEMENT MARKINGS OR COMPACTION OF LANDSCAPE AREAS.

LEGEND:

▲ APPROXIMATE LOCATION OF PROPOSED PRODUCTION WELL PW-9

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www.callsunshine.com

1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.

UTILITY LOCATES

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN L.M.S.
CHECKED J.N.M.
PROJ. ENGR. G.A.B.

GEORGE A. BROWN P.E.
No. 56076

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: -
ENGINEERS PROJECT: 40612-030
CAD REFERENCE: 40612-030BP4-C01

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.
CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9
STAGING PLAN

DATE: FEBRUARY 2020
SHEET: 4 OF 42
DRAWING: C-01

BID SET

PLOT DATE: 3/12/2020 9:42 AM BY: MNIEMIEC

XREFs= C:\bms\hazen-pw\hs-mniemiec\dms49216\40612-030-BP4TB,..\dms49208\SP-ST-X

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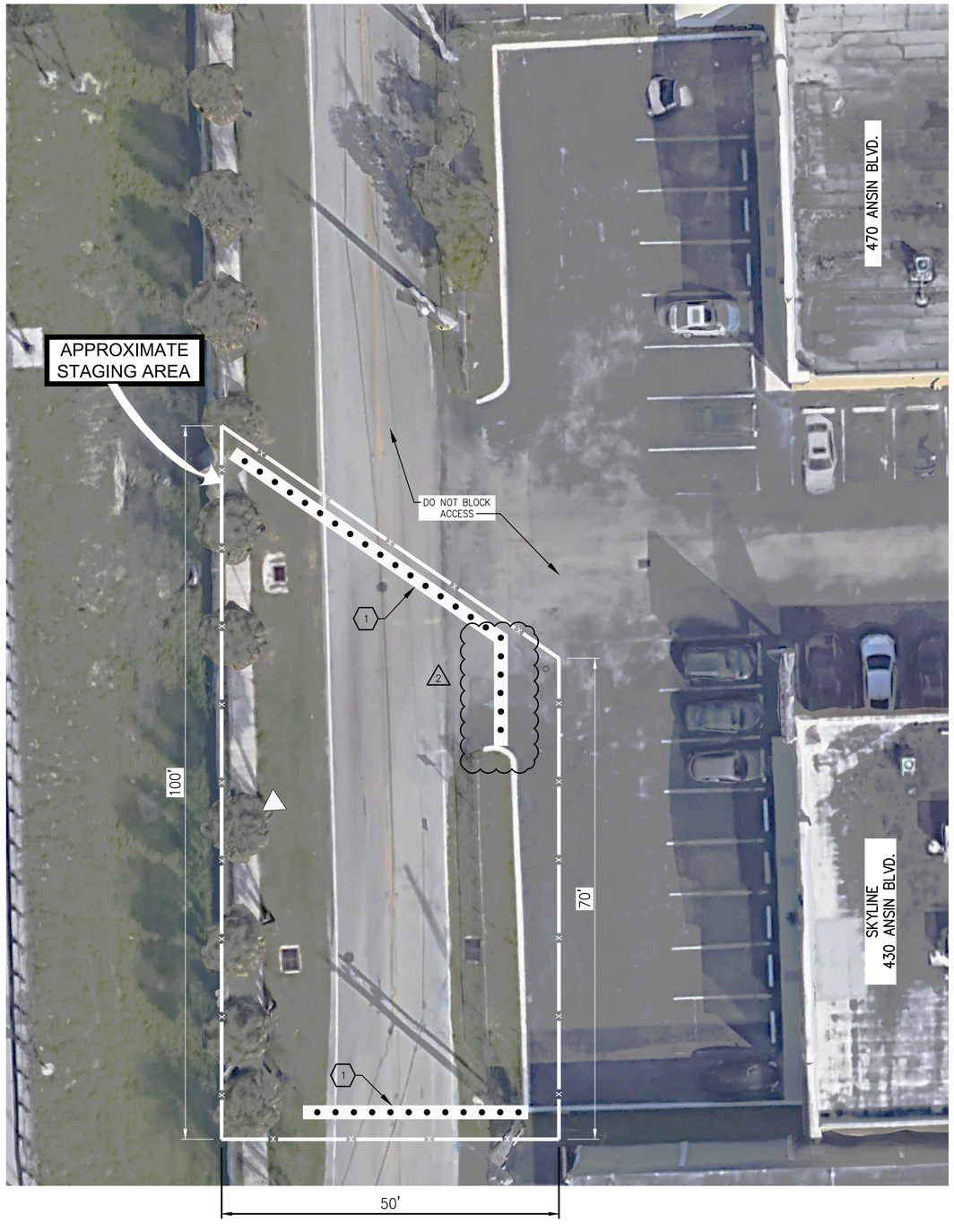

N

2

MAINTENENCE OF TRAFFIC NOTES:

1. IT IS THE ENGINEER-OF-RECORD'S DESIGN INTENT THAT THE TRAFFIC BARRIERS SHOWN ON THIS DRAWING BE LEFT IN PLACE CONTINUOUSLY DURING THE WELL DRILLING PHASE AND OTHER CONSTRUCTION PHASES AS DEEMED NECESSARY BY THE CONTRACTOR.
2. LEAVING THE BARRIERS IN PLACE FOR AN EXTENDED DURATION WILL RESULT IN CLOSING THE ROAD (AND SIDEWALK) IN THE VICINITY OF THE CONSTRUCTION SITE FROM VEHICLE AND PEDESTRIAN TRAFFIC.
3. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF HALLANDALE BEACH ENGINEERING DIVISION IN ACCORDANCE WITH TECHNICAL SPECIFICATION 01570.
4. THE CONTRACTOR'S TRAFFIC CONTROL PLAN SHALL REQUEST PERMISSION TO LEAVE THE TRAFFIC BARRIERS IN PLACE FOR AN EXTENDED DURATION.
5. THE TRAFFIC CONTROL PLAN SHALL DEFINE DETOUR REQUIREMENTS (SEE TECHNICAL SPECIFICATION 01570) TO ENSURE THAT VEHICLES AND PEDESTRIANS CAN REACH BUSINESSES ON EITHER SIDE OF THE REQUESTED TEMPORARY ROAD CLOSURE.

GENERAL NOTES:

1. THE SIZE AND LAYOUT OF THE CONSTRUCTION STAGING AREA LIMITS SHOWN IS FOR CONCEPTUAL PURPOSES. THE ACTUAL SIZE AND LAYOUT OF THE STAGING AREA SHALL BE DESIGNED BY THE CONTRACTOR.
2. ADDITIONAL STAGING AREA AT THE OWNER'S "SLUDGE HANDLING AREA" IS AVAILABLE WITHIN 1 MILE OF THE WELL SITE ON THE NORTH SIDE OF CHAVES LAKE.
3. STAGING AREA SHALL BE WITHIN 50' RIGHT-OF-WAY OF ANSIN BOULEVARD.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE STAGING AREA TO ITS ORIGINAL CONDITION (FURNISH AND INSTALL GRADING, SOD, LANDSCAPING, ASPHALT PAVEMEN, ETC.) AT THE END OF CONSTRUCTION AND PRIOR TO FINAL INSPECTION AND ACCEPTANCE BY THE OWNER.
5. SUCH DAMAGE INCLUDES BUT IS NOT LIMITED TO CRACKING AND RUTTING OF PAVED SURFACES AND CURBS, DIRT AND DEBRIS, DAMAGE TO PAVEMENT MARKINGS OR COMPACTION OF LANDSCAPE AREAS.

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1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.

UTILITY LOCATES

KEYED NOTE:

1 FURNISH AND INSTALL PLASTIC WATER FILLED BARRIER.

LEGEND:

APPROXIMATE LOCATION OF PROPOSED WELL PRODUCTION PW-9

PHOTO # | DWG # — ARROW INDICATES DIRECTION AND POINT OF VIEW OF PHOTO

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN L.M.S.
CHECKED J.N.M.
PROJ. ENGR. G.A.B.

GEORGE A. BROWN P.E.
No. 56076

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C02

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.
CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9
ENLARGED STAGING PLAN

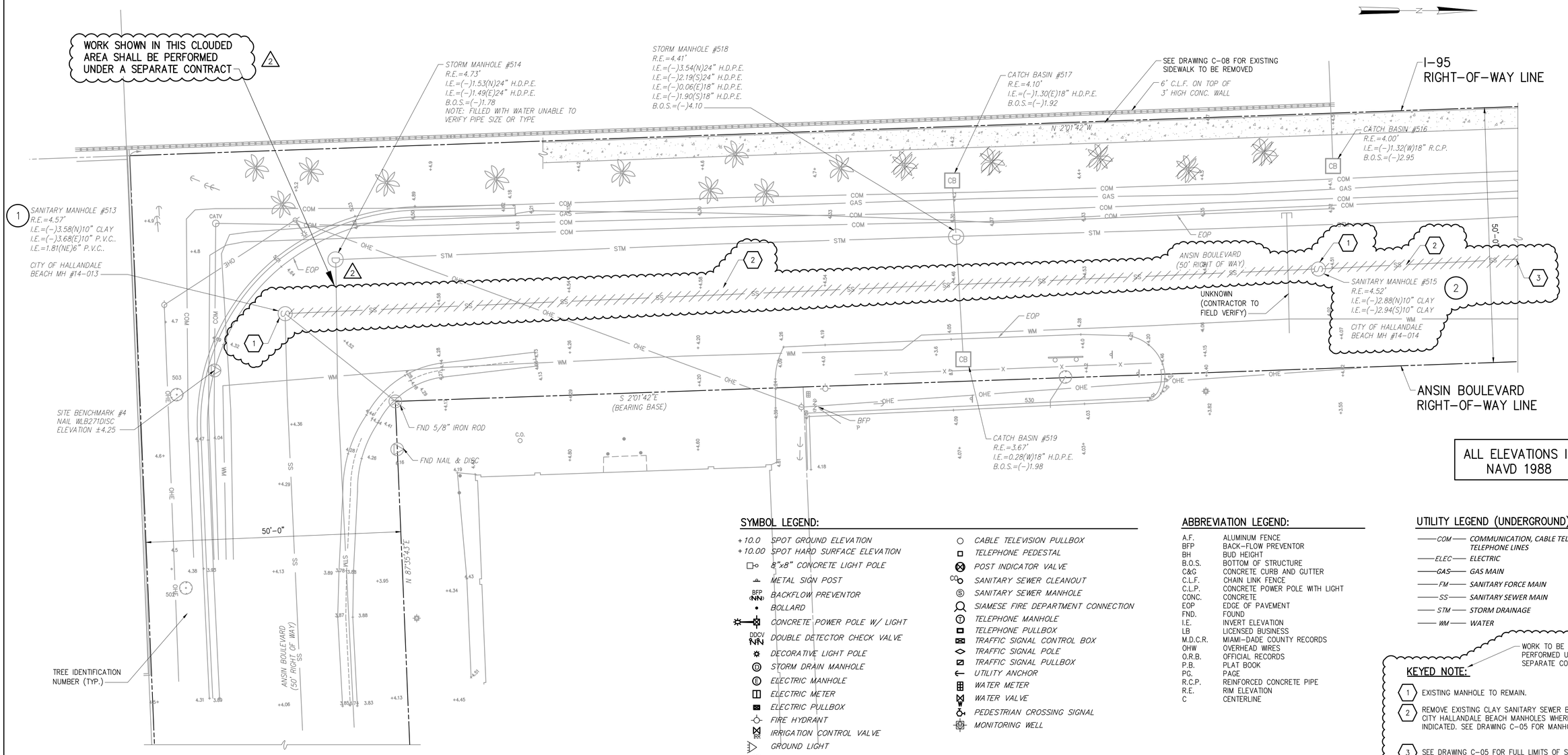
DATE: FEBRUARY 2020
SHEET: 5 OF 42
DRAWING: C-02

BID SET

PLOT DATE: 3/12/2020 9:59 AM BY: MNIEMIEC

XREFs= ..\dms49216\40612-030-BP4TB

File = C:\bms\hazen-pw\hs-mniemiec\dms49209\40612-030BP4-C02 Saved by MNiemiec Save date = 3/12/2020 9:32 AM



SYMBOL LEGEND:

- +10.0 SPOT GROUND ELEVATION
- +10.00 SPOT HARD SURFACE ELEVATION
- 8"x8" CONCRETE LIGHT POLE
- METAL SIGN POST
- BFP (NN) BACKFLOW PREVENTOR
- BOLLARD
- CONCRETE POWER POLE W/ LIGHT
- DDCV (NN) DOUBLE DETECTOR CHECK VALVE
- DECORATIVE LIGHT POLE
- STORM DRAIN MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PULLBOX
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- GROUND LIGHT
- SHADE TREE
- PALM TREE
- CABLE TELEVISION PULLBOX
- TELEPHONE PEDESTAL
- POST INDICATOR VALVE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SIAMESE FIRE DEPARTMENT CONNECTION
- TELEPHONE MANHOLE
- TELEPHONE PULLBOX
- TRAFFIC SIGNAL CONTROL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL PULLBOX
- UTILITY ANCHOR
- WATER METER
- WATER VALVE
- PEDESTRIAN CROSSING SIGNAL
- MONITORING WELL

ABBREVIATION LEGEND:

A.F.	ALUMINUM FENCE
BFP	BACK-FLOW PREVENTOR
BH	BUD HEIGHT
B.O.S.	BOTTOM OF STRUCTURE
C&G	CONCRETE CURB AND GUTTER
C.L.F.	CHAIN LINK FENCE
C.L.P.	CONCRETE POWER POLE WITH LIGHT
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
FND.	FOUND
I.E.	INVERT ELEVATION
LB	LICENSED BUSINESS
M.D.C.R.	MIAMI-DADE COUNTY RECORDS
OHW	OVERHEAD WIRES
O.R.B.	OFFICIAL RECORDS
P.B.	PLAT BOOK
PG.	PAGE
R.C.P.	REINFORCED CONCRETE PIPE
R.E.	RIM ELEVATION
C	CENTERLINE

UTILITY LEGEND (UNDERGROUND):

- COM — COMMUNICATION, CABLE TELEVISION TELEPHONE LINES
- ELEC — ELECTRIC
- GAS — GAS MAIN
- FM — SANITARY FORCE MAIN
- SS — SANITARY SEWER MAIN
- STM — STORM DRAINAGE
- WM — WATER

KEYED NOTE:

WORK TO BE PERFORMED UNDER A SEPARATE CONTRACT

1. EXISTING MANHOLE TO REMAIN.
2. REMOVE EXISTING CLAY SANITARY SEWER BETWEEN CITY HALLANDALE BEACH MANHOLES WHERE INDICATED. SEE DRAWING C-05 FOR MANHOLE 3
3. SEE DRAWING C-05 FOR FULL LIMITS OF SANITARY SEWER REMOVAL.

LEGEND:

EXISTING

TO BE REMOVED

1"=10'-0" 10 5 0 10'

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

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1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.
2. THE ABOVE NOTICE SHALL APPEAR ON THE COVER SHEET OF ALL CONSTRUCTION PLANS SUBMITTED TO THE COUNTY.

UTILITY LOCATES

MANHOLE SCHEDULE

MARK	CITY OF HALLANDALE BEACH SANITARY MANHOLE NUMBER	MANHOLE NUMBER FROM CRAVEN THOMPSON SURVEY
1	14-013	# 513
2	14-014	# 515
3	14-015	NOT APPLICABLE

SCHEDULE OF TREES TO BE RELOCATED

TREE ID No.	TREE TYPE	CALIPER	BUD HEIGHT
673	SABAL PALM	10"	24'
674	SABAL PALM	10"	20'
675	SABAL PALM	12"	22'
676	SABAL PALM	10"	26'
077	SABAL PALM	12"	26'

NOTE:

1. TREES TO BE RELOCATED ABOUT 1,000 FEET NORTH IN THE SWALE AT LOCATIONS SELECTED BY THE OWNER.

NOTE:

1. THIS DRAWINGS IS BASED ON THE TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES INC. PROJECT No. 14-0063-001-01.
2. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND REFERENCED TO NATIONAL GEODETIC SURVEY (NGS) BENCHMARK PID #AC4695, NGS BRASS DISC STAMPED "MORRIS No. 4", SET IN CONCRETE SIDEWALK ALONG WEST SIDE OF A PARKING LOT152' WEST OF THE CENTERLINE OF NW 9 AVENUE, SOUTHEAST OF THE SOUTHEAST CORNER OF HALLANDALE HIGH SCHOOL. ELEVATION = 8.72.

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN L.M.S.
CHECKED J.N.M.
PROJ. ENGR. G.A.B.

GEORGE A. BROWN P.E.
No. 56076

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C03

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.

CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

EXISTING SITE PLAN

DATE: FEBRUARY 2020
SHEET: 6 OF 42
DRAWING: C-03

BID SET

PLOT DATE: 3/12/2020 9:42 AM BY: MNIEMIEC

XREFs= C:\bms\hazen-pw\hs-mniemiec\dms49216\40612-030-BP4TB,C:\bms\hazen-pw\hs-mniemiec\dms49208\SP-ST-X

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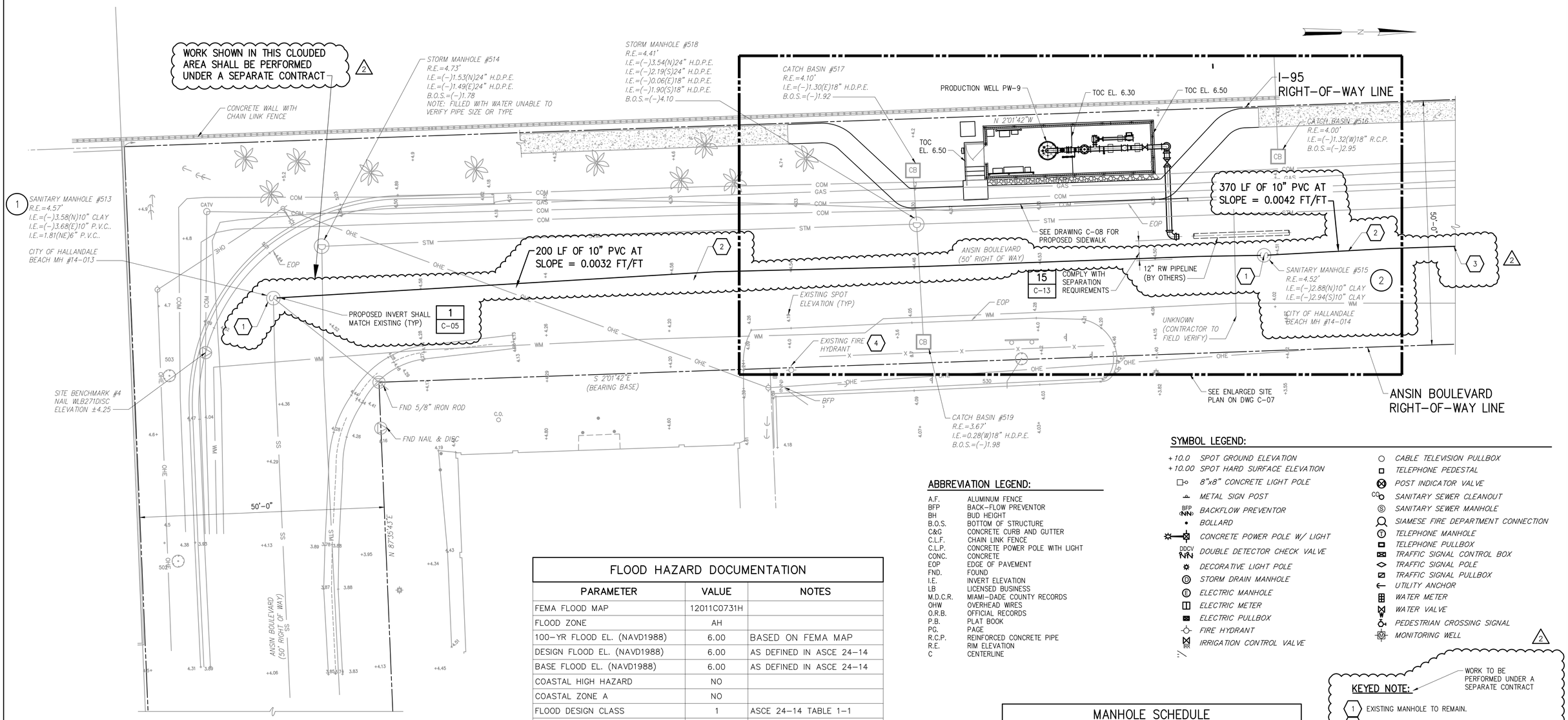

SYMBOL LEGEND:

- +10.0 SPOT GROUND ELEVATION
- +10.00 SPOT HARD SURFACE ELEVATION
- 8"x8" CONCRETE LIGHT POLE
- METAL SIGN POST
- BFP (NN) BACKFLOW PREVENTOR
- BOLLARD
- CONCRETE POWER POLE W/ LIGHT
- DDCV (NN) DOUBLE DETECTOR CHECK VALVE
- DECORATIVE LIGHT POLE
- STORM DRAIN MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PULLBOX
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- CABLE TELEVISION PULLBOX
- TELEPHONE PEDESTAL
- POST INDICATOR VALVE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SIAMESE FIRE DEPARTMENT CONNECTION
- TELEPHONE MANHOLE
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C.L.P.	CONCRETE POWER POLE WITH LIGHT
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
FND.	FOUND
I.E.	INVERT ELEVATION
LB	LICENSED BUSINESS
M.D.C.R.	MIAMI-DADE COUNTY RECORDS
OHW	OVERHEAD WIRES
O.R.B.	OFFICIAL RECORDS
P.B.	PLAT BOOK
PG.	PAGE
R.C.P.	REINFORCED CONCRETE PIPE
R.E.	RIM ELEVATION
C	CENTERLINE

FLOOD HAZARD DOCUMENTATION

PARAMETER	VALUE	NOTES
FEMA FLOOD MAP	12011C0731H	
FLOOD ZONE	AH	
100-YR FLOOD EL. (NAVD1988)	6.00	BASED ON FEMA MAP
DESIGN FLOOD EL. (NAVD1988)	6.00	AS DEFINED IN ASCE 24-14
BASE FLOOD EL. (NAVD1988)	6.00	AS DEFINED IN ASCE 24-14
COASTAL HIGH HAZARD	NO	
COASTAL ZONE A	NO	
FLOOD DESIGN CLASS	1	ASCE 24-14 TABLE 1-1
MINIMUM FLOOR EL. CRITERION REQUIRED VALUE DESIGN VALUE COMPLIES	 DFE 6.00 6.50 YES	ASCE 24-14 TABLE 2-1
MINIMUM EQUIPMENT EL. CRITERION REQUIRED VALUE DESIGN VALUE COMPLIES	 DFE 6.00 7.40 YES	ASCE 24-14 TABLE 7-1

ASCE 24-14: AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARD TITLED "FLOOD RESISTANT DESIGN AND CONSTRUCTION".
NAVD: NORTH AMERICAN VERTICAL DATUM

MANHOLE SCHEDULE

MARK	CITY OF HALLANDALE BEACH SANITARY MANHOLE NUMBER	MANHOLE NUMBER FROM CRAVEN THOMPSON SURVEY
1	14-013	# 513
2	14-014	# 515
3	14-015	NOT APPLICABLE

ALL ELEVATIONS IN NAVD 1988

KEYED NOTE:

WORK TO BE PERFORMED UNDER A SEPARATE CONTRACT

1. EXISTING MANHOLE TO REMAIN.
2. REPLACE EXISTING SANITARY SEWER. SEE DRAWING C-05
3. SEE DRAWING C-05 FOR FULL LIMITS OF SANITARY SEWER REPLACEMENT.
4. INSTALL OWNER SUPPLIED FLOW METER AT HYDRANT. FURNISH AND INSTALL BACKFLOW PREVENTER AND ALL NECESSARY TEMPORARY VALVES AND PIPING TO SUPPLY WATER FOR CONSTRUCTION.

LEGEND:
EXISTING
PROPOSED

1"=10'-0" 10 5 0 10'

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
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www.callsunshine.com

1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.

UTILITY LOCATES

UTILITY LEGEND (UNDERGROUND):

- COM — COMMUNICATION, CABLE TELEVISION TELEPHONE LINES
- ELEC — ELECTRIC
- GAS — GAS MAIN
- FM — SANITARY FORCE MAIN
- SS — SANITARY SEWER MAIN
- STM — STORM DRAINAGE
- WM — WATER

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN L.M.S.
CHECKED J.N.M.
PROJ. ENGR. G.A.B.

GEORGE A. BROWN P.E.
No. 56076

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C04

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.
CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

PROPOSED SITE PLAN

DATE: FEBRUARY 2020
SHEET: 7 OF 42
DRAWING: C-04

BID SET

PLOT DATE: 3/12/2020 9:42 AM BY: MNIEMIEC

XREFs= C:\bms\hazen-pw\hs-mniemiec\dms49216\40612-030-BP4TB,C:\bms\hazen-pw\hs-mniemiec\dms49208\PW-PT-MP,C:\bms\hazen-pw\hs-mniemiec\dms49208\PW-PT-SP,C:\bms\hazen-pw\hs-mniemiec\dms49208\SP-ST-X,C:\bms\hazen-pw\hs-mniemiec\dms49208\PW-PT-EP,C:\bms\hazen-pw\hs-mniemiec\dms49208\PW-SF-SP,C:\bms\hazen-pw\hs-mniemiec\dms49208\SP-YP-P

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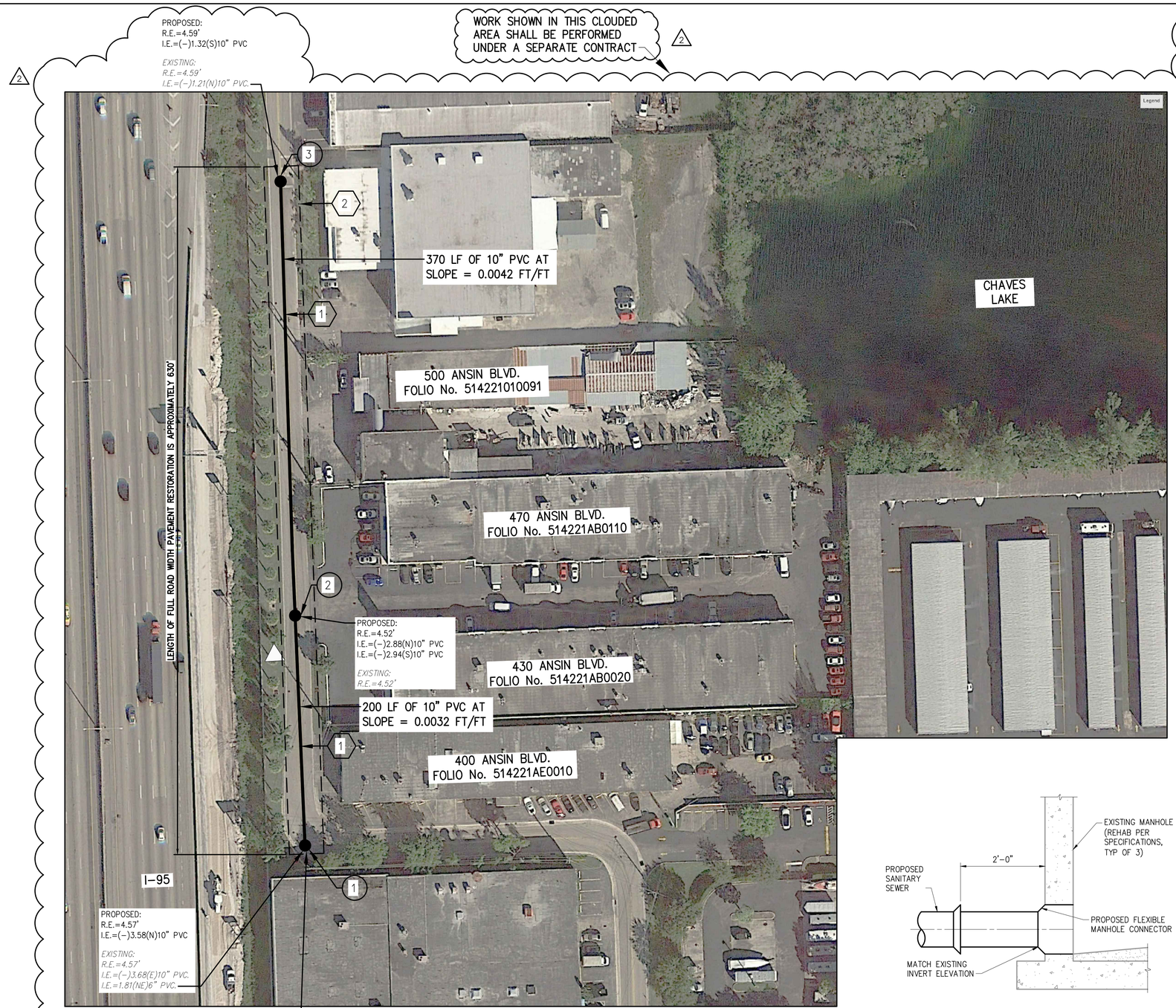

SANITARY SEWER REPLACEMENT PLAN

NTS

SEE DRAWING C–06 FOR PROFILE OF PROPOSED SEWER

MANHOLE SCHEDULE		
MARK	CITY OF HALLANDALE BEACH SANITARY MANHOLE NUMBER	MANHOLE NUMBER FROM CRAVEN THOMPSON SURVEY
1	14–013	# 513
2	14–014	# 515
3	14–015	NOT APPLICABLE

GENERAL NOTES:

1. PROPOSED SANITARY SEWER PIPE INVERTS SHALL MATCH EXISTING INVERTS.
2. RESTRAIN ALL JOINTS.
3. PRESSURE TEST PROPOSED SANITARY SEWER TO 150–PSI.

KEYED NOTE:

1. REMOVE THE EXISTING GRAVITY SANITARY SEWER PIPE (ASSUMED TO BE 10" DIAMETER CLAY) AND REPLACE WITH PVC PIPE THAT CONFORMS TO THE FOLLOWING:
   A. COMPLY WITH AWWA C900
   B. PRESSURE CLASS 165; DR=25
   C. TEST PIPE FOLLOWING INSTALLATION (BUT PRIOR TO FINAL CONNECTION WITH THE MANHOLES) TO 150 PSI TEST PRESSURE
   D. MATCH DIAMETER AND SLOPE OF THE EXISTING PIPE BEING REPLACED. FOR THE PURPOSE OF BIDDING ASSUME THAT THE REPLACEMENT PIPE WILL BE 10" DIAMETER.
2. RESTORE PAVEMENT FOR FULL ROAD WIDTH AS INDICATED IN THE CIVIL DETAILS.

NOTES:

1. FLEXIBLE MANHOLE CONNECTOR SHALL BE KOR–N–SEAL OR EQUAL.
2. ENLARGE EXISTING HOLE IN MANHOLE WALL IF NEEDED FOR THE PROPOSED 10–INCH SANITARY SEWER.
3. USE NON–SHRINK GROUT TO CREATE A SMOOTH SURFACE IN THE HOLE OF THE MANHOLE WALL AS RECOMMENDED BY THE BOOT MANUFACTURER.
4. PATCH ANY VOIDS (BUG HOLES) WITH NON–SHRINK GROUT.
5. REMOVE ANY WIRE PROTRUDING UP INTO THE HOLE AND PATCH WITH NON–SHRINK GROUT.

DETAIL 1 – NTS

LEGEND:

▲ APPROXIMATE LOCATION OF PROPOSED PRODUCTION WELL PW–9

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1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.

UTILITY LOCATES

LEGEND:

EXISTING
PROPOSED

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN L.M.S.
CHECKED J.N.M.
PROJ. ENGR. G.A.B.

GEORGE A. BROWN P.E.
No. 56076

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612–030
CAD REFERENCE:40612–030BP4–C05

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CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW–9

PROPOSED SANITARY SEWER REPLACEMENT PLAN

DATE: FEBRUARY 2020
SHEET: 8 OF 42
DRAWING: C–05

BID SET

PLOT DATE: 3/12/2020 9:43 AM BY: MNIEMIEC

XREFs= C:\bms\hazen-pw\hs-mniemiec\dms49216\40612-030-BP4TB

File = C:\bms\hazen-pw\hs-mniemiec\dms49209\40612-030BP4-C05 Saved by tbacas Save date = 3/3/2020 11:42 AM

1	2
C-10	C-10

PLAN
1"=20'

2

WORK SHOWN IN THIS CLOUDED AREA SHALL BE PERFORMED UNDER A SEPARATE CONTRACT

2

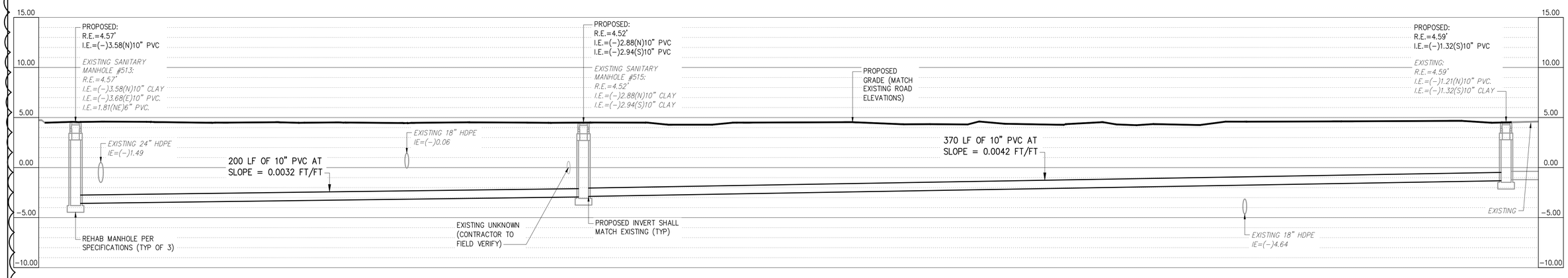
LEGEND

EXISTING

PROPOSED

1"=20'-0" 20 10 0 20'

1"=5'-0" 5 2.5 0 5'



PROFILE
HORI: 1"=20'
VERT: 1"=5'

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED G.A.B.
DRAWN T.B.
CHECKED J.N.M.
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GEORGE A. BROWN P.E.
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Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: -
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C06

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

PROPOSED SANITARY SEWER PLAN AND PROFILE

DATE: FEBRUARY 2020
SHEET: 9 OF 42
DRAWING: C-06

BID SET

PLOT DATE: 3/12/2020 9:43 AM BY: MNIEMIEC

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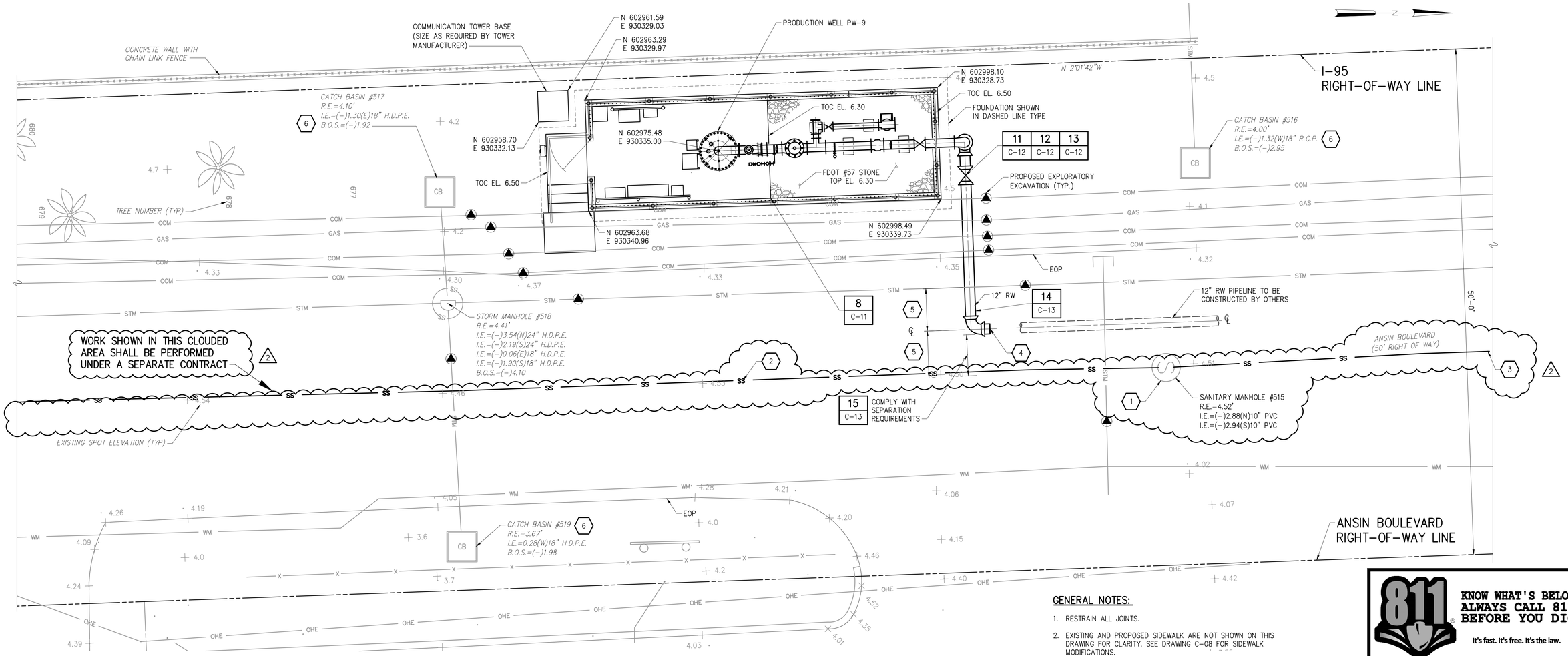

SYMBOL LEGEND:

- +10.0 SPOT GROUND ELEVATION
- +10.00 SPOT HARD SURFACE ELEVATION
- 8"x8" CONCRETE LIGHT POLE
- METAL SIGN POST
- BFP (NN) BACKFLOW PREVENTOR
- BOLLARD
- CONCRETE POWER POLE W/ LIGHT
- DDCV (NN) DOUBLE DETECTOR CHECK VALVE
- DECORATIVE LIGHT POLE
- STORM DRAIN MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PULLBOX
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- GROUND LIGHT
- SHADE TREE
- PALM TREE
- CABLE TELEVISION PULLBOX
- TELEPHONE PEDESTAL
- POST INDICATOR VALVE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SIAMESE FIRE DEPARTMENT CONNECTION
- TELEPHONE MANHOLE
- TELEPHONE PULLBOX
- TRAFFIC SIGNAL CONTROL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL PULLBOX
- UTILITY ANCHOR
- WATER METER
- WATER VALVE
- PEDESTRIAN CROSSING SIGNAL
- MONITORING WELL

ABBREVIATION LEGEND:

A.F.	ALUMINUM FENCE
BFP	BACK-FLOW PREVENTOR
BH	BUD HEIGHT
B.O.S.	BOTTOM OF STRUCTURE
C&G	CONCRETE CURB AND GUTTER
C.L.F.	CHAIN LINK FENCE
C.L.P.	CONCRETE POWER POLE WITH LIGHT
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
FND.	FOUND
I.E.	INVERT ELEVATION
LB	LICENSED BUSINESS
M.D.C.R.	MIAMI-DADE COUNTY RECORDS
OHW	OVERHEAD WIRES
O.R.B.	OFFICIAL RECORDS
P.B.	PLAT BOOK
PG.	PAGE
R.C.P.	REINFORCED CONCRETE PIPE
R.E.	RIM ELEVATION
C	CENTERLINE

UTILITY LEGEND (UNDERGROUND):

- COM — COMMUNICATION, CABLE TELEVISION TELEPHONE LINES
- ELEC — ELECTRIC
- GAS — GAS MAIN
- FM — SANITARY FORCE MAIN
- SS — SANITARY SEWER MAIN
- STM — STORM DRAINAGE
- WM — WATER

KEYED NOTE:

1. EXISTING MANHOLE TO REMAIN. REHAB MANHOLE PER SPECIFICATIONS.
2. REPLACE EXISTING SANITARY SEWER.
3. SEE DRAWING C-05 FOR FULL LIMITS OF SANITARY SEWER REPLACEMENT.
4. MECHANICAL JOINT PLUG RESTRAINED WITH MEGA-LUG SHOWN. CONTRACTOR SHALL REMOVE PLUG AND MAKE FINAL CONNECTION WITH THE 10-INCH RAW WATER PIPELINE CONSTRUCTED BY OTHERS. FURNISH AND INSTALL A SOLID SLEEVE COUPLING, A MINIMUM OF 10-FEET OF 10-INCH RAW WATER PIPE AND RESTRAINING DEVICES FOR ALL JOINTS.
5. CENTER THE PROPOSED 10-INCH RAW WATER PIPE BETWEEN THE EXISTING STORM DRAINAGE PIPE AND THE PROPOSED SANITARY SEWER.
6. PROTECT ALL CATCH BASINS WITH STRAW BALE SEDIMENT FILTERS. AT COMPLETION OF CONSTRUCTION REMOVE ALL DEBRIS AND SEDIMENTS FROM THE CATCH BASIN STRUCTURES.

GENERAL NOTES:

1. RESTRAIN ALL JOINTS.
2. EXISTING AND PROPOSED SIDEWALK ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. SEE DRAWING C-08 FOR SIDEWALK MODIFICATIONS.
3. PERFORM ALL NECESSARY EXPLORATORY EXCAVATIONS TO VERIFY THE LOCATION, ELEVATION AND ALIGNMENT OF EXISTING UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE PROPOSED IMPROVEMENTS.
4. THE OWNERS OF THE EXISTING UNDERGROUND COMMUNICATION LINES AND GAS MAIN NEARBY WELL PW-9 ARE UNKNOWN. THE CONTRACTOR SHALL COORDINATE WITH SERVICE PROVIDERS AND DETERMINE OWNERSHIP OF THESE UTILITIES.
5. THE CONTRACTOR SHALL COORDINATE WITH THE OWNERS OF THE EXISTING UNDERGROUND COMMUNICATION LINES AND GAS MAIN TO RELOCATE ITS UTILITIES AS REQUIRED TO AVOID CONFLICT WITH THE PROPOSED WELL PW-9.
6. THE CONTRACTOR SHALL CONTACT THE OWNERS OF THE EXISTING UNDERGROUND COMMUNICATION LINES AND GAS MAIN AS SOON AS POSSIBLE AFTER ITS NOTICE TO PROCEED TO INITIATE THE RELOCATION OF CONFLICTING UTILITIES.
7. THE OWNERS OF THE EXISTING UNDERGROUND COMMUNICATION LINES AND GAS MAIN SHALL BE PAID FOR THE RELOCATION BY THE CITY OF HALLANDALE BEACH THROUGH AN ALLOWANCE BID ITEM TITLED "UTILITY RELOCATION ALLOWANCE". THE CONTRACTOR SHALL SUBMIT INVOICES FROM THE UTILITY OWNERS DOCUMENTING ITS COSTS.
8. ALL CONTRACTOR WORK RELATED TO THE RELOCATION OF THE UNDERGROUND COMMUNICATION LINES AND GAS MAIN (I.E., COORDINATION, EXPLORATORY EXCAVATIONS, AND OTHER ASSOCIATED COSTS) SHALL BE PAID FOR THROUGH AN ALLOWANCE BID ITEM TITLED " UTILITY RELOCATION ALLOWANCE". THE AMOUNT TO BE PAID SHALL BE NEGOTIATED AND AGREED TO BY THE CONTRACTOR AND THE CITY OF HALLANDALE BEACH.

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1. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES THAT HAVE FACILITIES WITHIN THE PROJECT AREA.

UTILITY LOCATES

ALL ELEVATIONS IN NAVD 1988

LEGEND:

- EXISTING
- PROPOSED
- TO BE CONSTRUCTED BY OTHERS
- PROPOSED EXPLORATORY EXCAVATION

1"=5' 5 2.5 0 5'

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

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THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: -
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C07

Hallandale Beach PROGRESS. INNOVATION. OPPORTUNITY.
CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

ENLARGED SITE PLAN

DATE: FEBRUARY 2020
SHEET: 10 OF 42
DRAWING: C-07

BID SET

PLOT DATE: 3/12/2020 9:43 AM BY: MNIEMIEC

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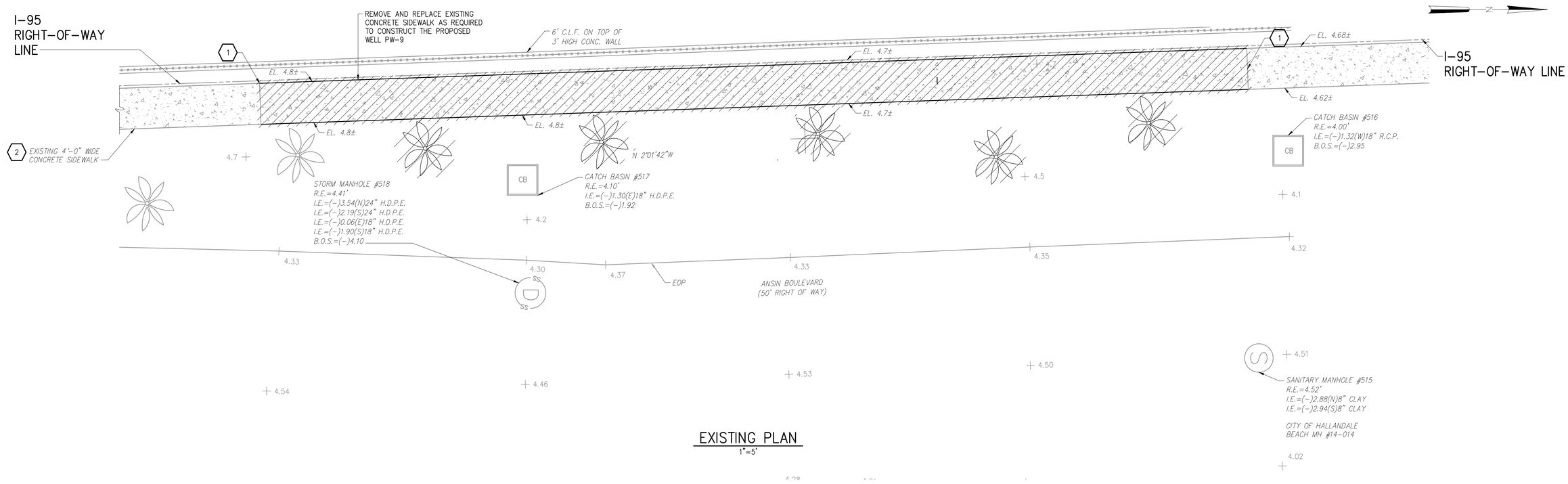
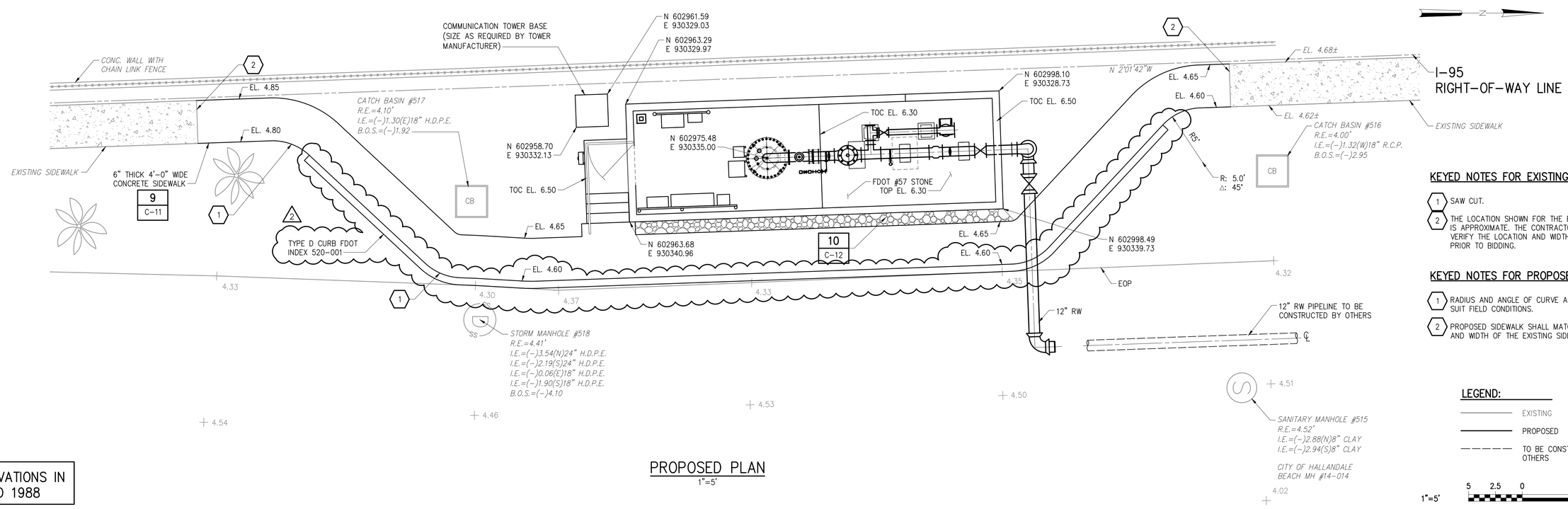


EXISTING PLAN
1"=5'



PROPOSED PLAN
1"=5'

KEYED NOTES FOR EXISTING PLAN:

1. SAW CUT.
2. THE LOCATION SHOWN FOR THE EXISTING SIDEWALK IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND WIDTH OF SIDEWALK PRIOR TO BIDDING.

KEYED NOTES FOR PROPOSED PLAN:

1. RADIUS AND ANGLE OF CURVE AS REQUIRED TO SUIT FIELD CONDITIONS.
2. PROPOSED SIDEWALK SHALL MATCH THE ELEVATION AND WIDTH OF THE EXISTING SIDEWALK.

LEGEND:

- EXISTING
- PROPOSED
- TO BE CONSTRUCTED BY OTHERS

1"=5' 5 2.5 0 5'

ALL ELEVATIONS IN NAVD 1988

NO.	DATE	ISSUED FOR	BY
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1	01/21/2020	BID SET	GAB

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HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C08

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CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

SIDEWALK RELOCATION PLAN

DATE: FEBRUARY 2020
SHEET: 11 OF 42
DRAWING: C-08

BID SET

PLOT DATE: 3/12/2020 9:43 AM BY: MNIEMIEC

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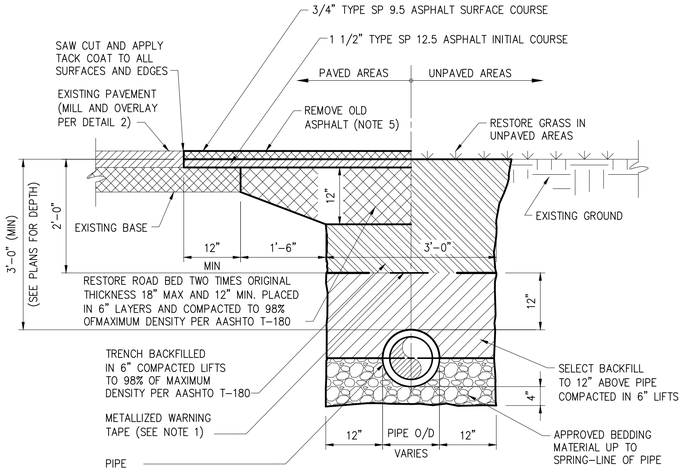
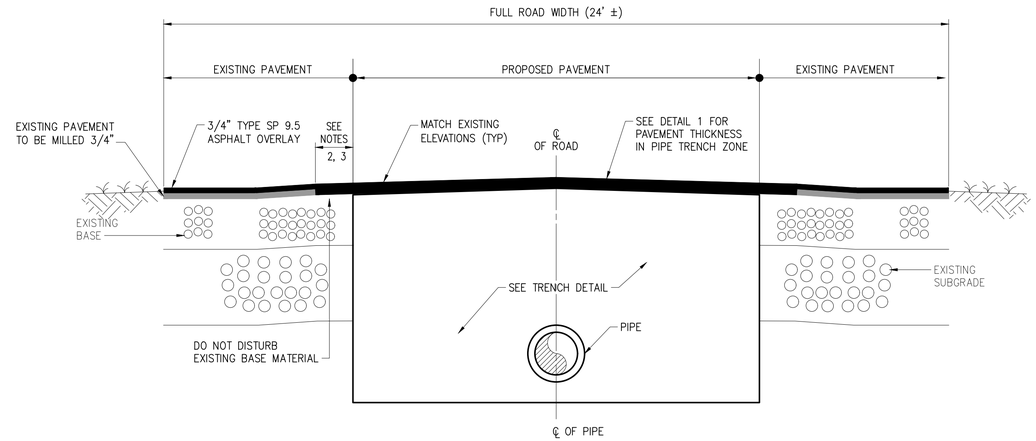


NOTES:

1. METALLIZED WARNING TAPES SHALL BE INSTALLED 24" BELOW FINISH GRADE CENTERED ABOVE THE PIPE.
2. SELECTED BACKFILL MATERIAL SHALL BE FREE OF STONES LARGER THAN 3/4" DIA.
3. REPLACE ALL LANE MARKINGS AND REFLECTIVE MARKERS.
4. DEPTH OF PIPE VARIES. SEE PIPING PLANS FOR PROPOSED DEPTHS. MINIMUM DEPTH OF COVER SHALL BE 36 INCHES
5. ASSUME ASPHALT DEPTH AVERAGES TWO INCHES.

TYPICAL TRENCH AND PAVEMENT RESTORATION

DETAIL 1
NTS –



NOTES:

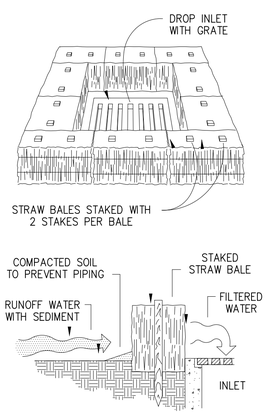
1. RESTORE PAVEMENT ALONG ENTIRETY OF PROPOSED SANITARY SEWER REPLACEMENT IN ACCORDANCE WITH THIS DETAIL.
2. BASE MATERIAL SHALL HAVE A MINIMUM CARBONATE OF 70%.
3. AT LOCATIONS WHERE PROPOSED PAVEMENT WILL TIE– IN TO EXISTING PAVEMENT, CONTRACTOR SHALL MECHANICALLY SAW–CUT A CLEAN STRAIGHT EDGE AND REMOVE 6" OF THE EXISTING PAVEMENT (TYP) ALONG THE PROPOSED ROAD, AND MATCH THE THICKNESS OF THE EXISTING PAVEMENT.

ROAD RESTORATION

DETAIL 2
NTS –

2

DETAIL 4
NTS –

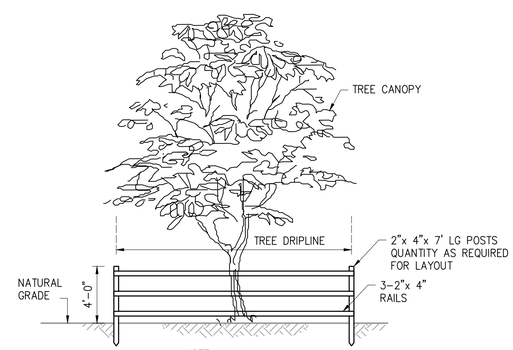


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THIS METOD SHALL NOT APPLY TO INLETS RECIEVEING CONCENTRAED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

STRAW BALE DROP INLET SEDIMENT FILTER

DETAIL 4
NTS –

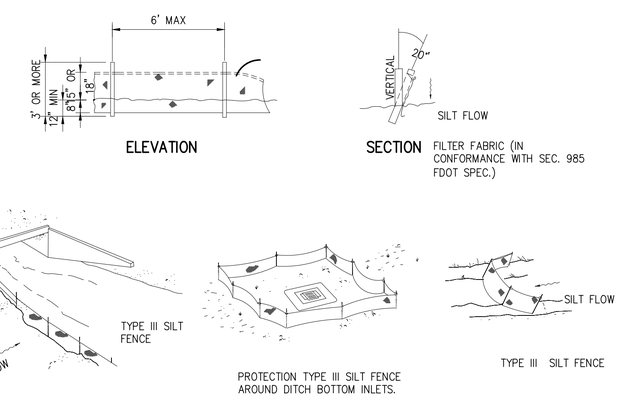


NOTE:

BEFORE SITE CLEARING BEGINS PROVIDE NECESSARY MEASURES TO ASSURE SURVIVAL OF VEGETATION.

TEMPORARY TREE PROTECTION BARRIER

DETAIL 5
NTS –



DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

APPLICATIONS

SILT FENCE

DETAIL 6
NTS –

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HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-C10

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CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9
CIVIL DETAILS – SHEET 1

DATE: FEBRUARY 2020
SHEET: 13 OF 42
DRAWING: C-10

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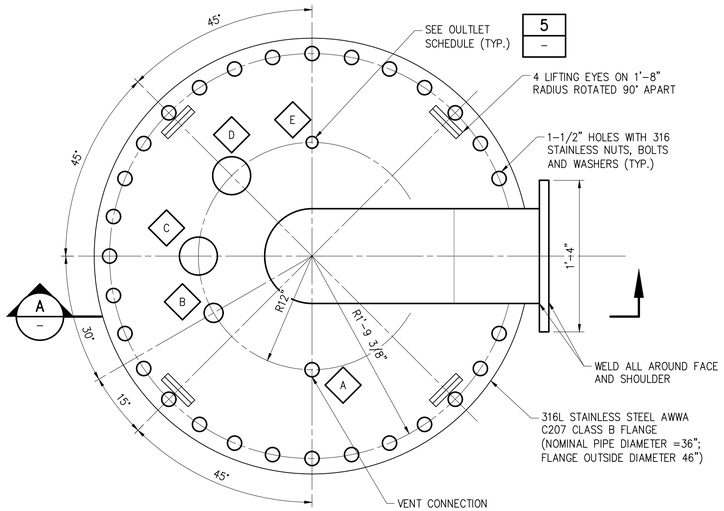
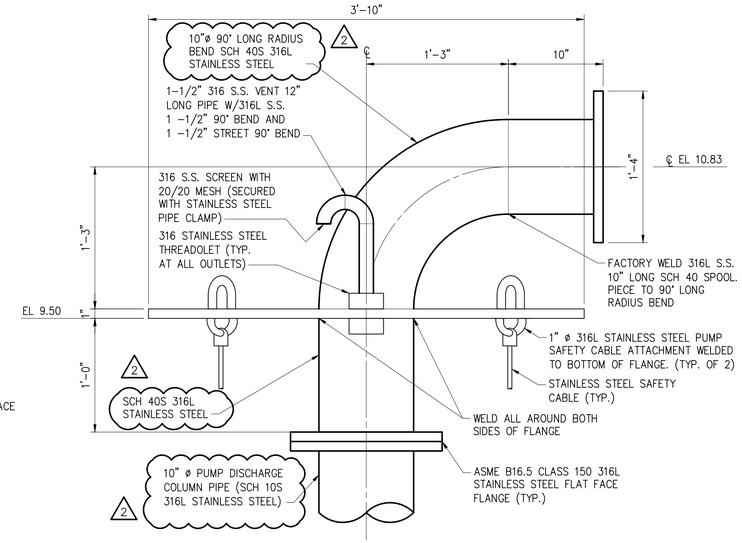


PLAN
1-1/2"=1'-0"



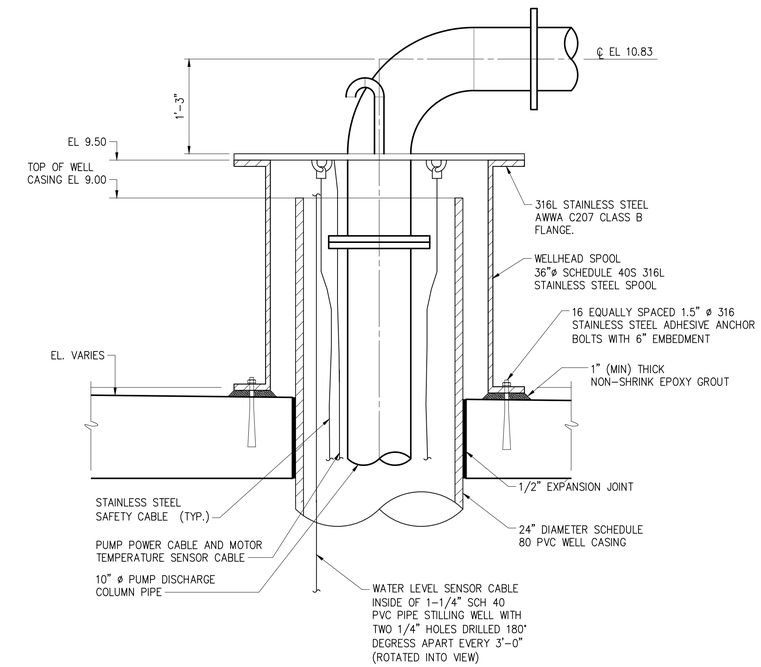
SECTION A
1-1/2"=1'-0"

WELLHEAD NOTES:

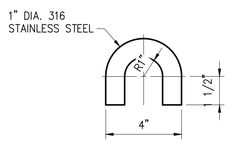
1. ALL MATERIAL SHALL BE ASTM A240 AND/OR ASTM A403 316L STAINLESS STEEL. WELLHEAD FABRICATION SHALL BE PICKLED AND PASSIVATED PER ASTM A380. THE WELLHEAD SHALL HAVE A UNIFORM 2D FINISH.
2. ~~PIPE AND NIPPLES SHALL BE SCHEDULE 40S.~~ NOT USED
3. WELDERS SHALL BE CERTIFIED BY THE AMERICAN WELDING SOCIETY.
4. ALL OUTLES SHALL HAVE THREADOLETS ABOVE AND BELOW THE FLANGE.
5. FURNISH AND INSTALL NEOPRENE GASKET.

WELLHEAD DISCHARGE
DETAIL 2
1 1/2" = 1'-0" M-01

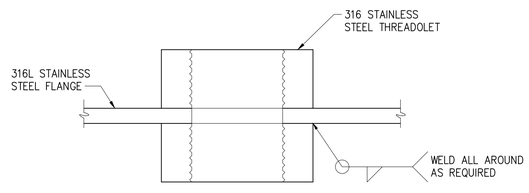
WELLHEAD OUTLET SCHEDULE		
ID MARK	DESCRIPTION	OUTLET DIAMETER
A	VENT PIPE CONNECTION	1.5"
B	SPARE (WITH WATER TIGHT CAP)	2"
C	MOTOR POWER CABLE	4"
D	SPARE (WITH WATER TIGHT CAP)	4"
E	WATER LEVEL SENSOR	1.25"



DETAIL 4
1" = 1'-0" M-02



LIFTING EYE DETAIL
DETAIL 3
3" = 1'-0" –



OUTLET DETAIL – SECTION VIEW
DETAIL 5
NTS –

1"=1'-0" 12" 6 0 1'
1 1/2"=1'-0" 4" 0 1'
3"=1'-0" 2" 0 2 4 6"

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CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-M04

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CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9
MECHANICAL DETAILS – SHEET 2

DATE: FEBRUARY 2020
SHEET: 20 OF 42
DRAWING: M-04

BID SET

PLOT DATE: 3/12/2020 9:43 AM BY: MNIEMIEC

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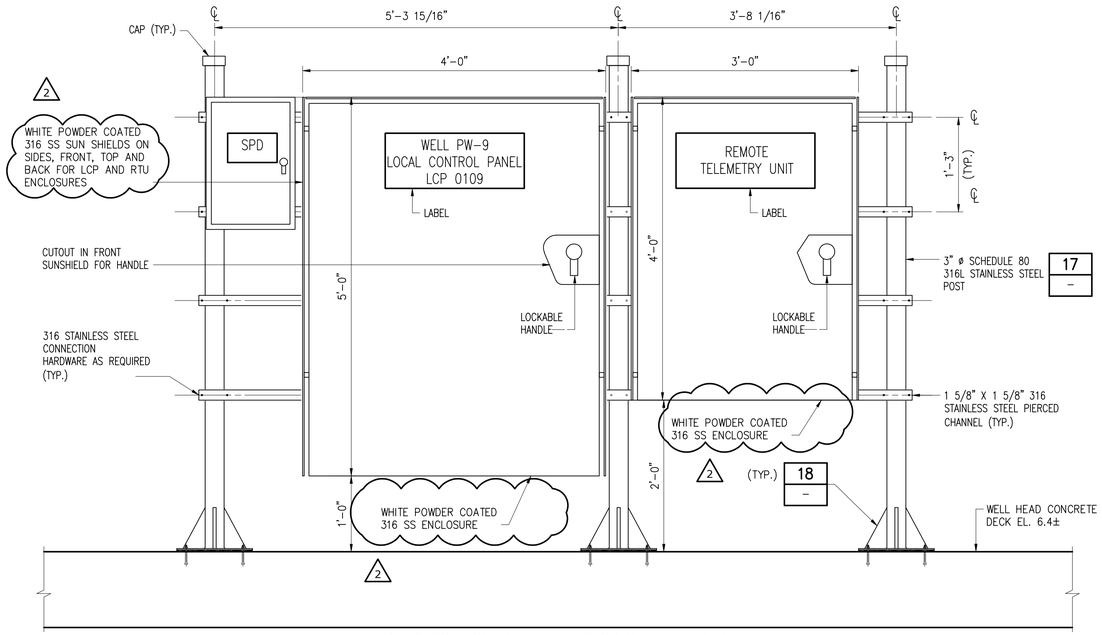
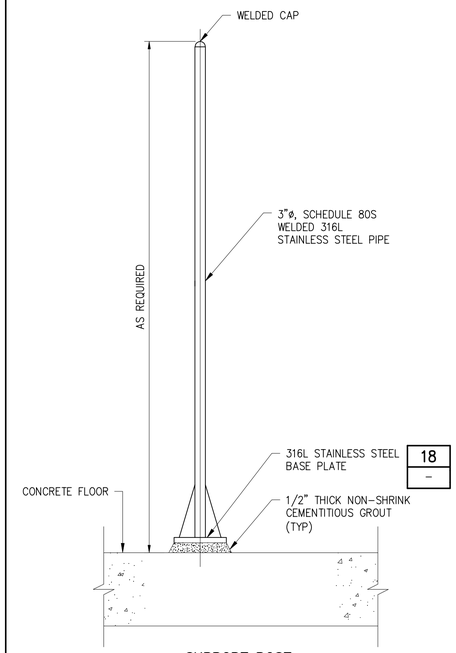


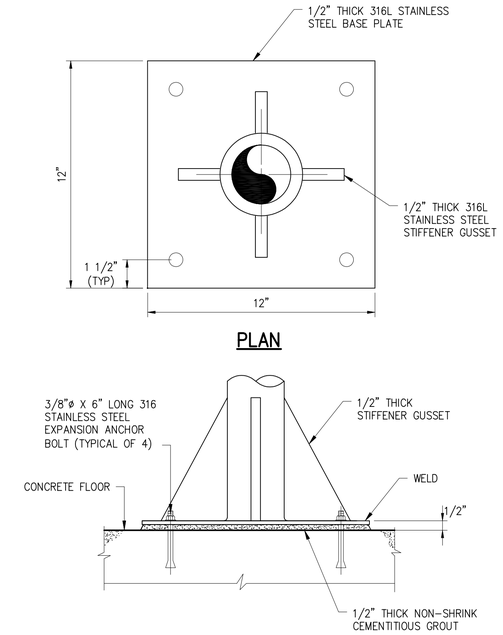
WELL PW-9 CONTROL PANEL – MOTOR SPD – AND RTU ELEVATION

DETAIL 16 / 1" = 1'-0" –



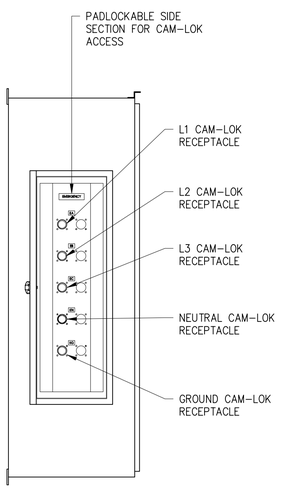
SUPPORT POST

DETAIL 17 / NTSA –

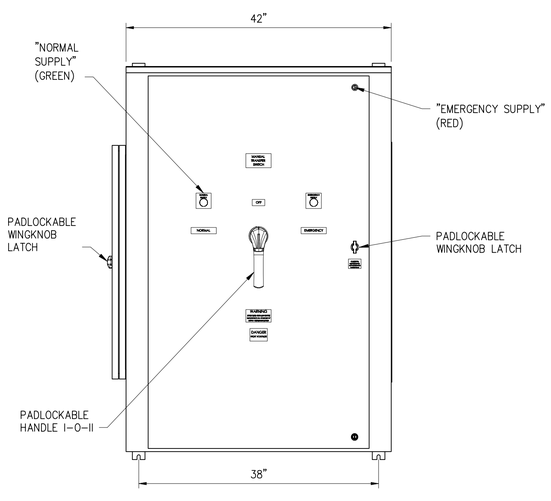


BASE PLATE

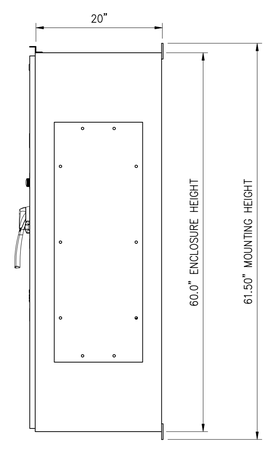
DETAIL 18 / NTS –



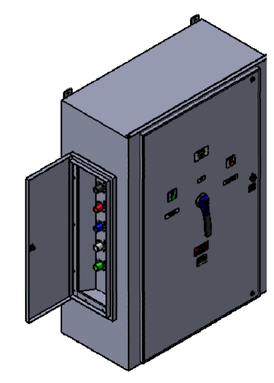
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



DIMETRIC VIEW

400A FUSIBLE, 4-POLE, NEMA 3R MANUAL TRANSFER SWITCH

DETAIL 19 / NTS E-09

SPECIFICATIONS:

MAX VOLTAGE – 600VAC 3Ø
RATED CURRENT – 400 A
STANDARDS – UL508A
ENCLOSURE RATING – NEMA 3R, 304 SS
REF. ES100145BF
DURABILITY – 6050 CYCLES
COLOR – WHITE POWDER COATED
EST SHIPPING WEIGHT – 450LBS

MODEL
STS400N3RBF4CL
BY PSI CONTROL SOLUTIONS

NOTES:

1. MANUAL TRANSFER SWITCH SHALL BE SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
2. SHORT CIRCUIT CURRENT RATING SHALL BE 22,000 AMPERES RMS SYMMETRICAL, MINIMUM.
3. MANUFACTURER SHALL COORDINATE FUSE SIZING AND TYPES, AS REQUIRED.
4. CONTRACTOR SHALL PROVIDE CLEAR ACCESS TO TRANSFER SWITCH GENERATOR TERMINATIONS.

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED JMB
DRAWN JMB
CHECKED JCB
PROJ. ENGR. JCB

JOHN C. BURKE P.E.
No. 17301

Hazen
HAZEN AND SAWYER
4000 HOLLYWOOD BOULEVARD, SUITE 750N
HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

CLIENTS PROJECT: –
ENGINEERS PROJECT: 40612-030
CAD REFERENCE:40612-030BP4-E09

Hallandale Beach
PROSPERITY, INNOVATION, OPPORTUNITY

CITY OF HALLANDALE BEACH
UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

ELECTRICAL DETAILS – SHEET 3

DATE: FEBRUARY 2020
SHEET: 37 OF 42
DRAWING: E-09

BID SET

PLOT DATE: 3/10/2020 3:04 PM BY: TBOCAS

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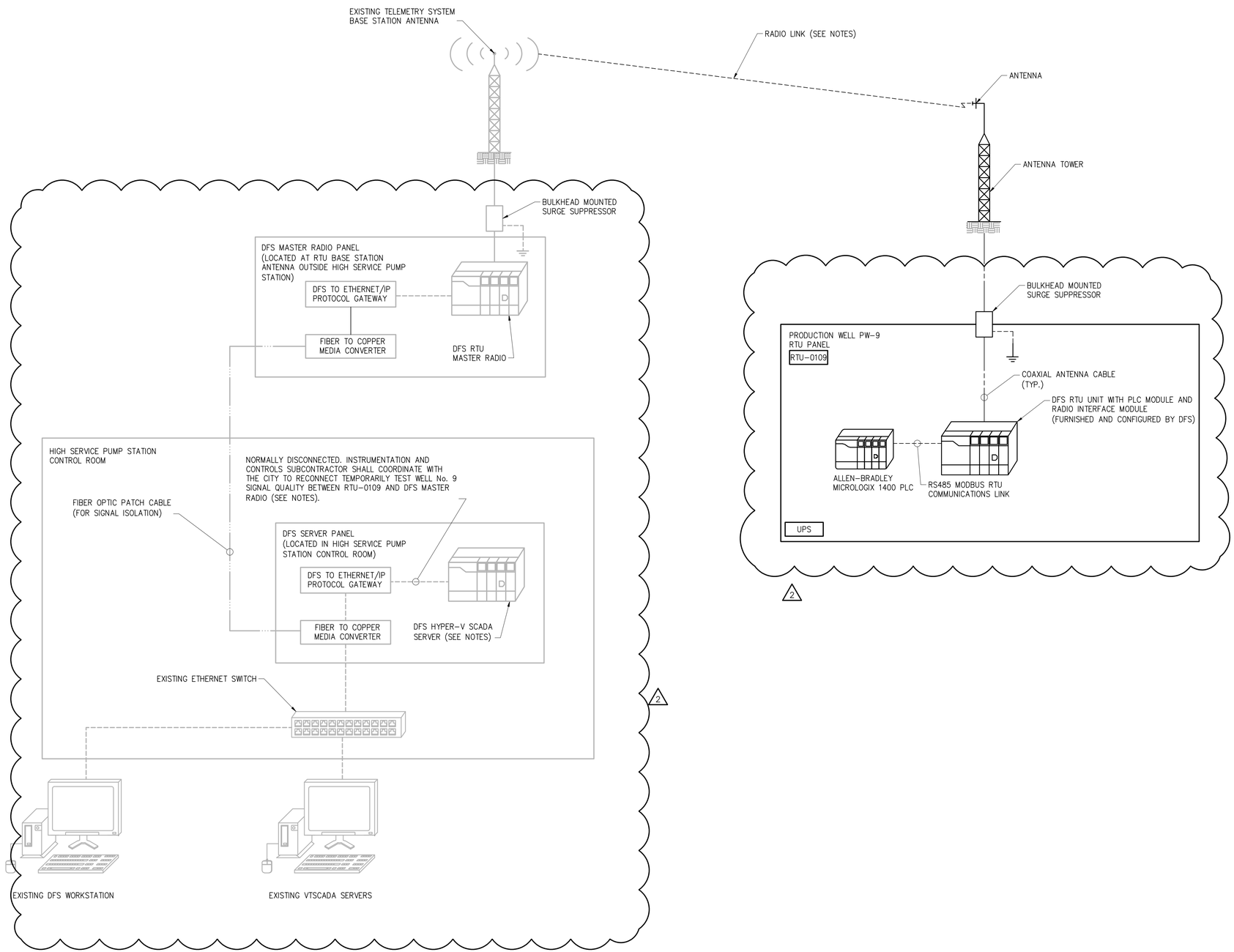

SEQUENCE OF REQUIRED MODIFICATIONS;

1. RTU-0109 RADIO TOWER SHALL BE FURNISH AND INSTALLED BY CONTRACTOR.
2. RTU-0109 RADIO ANTENNA, ANTENNA CABLE, SURGE SUPPRESSOR AND ALL REQUIRED ACCESSORIES SHALL BE FURNISHED AND INSTALLED BY INSTRUMENTATION AND CONTROLS SUBCONTRACTOR.
3. DFS (DATA FLOW SYSTEMS) SHALL UPDATE EXISTING FCC RADIO LICENSE AS REQUIRED TO INCLUDE THE DFS RADIO IN RTU-0109 IN THE CITY'S DFS NETWORK.
4. DFS SHALL FURNISH A DFS RTU UNIT WITH A PLC MODULE WITH BACKPLANE, POWER SUPPLY/UPS, RADIO MODULE AND CABLES REQUIRED TO COMMUNICATE WITH THE INSTRUMENTATION AND CONTROLS SUBCONTRACTOR FURNISHED ALLEN-BRADLEY MICROLOGIX 1400 PLC. THE UNIT SHALL BE SHIPPED BY DFS TO THE INSTRUMENTATION AND CONTROLS SUBCONTRACTOR A MINIMUM OF 2 WEEKS PRIOR TO FACTORY TESTING OF RTU-0109.
5. INSTRUMENTATION AND CONTROLS SUBCONTRACTOR SHALL FURNISH THE COMPLETE RTU-0109 PANEL AND SHALL WARRANTY ALL COMPONENTS FOR A PERIOD OF NO LESS THAN ONE YEAR FROM COMMISSIONING WITH THE EXCEPTION OF THE DFS RADIO, WHICH SHALL BE WARRANTED BY DFS FOR A PERIOD OF NO LESS THAN 2 YEARS FROM THE DATE OF COMMISSIONING.
6. INSTRUMENTATION AND CONTROLS SUBCONTRACTOR SHALL UPDATE THE VTSCADA WORKSTATION DATABASE AND GRAPHICS TO INTEGRATE RTU-0109 INTO THE WTP SCADA SYSTEM.
7. ONCE RTU-0109 HAS BEEN INSTALLED AND POWERED UP INSTRUMENTATION AND CONTROLS SUPPLIER SHALL COORDINATE WITH THE CITY TO TEMPORARILY DISCONNECT THE DFS MASTER RADIO FROM THE VTSCADA NETWORK AND CONNECT THE DFS MASTER RADIO TO DFS HYPER-V SERVER FOR TESTING THE QUALITY OF THE RADIO SIGNAL BETWEEN THE DFS MASTER RADIO AND THE DFS PLC RADIO IN RTU-0109. INSTRUMENTATION AND CONTROL SUBCONTRACTOR SHALL CONFIRM THAT THE DFS RADIO LINK BETWEEN RTU-0109 AND DFS MASTER RADIO, ALL OTHER RTU PANELS, IS FULLY FUNCTIONAL, INDEPENDENT OF THE VTSCADA SCADA SYSTEM. THE INSTRUMENTATION SUBCONTRACTOR, IN COORDINATION WITH THE CITY, SHALL DISCONNECT THE DFS HYPER-V SCADA SERVER AND RECONNECT THE DFS MASTER RADIO TO THE VTSCADA SCADA NETWORK.
8. INSTRUMENTION AND CONTROL SUPPLIER SHALL PERFORM ALL PROGRAMMING OF THE VTSCADA SCADA SYSTEM AND MICROLOGIX 1400 PLC IN RTU-0109 AND SHALL COORDINATE WITH DFS TO ESTABLISH THE COMMUNICATIONS LINK BETWEEN THE DFS PLC AND THE MICROLOGIX 1400 PLC.
9. DFS SHALL PERFORM ALL PROGRAMMING AND CONFIGURATION OF DFS EQUIPMENT AND COORDINATE WITH THE INSTRUMENTATION AND CONTROLS SUPPLIER AS REQUIRED TO ESTABLISH A FULLY OPERATIONAL COMMUNICATIONS LINK BETWEEN THE DFS RTU IN RTU-0109 AND THE MICROLOGIX 1400 PLC IN RTU-0109.
10. INSTRUMENTATION AND CONTROLS SUBCONTRACTOR SHALL PERFORM A PRELIMINARY LOOP CHECKOUT AND VERIFY ALL INPUTS AND OUTPUTS SHOWN ON THE P&IDS AND LISTED IN THE SPECIFICATIONS ARE FULLY FUNCTIONING PRIOR TO SCHEDULING THE LOOP CHECKOUT WITH CITY AND ENGINEER.
11. REFER TO DIVISION 17 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2

NO.	DATE	ISSUED FOR	BY
2	03/02/2020	ADDENDUM	GAB
1	01/21/2020	BID SET	GAB

DESIGNED E.P.C.
DRAWN L.M.S.
CHECKED G.A.B.
PROJ. ENGR. G.A.B.

KEITH R. DINNEN P.E.
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HOLLYWOOD, FLORIDA 33021
CERTIFICATE OF AUTHORIZATION NO. : 2771

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CAD REFERENCE: 40612-030BP4-I02

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UTILITIES DEPARTMENT

CITY OF HALLANDALE BEACH UTILITIES DEPARTMENT
PRODUCTION WELL PW-9

SYSTEM BLOCK DIAGRAM

DATE: FEBRUARY 2020
SHEET: 39 OF 42
DRAWING: I-02

BID SET

PLOT DATE: 3/10/2020 4:03 PM BY: TBOCAS

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