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SEAL

JOSEPH B. KALLER  
FLORIDA R.A., # 0009239

PROJECT TITLE  
W HALLANDALE SHOPPPES  
613 -625 W. HALLANDALE BEACH BLVD  
HALLANDALE BEACH, FL 33009

SHEET TITLE  
NEW FLOOR PLAN

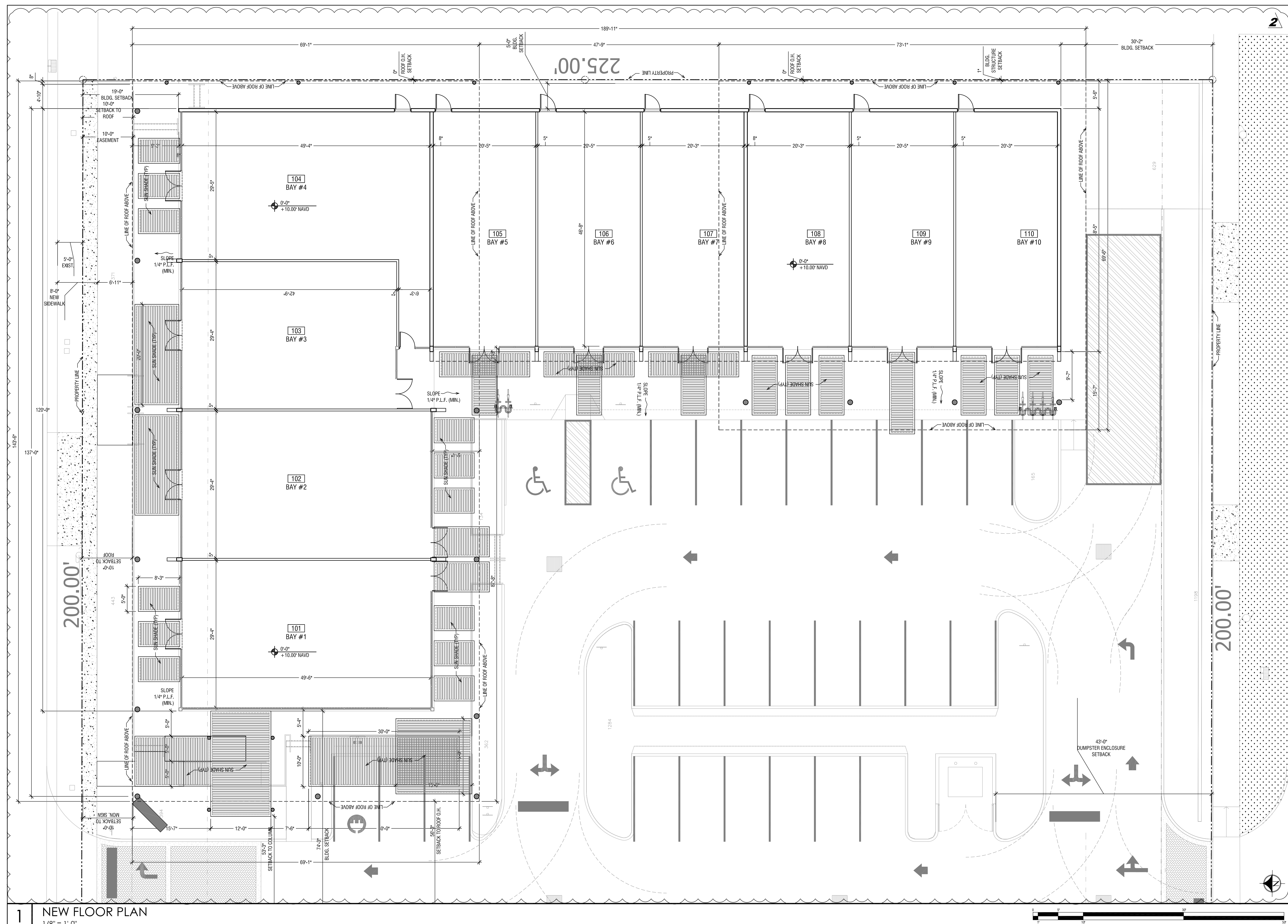
REVISIONS		
No.	DATE	DESCRIPTION
1	9/21/18	MDR COMMENTS
2	11.15.18	CITY COMMENTS

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PROJECT No.: 18048  
DATE: 08-30-18  
DRAWN BY: GMV / JP  
CHECKED BY: JBK

SHEET

A.1-0



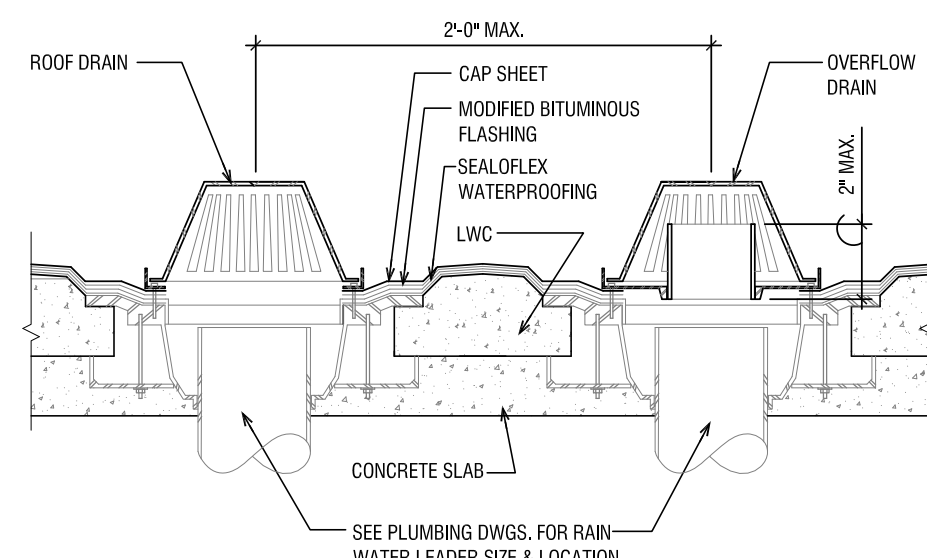


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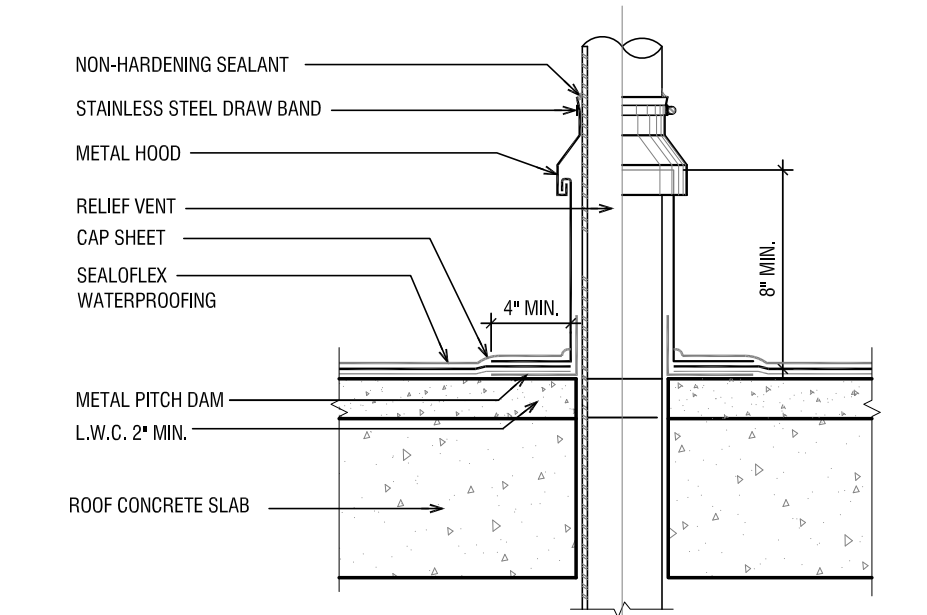
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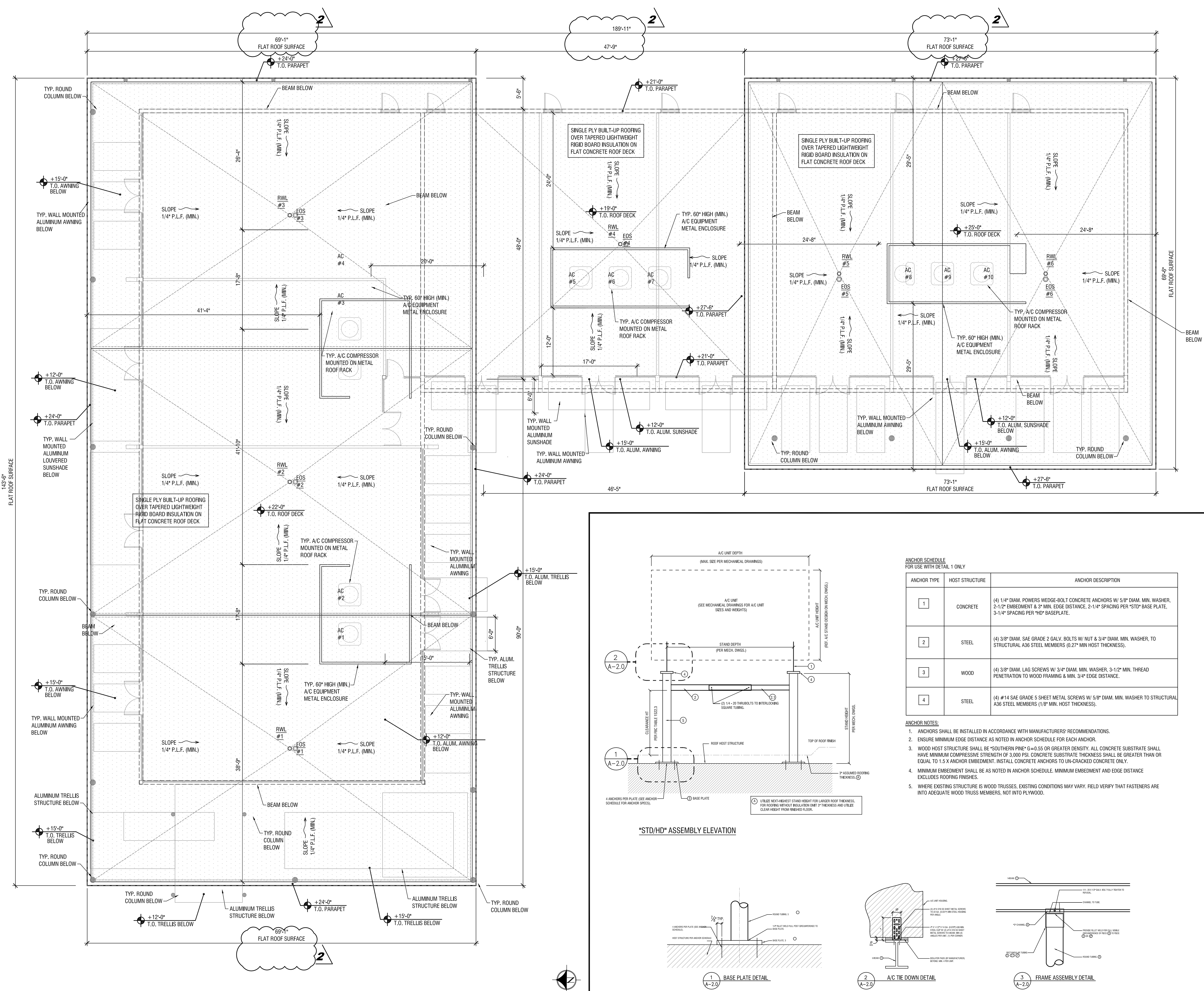
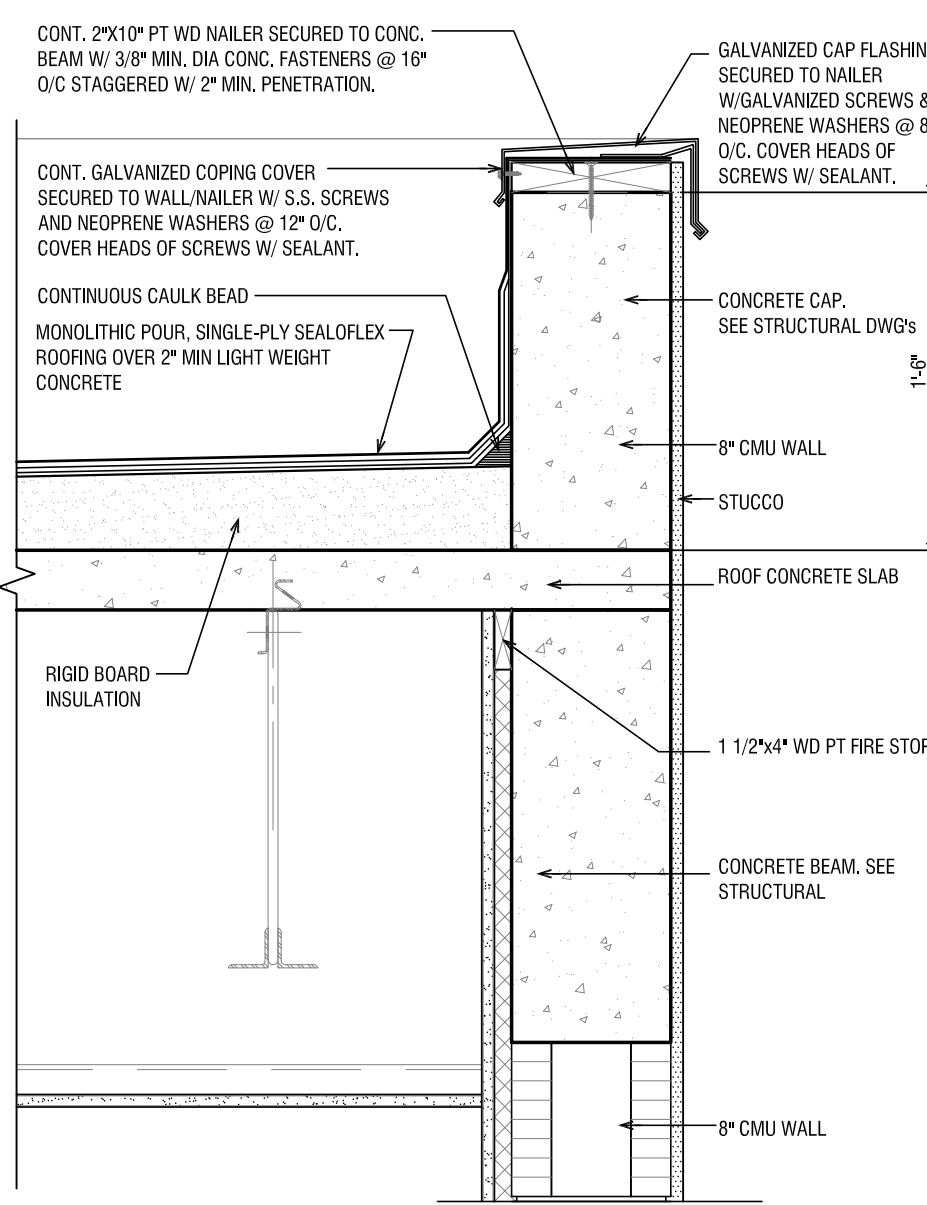
# A.2-0



3	DRAIN/ OVERFLOW DETAIL NTS
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## 4 VENT. FLASHING SYSTEM



5	PARAPET FLASHING DETAIL NTS
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2	EAST ELEVATION 1/8" = 1'-0"
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W HALLANDALE SHUFFLES  
613 -625 W. HALLANDALE BEACH BLVD  
HALLANDALE BEACH, FL 33009

## WEST & SOUTH ELEVATIONS KEYNOTES

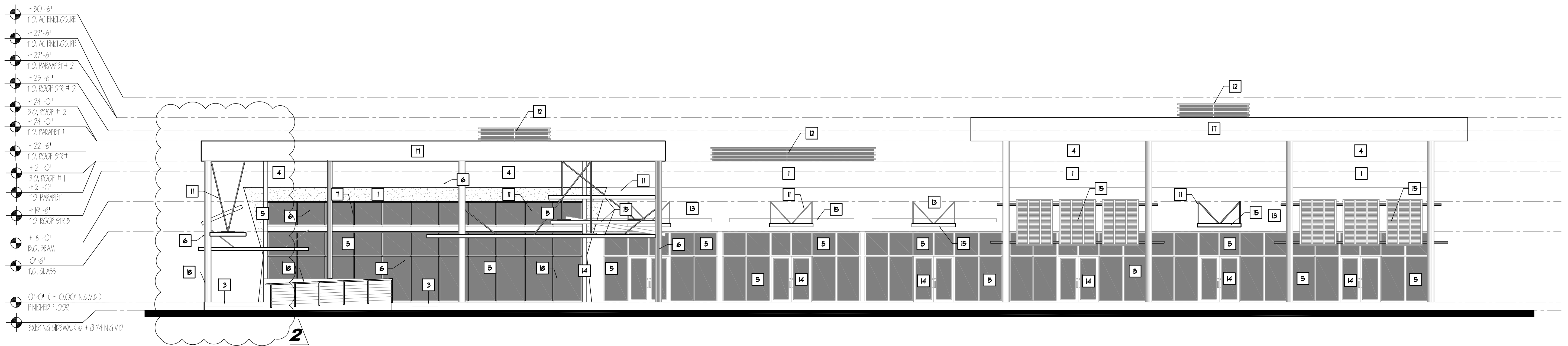
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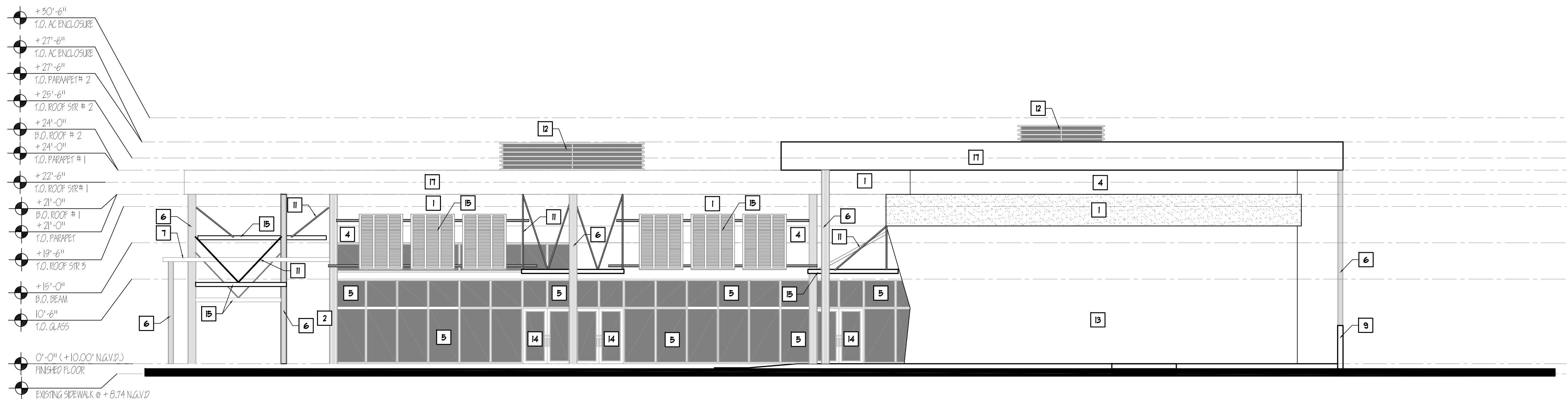
ECT No.: 18048  
: 08-30-18  
WN BY: GMV / JP  
CKED BY: JBK

EET

## A-4.0



1 WEST ELEVATION  
1/8" = 1'-0"

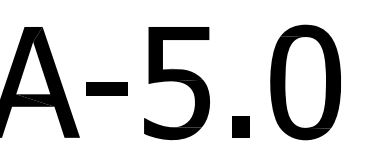


2	SOUTH ELEVATION 1/8" = 1'-0"
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3	KEY NOTES
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- |  |  |                                   |  |
|--|--|-----------------------------------|--|
| [1] SMOOTH STUCCO FINISH - WHITE COLOR | [5] IMPACT RATED STOREFRONT WINDOWS            | [10] ADA RAMP                     | [15] BLACK POWDER COAT ANODIZED ALUMINUM LOUVER, GC TO PROVIDE N.O.A. PRIOR TO FABRICATION |
| [2] DUMPSTER ENCLOSURE                 | [6] BLACK POWDER COAT STEEL COLUMN             | [11] 1-1/2" STAINLESS STEEL REVEL | [16] SHOPPING CENTER SIGN  |
| [3] CONCRETE STEPS                     | [7] POWDER COAT PAINT ALUMINUM TRELLIS         | [12] OPAQUE AC UNIT ENCLOSURE     | [17] ROOF  |
| [4] SMOOTH STUCCO FINISH - DARK GRAY   | [8] SERVICE EXIT DOOR                          | [13] WHITE BRICK FINISH           | [18] 42" HIGH RAILING  |
|  | [9] 6'-0" HIGH CMU WALL, PAINTED STUCCO FINISH | [14] IMPACT RATED DOOR            |  |





**18** 42" HIGH RAILING

2	KEY NOTES
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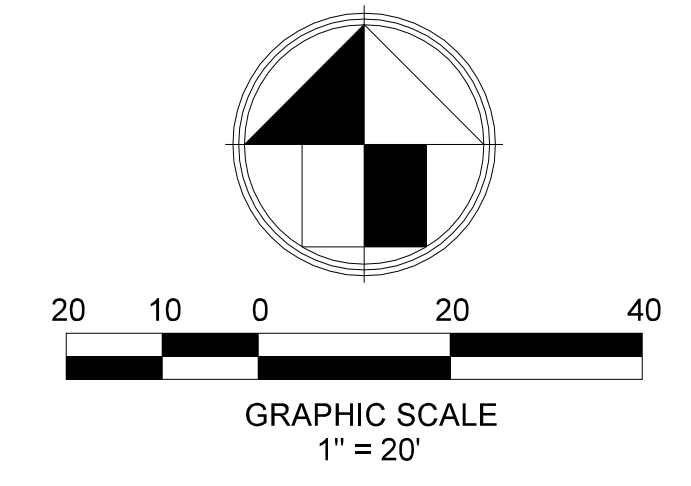
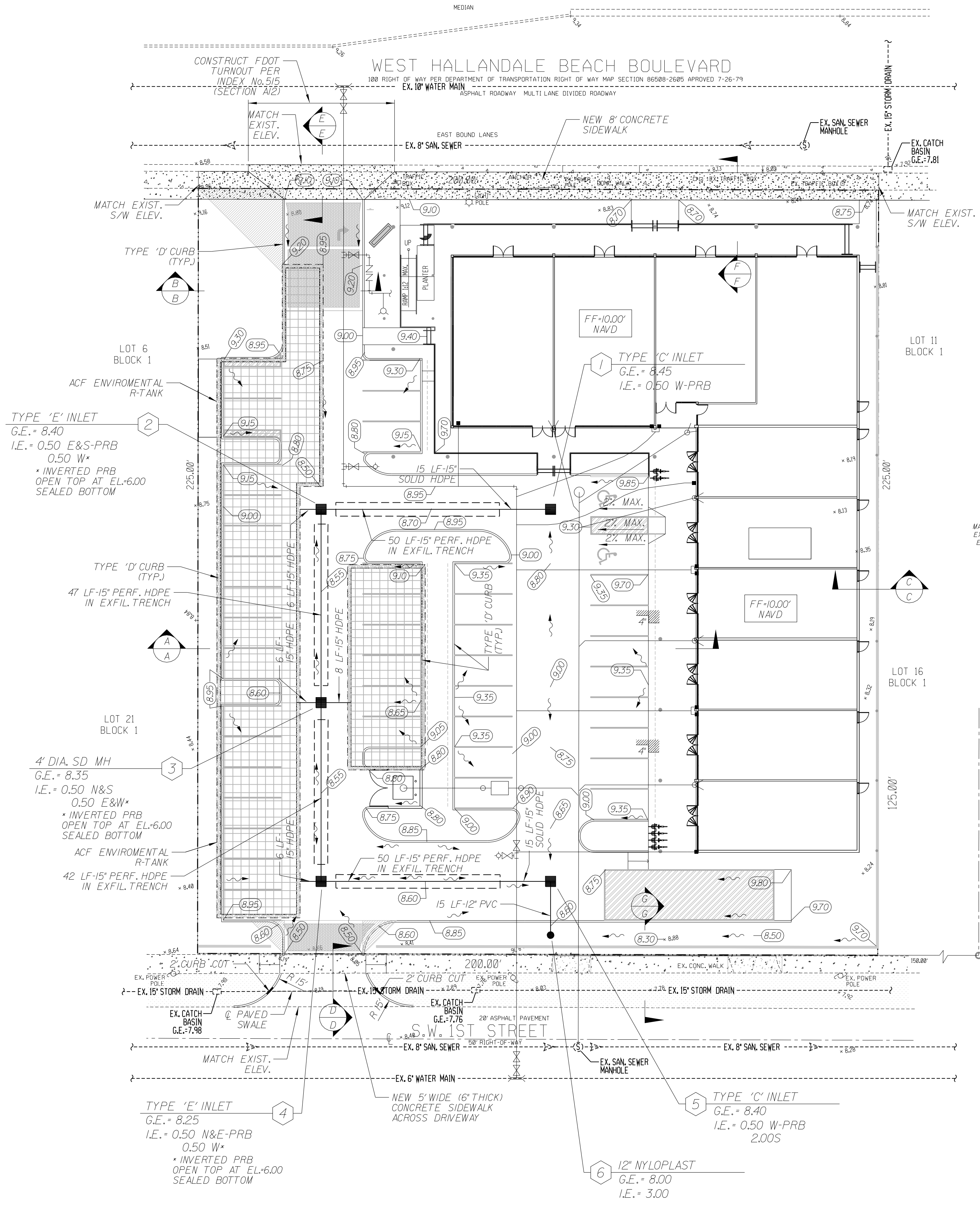


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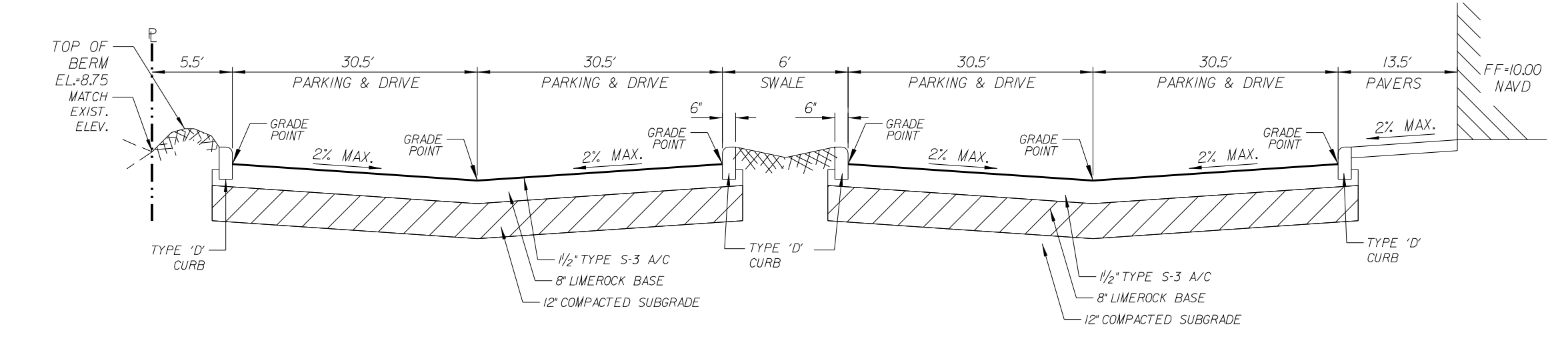
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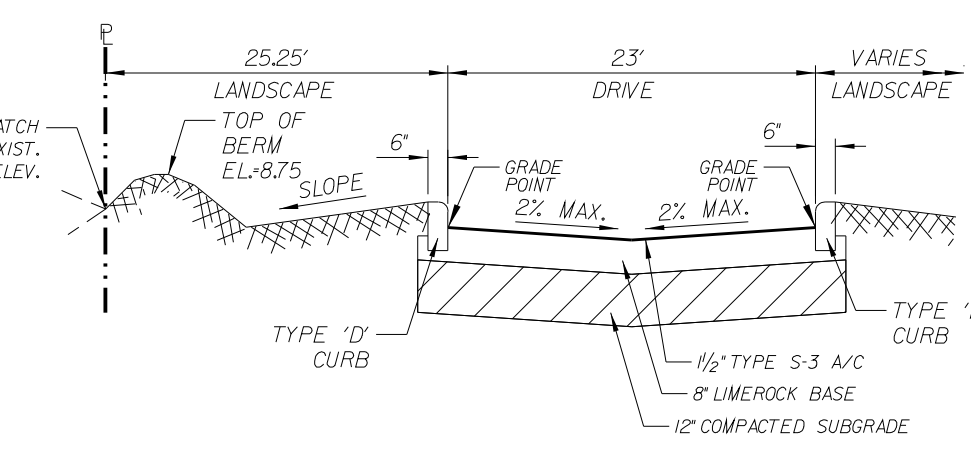




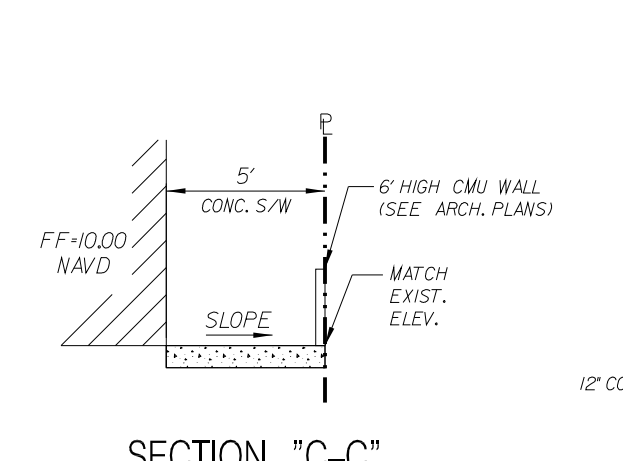
LOCATION MAP  
N.T.S.



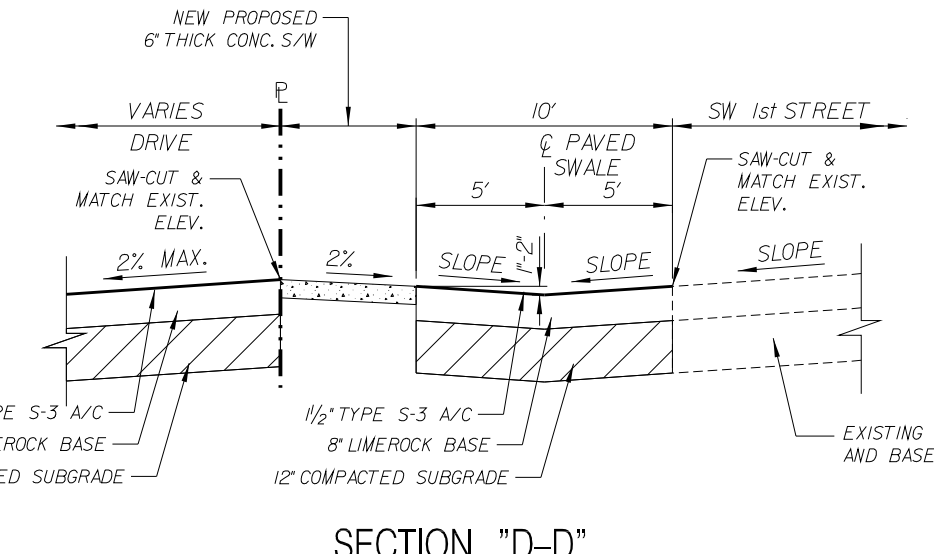
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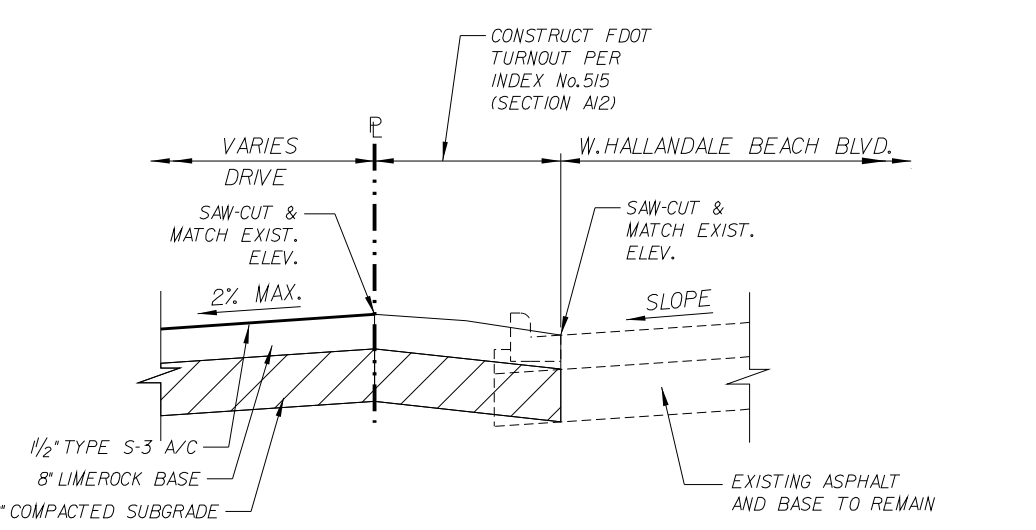
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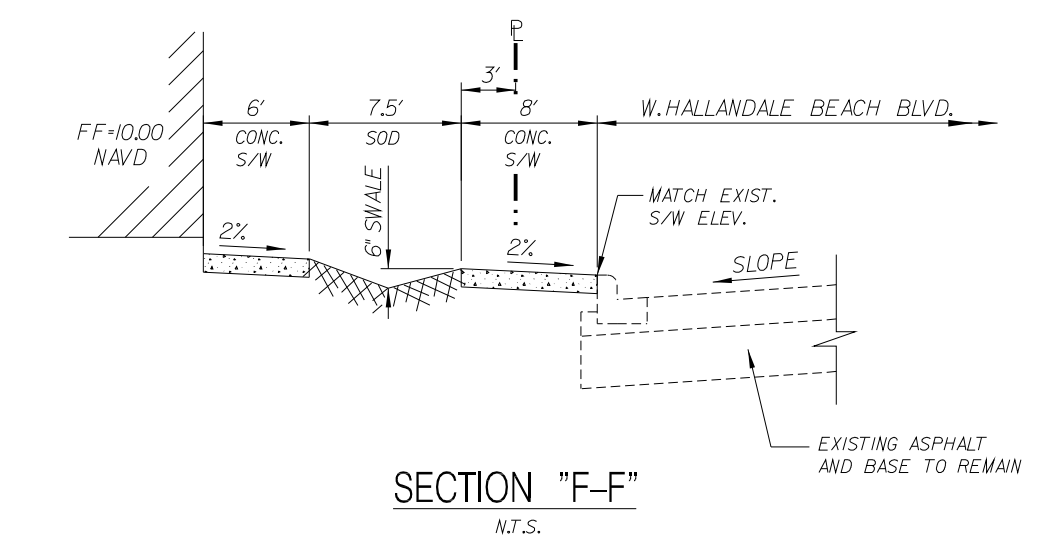
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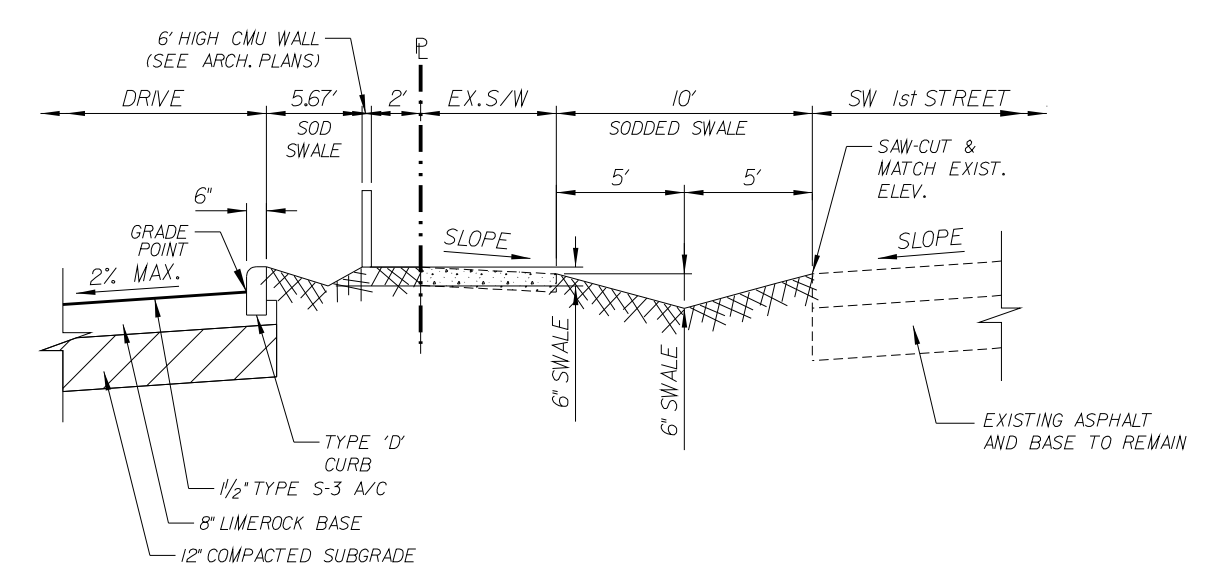
SECTION "D-D"  
N.T.S.



SECTION "E-E"  
N.T.S.



SECTION "F-F"  
N.T.S.



SECTION "G-G"  
N.T.S.

NOTE:  
FOR SITE DIMENSIONS REFER  
TO ARCHITECTURAL SITE PLAN.

NOTE:  
ALL ELEVATIONS SHOWN ARE BASED  
ON THE NORTH AMERICAN VERTICAL DATUM  
OF 1988 (NAVD).

Always call 811 two full business days before you dig to  
have underground utilities located and marked.



REVISIONS:	
1.	
2.	
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CLIENT:	
PROJECT:	
TASK:	
DATE:	
DESIGNED BY:	
DRAWN BY:	
PROJECT NO.:	
SHEET:	
C-1	
GARY G. BLOOM, P.E. FLA. LIC. NO. 19832 NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER	

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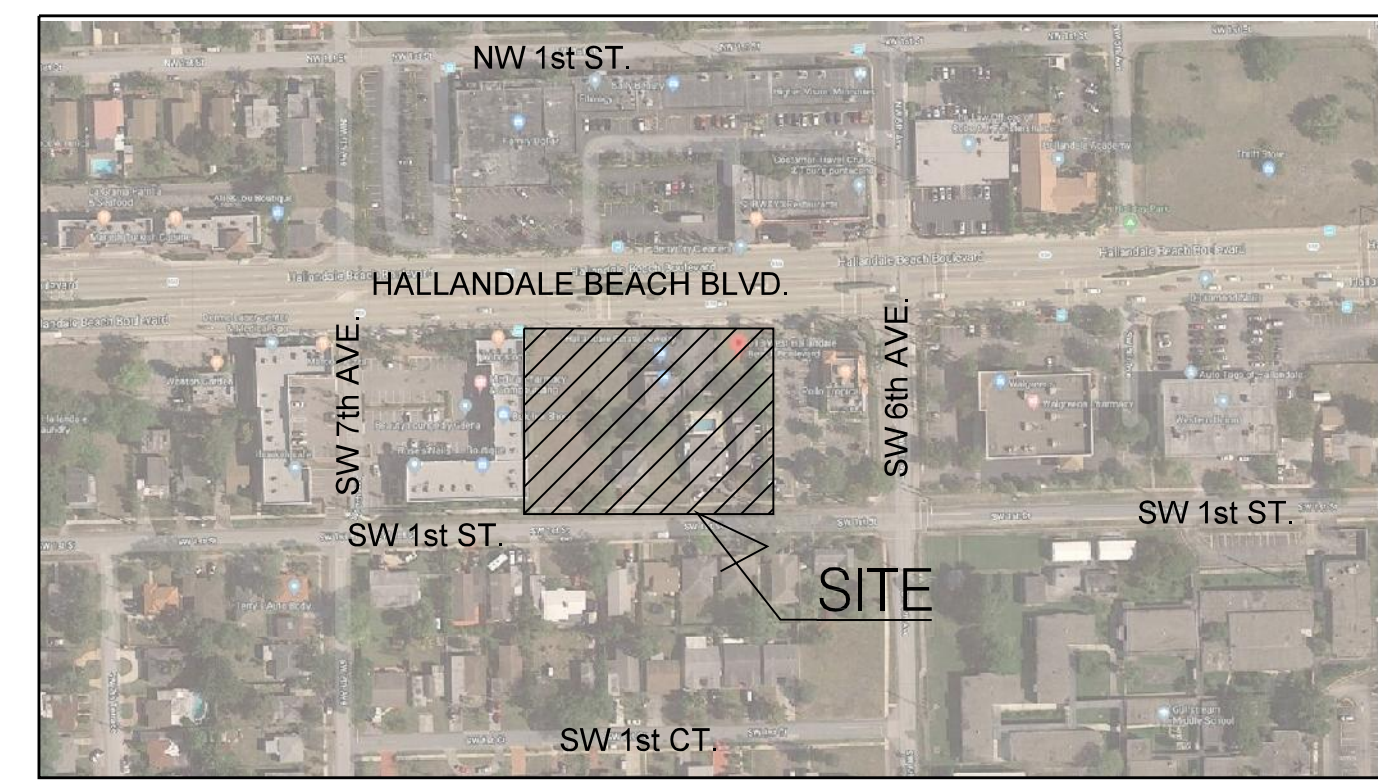
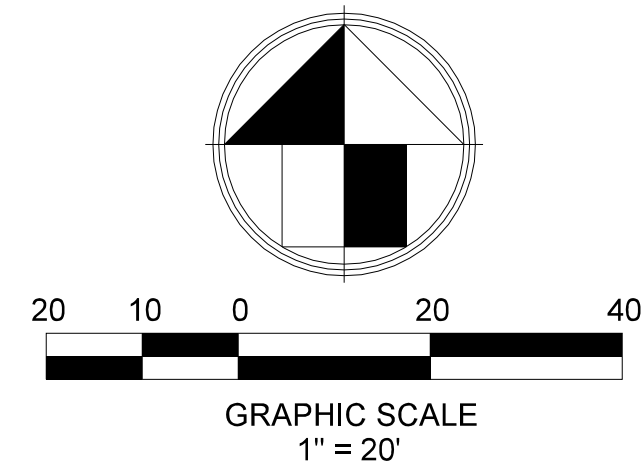
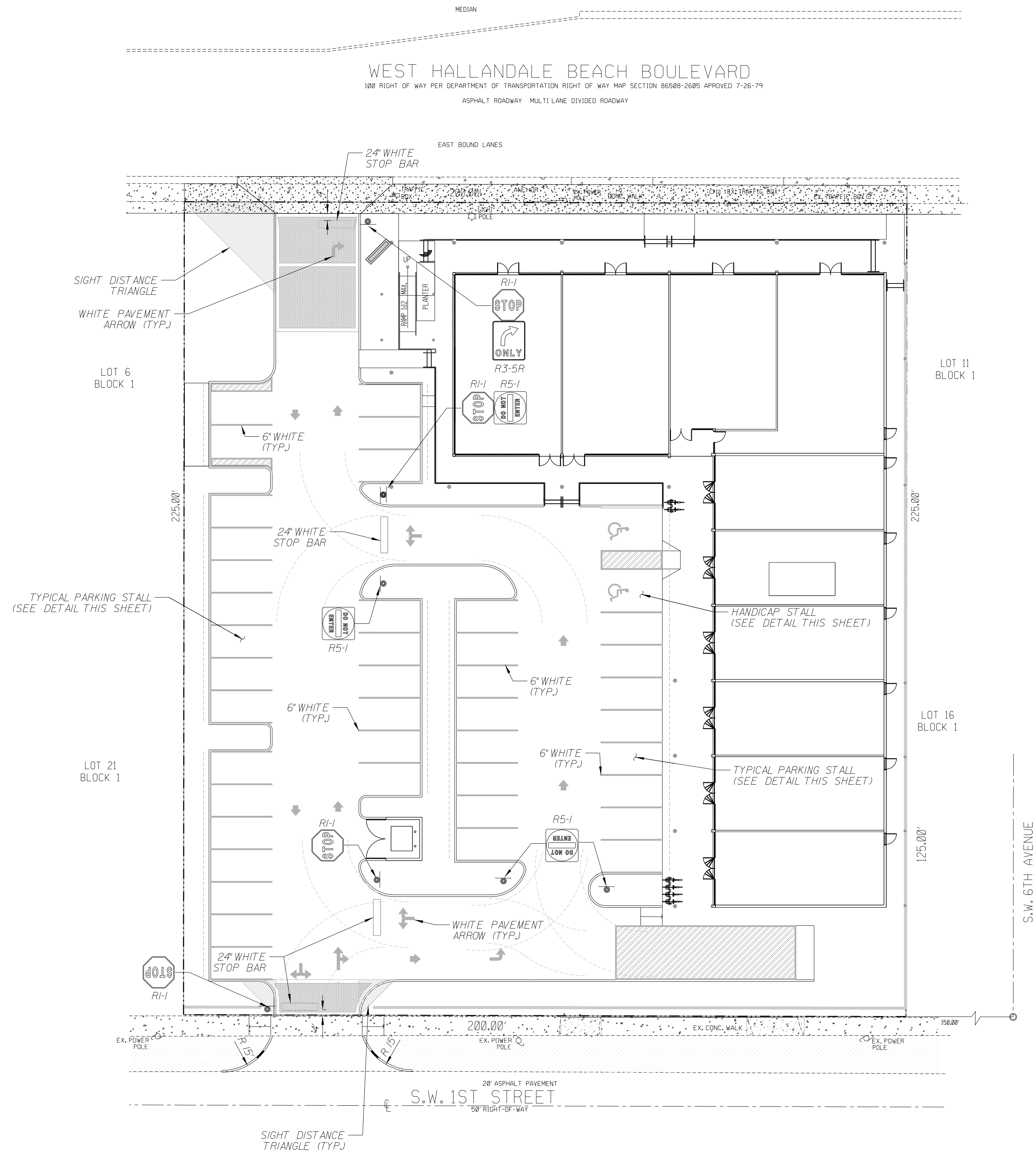
613 Hallandale Beach Blvd.  
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HALLANDALE BEACH  
PAVING, GRADING AND  
DRAINAGE PLAN

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2699 Stirling Road, Suite 200  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655

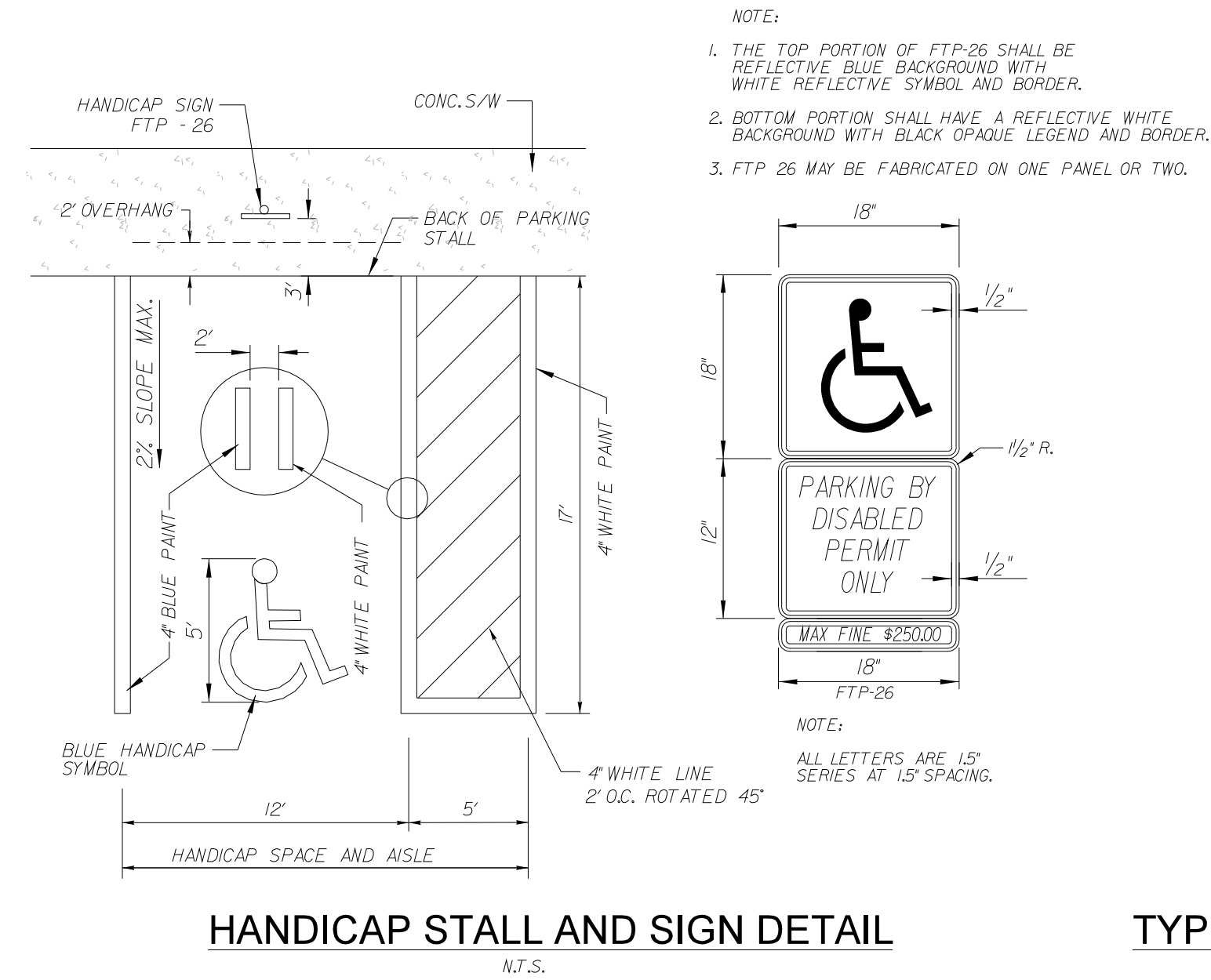
March 2018  
C.G.B.  
18-0425  
C-1

SCALE:  
1"=20'  
F.M.

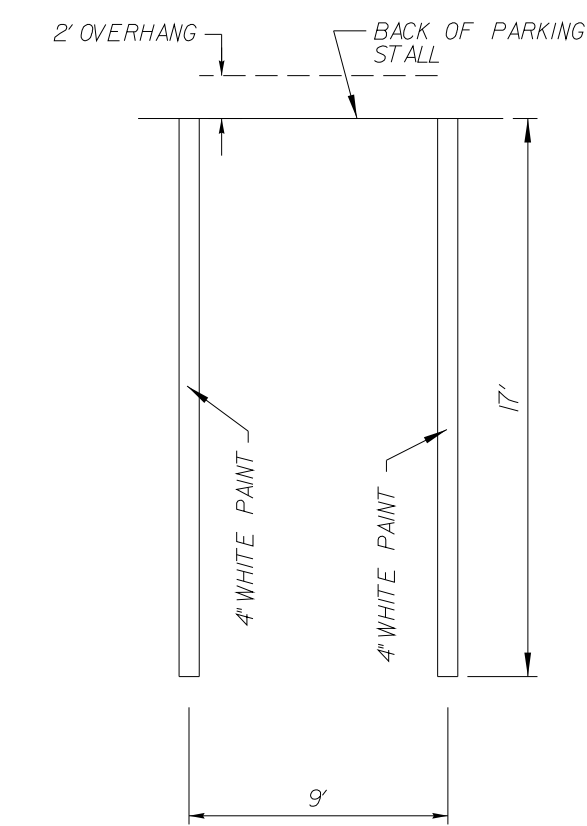




LOCATION MAP  
N.T.S.



HANDICAP STALL AND SIGN DETAIL  
N.T.S.



TYPICAL PARKING STALL DETAIL  
N.T.S.

NOTE:  
ALL PAVEMENT MARKINGS TO CONFORM  
TO BROWARD COUNTY STANDARDS  
LATEST EDITION.

Always call 811 two full business days before you dig to  
have underground utilities located and marked.

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REVISIONS:							
1.	2.	3.	4.	5.	6.	7.	8.

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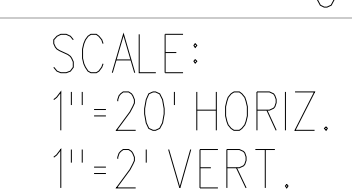
613 Hallandale Beach Blvd. FLORIDA 33304  
HALLANDALE BEACH  
TASK:  
**PAVEMENT MARKINGS  
AND SIGNAGE PLAN**


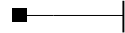
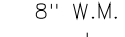




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2699 Stirling Road, Suite 600  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655  
Email: gary@ggbeng.com

DATE:	March 2018	SCALE:	1"=20'
DESIGNED BY:	G.C.B.	DRAWN BY:	F.M.
PROJECT NO.	18-0425	SHEET	C-1A

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FLA. LIC. No. 19832  
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WATER LEGEND	
	DOUBLE WATER METER SERVICE
	SINGLE WATER METER SERVICE
	LENGTH, SIZE & TYPE OF WATER MAIN
	FIRE HYDRANT, GATE VALVE & TEE ASSEMBLY
	PROPOSED GATE VALVE
 S.P. • 2	BACTERIOLOGICAL SAMPLING POINT
.....	EXISTING OR FUTURE UTILITIES
	D.I.P. PIPE

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SHEET  
C-2

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FLA LIC. No. 19832  
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GENERAL NOTES

1. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY HAVE BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, 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. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED WITH THE ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS.
2. UNDER FLORIDA STATUTES, THE CONTRACTOR MUST PROVIDE A 48 HOUR NOTIFICATION PRIOR TO ANY OPERATION WHICH WOULD "PIERCE THE EARTH'S SURFACE" WITH THE WORK STARTED WITHIN FIVE WORKING DAYS AFTER ALL UNDERGROUND UTILITIES HAVE BEEN IDENTIFIED. THE NOTIFICATION NUMBER IS A ONE CALL SYSTEM STATEWIDE AT (800) 432-4770 . FAILURE TO COMPLY COULD RESULT IN FINES AND DAMAGES.

UNIVERSAL COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES

RED	ELECTRIC
YELLOW	GAS/OIL
ORANGE	COMMUNICATION, CATV
BLUE	WATER
GREEN	SEWER
PINK	SURVEY MARKINGS
WHITE	PROPOSED EXCAVATION

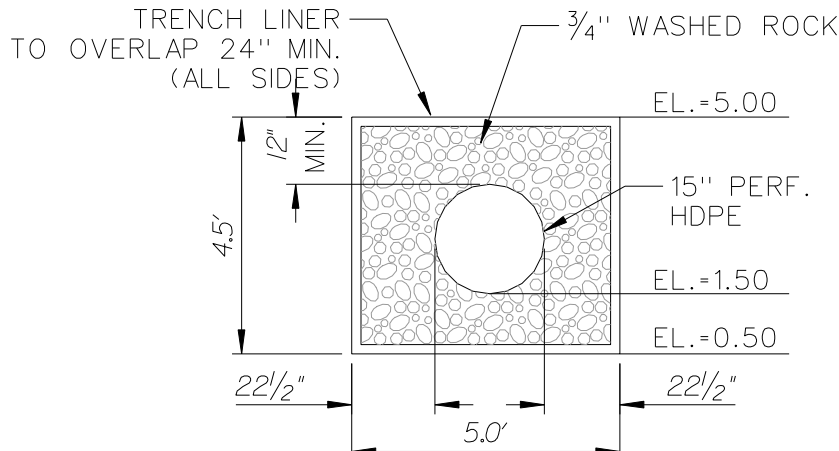
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES:
- FLORIDA POWER AND LIGHT COMPANY  
BELL SOUTH  
COMCAST CATV  
CITY OF HOLLYWOOD
4. ALL ELEVATIONS ARE BASED UPON THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929.
5. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF SHOP DRAWINGS FOR APPROVAL TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR CONSTRUCTION FOR ALL MATERIALS USED ON THE PROJECT. APPROVED SHOP DRAWINGS FROM THE ENGINEER SHALL THEN BE SUBMITTED TO CITY OF HOLLYWOOD FOR THEIR APPROVAL. NO CONSTRUCTION SHALL COMMENCE UNTIL THE APPROVED SHOP DRAWINGS HAVE BEEN OBTAINED BY THE CONTRACTOR FROM THE ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY.
7. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND CONDUIT REQUIRED FOR FP&L, BELL SOUTH, IRRIGATION SYSTEM, ETC. PRIOR TO BEGINNING SUBGRADE. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.
8. ALL EXISTING UTILITIES SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY CASTINGS, INCLUDING VALVE BOXES, JUNCTION BOXES, MANHOLES, HAND HOLES, PULL BOXES, INLETS AND SIMILAR STRUCTURES IN AREAS OF CONSTRUCTION. ALL ADJUSTMENTS TO BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY.
10. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY TREE REMOVAL PERMITS FROM THE CITY OF HOLLYWOOD PRIOR TO COMMENCING WORK.
11. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUPPLY THE ENGINEER OF RECORD WITH THE CERTIFICATION THAT ALL CONSTRUCTION AND MATERIALS MEET OR EXCEEDS THE DESIGN AND HAS BEEN INSTALLED PER THE DRAWINGS AND/OR AS-BUILT DRAWINGS.
12. COMPLIANCE WITH THE "TRENCH SAFETY ACT" IS REQUIRED FOR ALL EXCAVATIONS IN EXCESS OF 5 FOOT DEPTHS.

PAVING, GRADING AND DRAINAGE NOTES

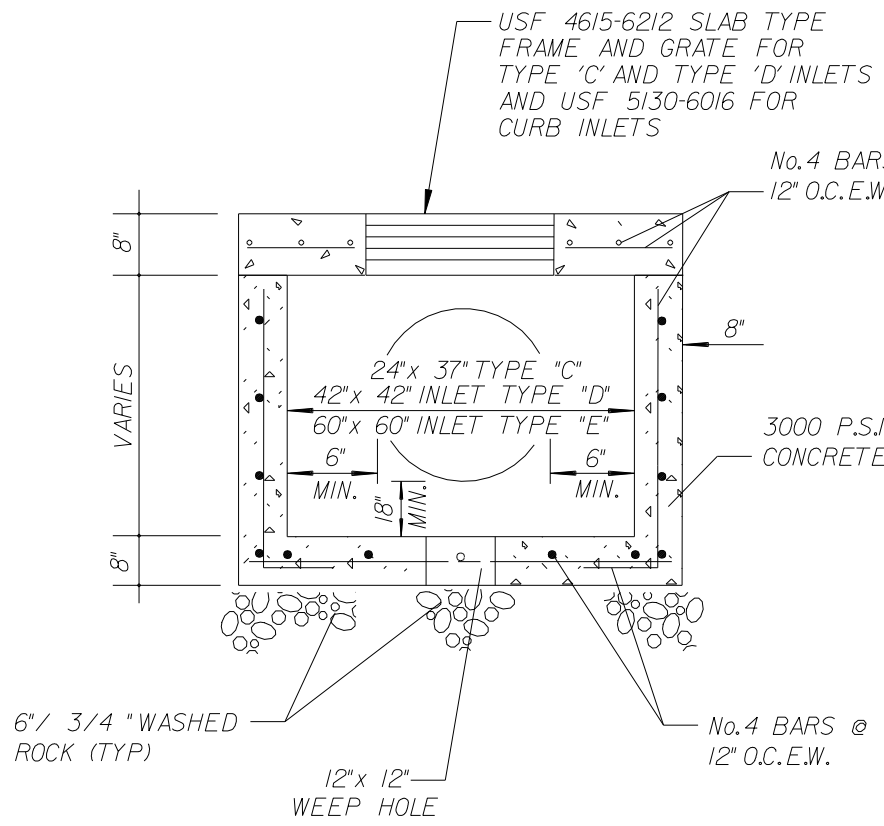
1. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, HARDPAN, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL, AS CLASSIFIED BY AASHTO M-145, FOUND WITHIN THE ROAD AND PARKING LOT AREA SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 1' LIFTS COMPACTED TO NOT LESS THAN 100% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-99. THICKNESS OF LAYERS MAY BE INCREASED PROVIDED THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING TO BE CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.
3. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1 FOOT. ITEMS DESIGNATED TO REMAIN OR TO BE RELOCATED OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.
4. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, or A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL, NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.
6. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
7. WHERE NEW ASPHALT MEETS EXISTING ASPHALT THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR CUTTER, THE ADJACENT ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
8. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
9. SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1 FOOT OF THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
10. ALL SUBGRADE SHALL HAVE AN LBR OF 40, UNLESS OTHERWISE NOTED, AND SHALL BE COMPACTED TO 100% MAXIMUM DRY DENSITY PER AASHTO T-99.
11. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 60% OF CARBONATES OF CALCIUM AND MAGNESIUM, UNLESS OTHERWISE DESIGNATED. ALL LIMEROCK SHALL BE PRIMED.
12. ASPHALT SHALL BE OF THE TYPE DESIGNATED ON THE DRAWINGS.
13. PLASTIC FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.
14. CONCRETE SIDEWALK SHALL BE 4 INCHES THICK ON COMPACTED SUBGRADE, WITH 1/2 INCH EXPANSION JOINTS PLACED AT A MAXIMUM OF 75 FEET. CRACK CONTROL JOINTS SHALL BE 5 FEET ON CENTER. THE BACK OF SIDEWALK ELEVATION SHALL EQUAL THE CROWN OF ROADWAY, UNLESS OTHERWISE SPECIFIED BY LOCAL CODES, OR SHOWN ON THE DRAWINGS. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6 INCHES THICK WITH 6" X 6" (O.G.) WELDED WIRE MESH REINFORCEMENT.
15. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:

- RCP • REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, CLASS III, WALL THICKNESS "B", LATEST EDITION.
- CMP • CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196 CMP (SMOOTH LINED) • CORRUGATED METAL ALUMINUM PIPE (SMOOTH LINES), ASTM DESIGNATION M-196.
- SCP • SLOTTED CONCRETE PIPE, FDOT SECTIONS 941 AND 942.
- PVC • POLYVINYLCHLORIDE PIPE
- PCMP • PERFORATED CMP, FDOT SECTION 945
- DIP • DUCTILE IRON PIPE
- HDPEP • SMOOTH LINED HIGH DENSITY POLYETHYLENE, AASHTO M 294 TYPE S

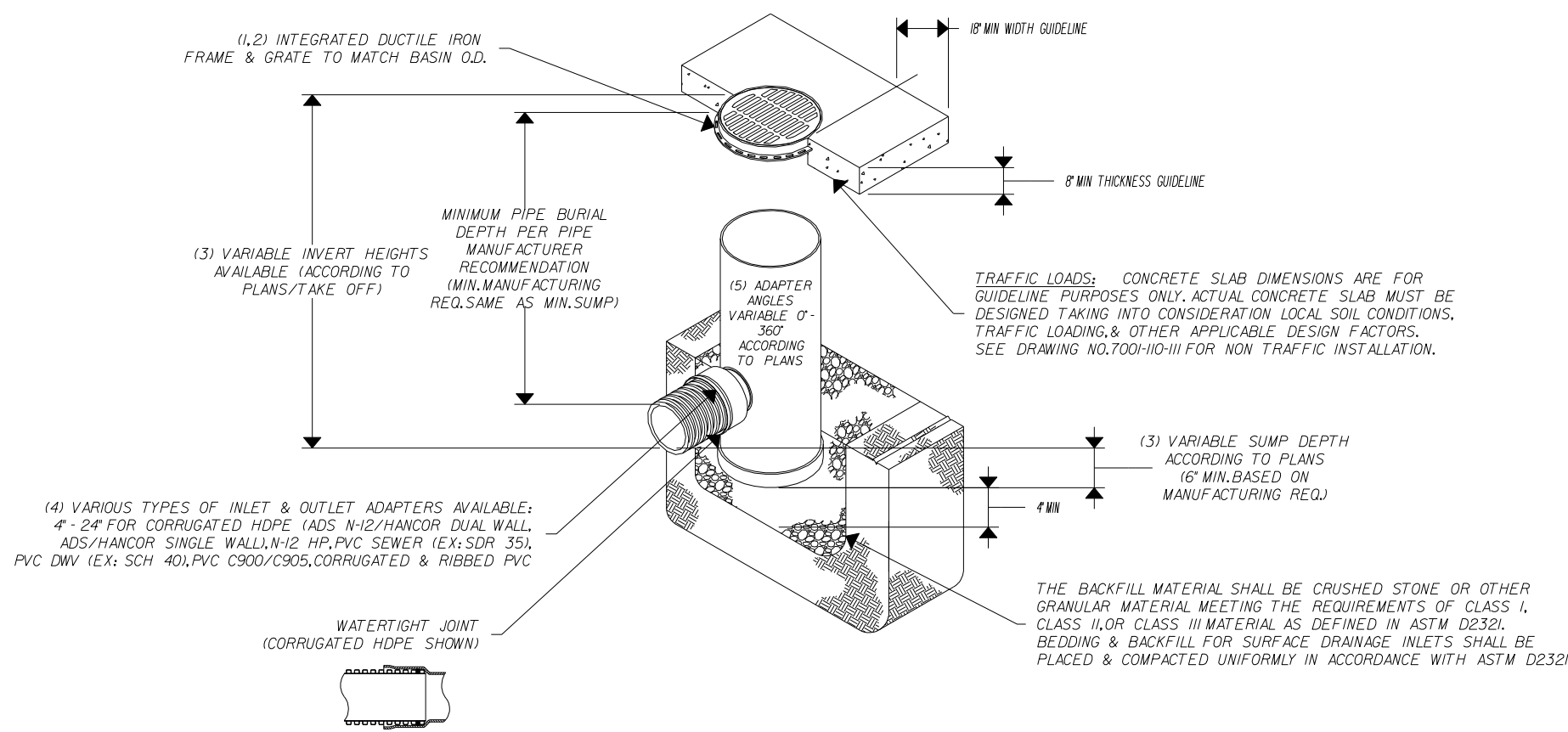
16. ASPHALTIC CONCRETE TYPE S-III SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 331-1 THROUGH 331-6 OF F.D.O.T. STANDARD SPECIFICATIONS. ASPHALTIC CONCRETE TYPE S-1 SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 333-1 THROUGH 333-6 OF F.D.O.T. STANDARD SPECIFICATIONS.
17. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
18. CONCRETE FOR PRECAST MANHOLE AND CATCH BASINS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
19. REINFORCING STEEL FOR MANHOLES AND CATCH BASINS SHALL CONFORM TO ASTM SPECIFICATION A-615 AND A-305, LATEST REVISION.
20. ALL RE-BAR SPLICES IN CONCRETE STRUCTURES SHALL HAVE A MINIMUM LAP OF 24 BAR DIAMETERS.
21. ALL JOINTS IN CONCRETE STRUCTURES SHALL BE FINISHED WATER TIGHT.
22. ALL SPACES AROUND PIPING ENTERING OR LEAVING MANHOLES AND CATCH BASINS SHALL BE COMPLETELY FILLED WITH 2:1 CEMENT MORTAR.
23. JOINTS IN CORRUGATED ALUMINUM PIPE SHALL EMPLOY CORRUGATED METAL BANDS OF SIMILAR METAL AND CORRUGATIONS WITH NEOPRENE, RAM-NEK, OR BITUMASTIC GASKETS INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
24. REINFORCED CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION, AND AS MODIFIED BY SECTION 941 OF THE FLORIDA DOT STANDARD SPECIFICATIONS, LATEST REVISION.
26. ALL HANDICAP SPACES, RAMPS, AND ACCESS AREAS SHALL COMPLY IN STRICT ACCORDANCE WITH THE "AMERICAN DISABILITY ACT" (ADA) (28 CFR PART 36), AND "ACCESSIBILITY BY HANDICAPPED PERSONS", CHAPTER 553, PART V, FLORIDA STATUTES. ANY DISCREPANCY SHALL BE CALLED TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.
27. JOINTS IN HDPE PIPE SHALL BE ADS PRO LINK ST, HANCOR SURE-LOK OR APPROVED EQUAL.



EXFILTRATION TRENCH DETAIL



PRECAST INLET DETAIL

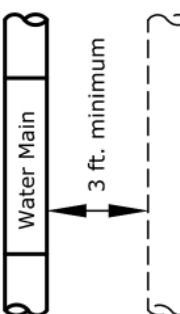
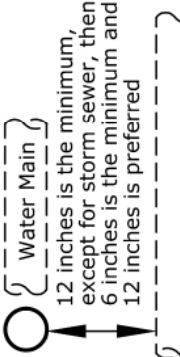
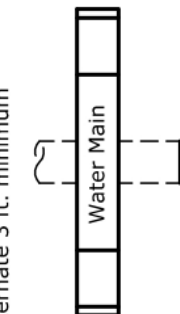
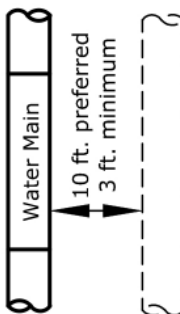
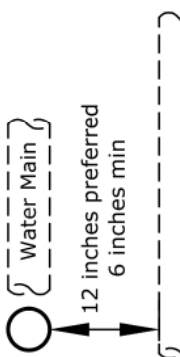
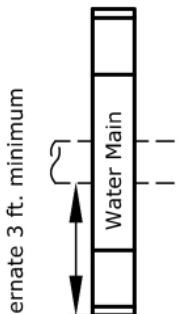
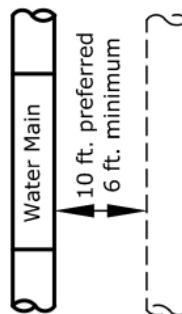
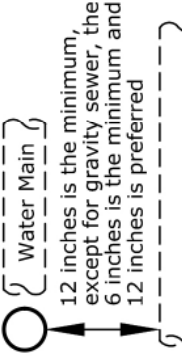
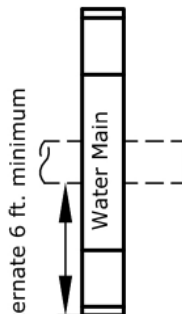


NYLOPLAST DRAIN BASIN:

BROWARD COUNTY  
PUBLIC WORKS DEPARTMENT

WATER & WASTEWATER SERVICES  
ENGINEERING DIVISION  
2555 WEST COPANS ROAD  
POMPAHO BEACH, FL 33069  
PHONE NO. 954-831-0745  
FAX: 954-831-0925

STANDARD DETAIL

WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314					
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1) (4)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)		
STORM SEWER, STORM WATER, FORCE MAIN, RECLAIMED WATER (2)					
VACUUM SANITARY SEWER					
GRAVITY SANITARY SEWER, (3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER					
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft. minimum	—	—		

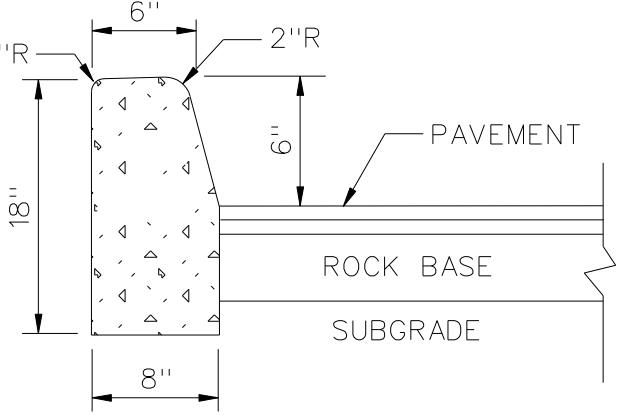
(1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.  
(2) 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED.  
(3) 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.  
(4) 18" VERTICAL MINIMUM SEPARATION REQUIRED BY WWS, UNLESS OTHERWISE APPROVED.

REPLACES FORMER  
DWG NO.105  
REVISED  
5/14/2018

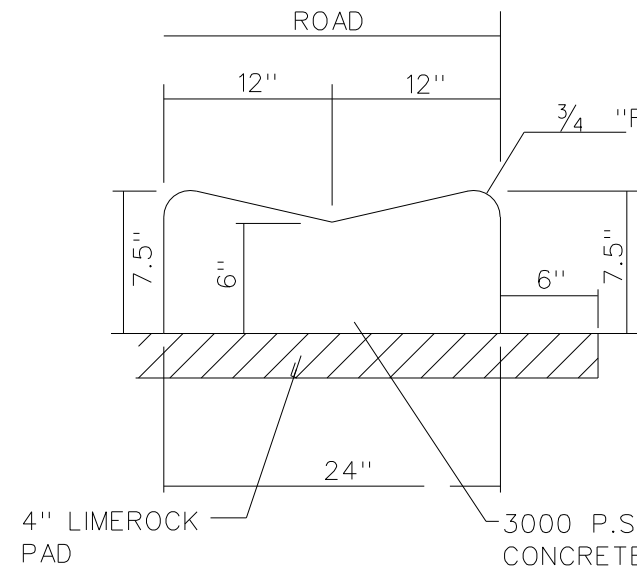
WATER MAIN SEPARATION

FIGURE  
105

<b>BROWARD COUNTY</b> <b>PUBLIC WORKS DEPARTMENT</b>		<b>WATER &amp; WASTEWATER SERVICES</b> ENGINEERING DIVISION 3355 WEST COPAKE ROAD POMPAHO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925		<b>STANDARD DETAIL</b>	
<p><b>NOTE:</b></p> <p>JOINTS SHALL NOT BE DEFLECTED MORE THAN 50% OF MANUFACTURER'S RECOMMENDED DEFLECTION</p>					
REPLACES FORMER DWG NO. 16B		<b>STANDARD UTILITY CROSSING</b>		<b>FIGURE</b> <b>106</b>	
REVISED 5/14/2018					



TYPE "D" CURB



VALLEY GUTTER DETAIL

REVISIONS:

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CLIENT:

**Kaller Architects**  
**2417 Hollywood Boulevard**  
**Hollywood, Florida 33020-6605**  
**(954) 920-5746**

PROJECT:

**613 Hallandale Beach Blvd.**  
**HALLANDALE BEACH**  
**FLORIDA 33304**

TASK:

**GENERAL NOTES AND CONSTRUCTION DETAILS**

**GGB Engineering, Inc.**  
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
• CONSTRUCTION MANAGERS  
• FLORIDA REGISTRATION NO. 818  
2699 Stirling Road, Suite 200  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655

DATE: March 2018

DESIGNED BY: G.C.B.

PROJECT NO. 18-0425

SHEET C-3

SCALE: N.T.S.

DRAWN BY: F.M.

GARY G. BLOOM, P.E.  
FLA. LIC. NO. 39832  
NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER



**BROWARD COUNTY**  
PUBLIC WORKS DEPARTMENT

WATER & SEWAGE TREATMENT  
ENGINEERING DIVISION  
2355 WEST COPANS ROAD  
FORT LAUDERDALE, FL 33605  
PHONE: 954-831-0745  
FAX: 954-831-0925

# STANDARD DETAIL

BOTTOM OF ROADWAY BASE COURSE (LIMEROCK)  
OR EXISTING GROUND

PIPE O.D. PLUS 24 INCHES  
TRENCH WIDTH MINIMUM

REFER TO PAVEMENT  
RESTORATION DETAILS

SUITABLE BACKFILL PLACED AND  
COMPACTED TO AT LEAST 100%  
OF MAXIMUM DENSITY, 6"  
MAXIMUM SIZE, 6" LIFTS, PER  
AASHTO SPEC. NO. T-99C.

SELECT BACKFILL PLACED AND  
COMPACTED TO AT LEAST 100%  
OF MAXIMUM DENSITY PER AASHTO T-99C IN  
LAYERS NOT TO EXCEED 6" THICKNESS WITH 2"  
MAXIMUM PARTICLE SIZE.

BEDDING MATERIAL. SEE NOTE  
NO. 1

FOUNDATION REQUIRED IN UNSTABLE  
SOILS. SEE NOTE NO. 3

**NOTES:**

- UNLESS OTHERWISE SPECIFIED, BEDDING MATERIAL SHALL CONSIST OF SELECT BACKFILL MATERIAL 2" MAXIMUM PARTICLE SIZE, COMPACTED TO AT LEAST 100% OF MAX. DENSITY, 6" LIFTS, PER AASHTO SPEC. NO. T-99C.
- WHERE REQUIRED, SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- WHERE UNSTABLE SOILS ARE ENCOUNTERED, INCLUDING PEAT, MUCK OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS, A FOUNDATION IS REQUIRED AS DETERMINED BY THE ENGINEER OF RECORD.

REPLACES FORMER  
DWG NO. 180

REVISED  
5/14/2018

## TYPICAL TRENCH BACKFILL

## FIGURE 180

**BROWARD COUNTY**  
PUBLIC WORKS DEPARTMENT

WATER & SEWAGE SERVICES  
ENGINEERING DIVISION  
2555 WEST COPANS ROAD  
POMPANOE BEACH, FL 33069  
PHONE NO. 954-831-0745  
FAX: 954-831-0925

# STANDARD DETAIL

**NOTES:**

1. BASE MATERIAL SHALL HAVE A MINIMUM LBR OF 100 AND A MINIMUM CARBONATE CONTENT OF 70%.
2. BASE SHALL BE PLACED IN 6" MAXIMUM THICKNESS LAYERS WITH EACH LAYER COMPACTED AS REQUIRED AND TESTED PRIOR TO THE PLACEMENT OF THE SUCCEEDING LAYERS.
3. SUBGRADE MATERIAL SHALL BE GRANULAR AND ANGULAR AND SHALL HAVE A MINIMUM LBR OF 40.
4. BACKFILL SHALL BE PLACED AND COMPACTED IN 6" LAYERS, BUT TESTING WILL BEGIN 12" ABOVE THE INSTALLED UTILITY.
5. ALL EDGES OF EXISTING ASPHALT PAVEMENT THAT ABOUT RESURFACING SHALL BE SAW CUT IN STRAIGHT LINES PARALLEL TO OR PERPENDICULAR TO THE ROADWAY, PRIOR TO RESURFACING.
6. RESURFACING MATERIAL SHALL BE CONSISTENT WITH SURROUNDING SURFACE, AND SHALL BE APPLIED IN 2 LIFTS, A MINIMUM OF 1/2 INCH.
7. TRAFFIC STRIPES SHALL NOT BE PLACED DIRECTLY ON TOP OF THE JOINT
8. FOR STATE ROADS REFER TO FDOT SPECIFICATIONS AND REQUIREMENTS.

T = EXISTING LIMEROCK BASE THICKNESS.

REPLACES FORMER  
DWG NO. 19A

**RESTORATION OF ROADWAY CUT  
FOR  
PARALLEL UTILITY INSTALLATION**

REVISED  
5/14/2018

**FIGURE  
182**

PLAN, LANE AND DEPTH OF EXISTENCE SECTION SHOWN. DATE: 5-14-2018. DWG. NO. 182. 3-DOTTED: 8/14/2018. 11:53 PM. BY: WILSON, ROBERT

BROWARD COUNTY PUBLIC WORKS DEPARTMENT  
 STANDARD DETAIL  
 FIGURE 183  
 RESTORATION OF ROADWAY CUT FOR PERPENDICULAR UTILITY INSTALLATION  
 DWG. NO. 19B  
 REVISED 5/14/2018  
 PREPARED BY: J. L. WILSON, ROBERT

**BROWARD COUNTY**  
**PUBLIC WORKS DEPARTMENT**

WATER & WASTEWATER SERVICES  
 ENGINEERING DIVISION  
 2555 WEST COPAN ROAD  
 FORT LAUDERDALE, FL 33309  
 PHONE NO. 954-831-0745  
 FAX: 954-831-0925

# STANDARD DETAIL

**NOTES:**

1. BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL.
2. BASE MATERIAL SHALL BE PLACED IN 6" MAXIMUM LAYERS (LOOSE MEASUREMENT) AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAW CUT.
4. SURFACE MATERIAL SHALL BE CONSISTENT WITH THE SURROUNDING SURFACE MATERIAL.
5. BASE MATERIAL SHALL HAVE A MINIMUM CARBONATE OF 70%.
6. SUB GRADE MATERIAL SHALL BE GRANULAR AND ANGULAR AND SHALL HAVE A MINIMUM LBR OF 40.
7. IF THE DITCH IS FILLED TEMPORARILY, IT SHALL BE COVERED WITH A 2" THICK ASPHALT CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING, UNTIL REPLACED WITH A PERMANENT PATCH.
8. FOR STATE ROADS REFER TO FDOT SPECIFICATIONS AND REQUIREMENTS.

T = EXISTING LIMEROCK BASE THICKNESS.

REPLACES FORMER  
 DWG NO. 19B

REVISED  
 5/14/2018

RESTORATION OF ROADWAY CUT  
 FOR  
 PERPENDICULAR UTILITY INSTALLATION

FIGURE  
**183**

**BROWARD COUNTY**  
**PUBLIC WORKS DEPARTMENT**

WATER & WASTEWATER SERVICES  
ENGINEERING DIVISION  
2355 WEST COPANE ROAD  
FORT LAUDERDALE, FL 33609  
PHONE NO. 954-831-0745  
FAX: 954-831-0925

# STANDARD DETAIL

**NOTES:**

- REFER TO WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS FOR MINIMUM REQUIREMENTS AND PRE-APPROVED MANUFACTURERS.
- MAIN SHALL BE CLEANED BEFORE ATTACHING SLEEVE
- SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP. PRESSURE TEST AND TAP SHALL BE MADE IN PRESENCE OF AN AUTHORIZED COUNTY REPRESENTATIVE.
- TAP SHALL BE MADE NO CLOSER THAN 18" FROM THE NEAREST JOINT.
- CONCRETE BLOCK SHALL COMPLETELY SUPPORT TAPPING VALVE.
- RESTRAINT JOINT REQUIREMENTS SHALL BE IN ACCORDANCE WITH WWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS.

REVISED  
5/14/2018

## TAPPING SLEEVE AND VALVE INSTALLATION

## FIGURE 196

**BROWARD COUNTY**  
**PUBLIC WORKS DEPARTMENT**

WATER & WASTEWATER SERVICES  
ENGINEERING DIVISION  
2555 WEST COPANS ROAD  
POMPANOA BEACH, FL 33069  
PHONE NO. 954-831-0745  
FAX: 954-831-0925

# STANDARD DETAIL

**JUMPER ASSEMBLY**

**NOTES:**

1. A BCWWS SUPPLIED FIRE HYDRANT BACKFLOW METER WITH RPZ MAY BE USED IN LIEU OF THE JUMPER ASSEMBLY.
2. SEE DETAIL 205B FOR ADDITIONAL REQUIREMENTS.

REPLACES FORMER  
DWG NO.7

REVISED  
5/14/2018

## FILLING AND FLUSHING JUMPER CONNECTION

# FIGURE 205A

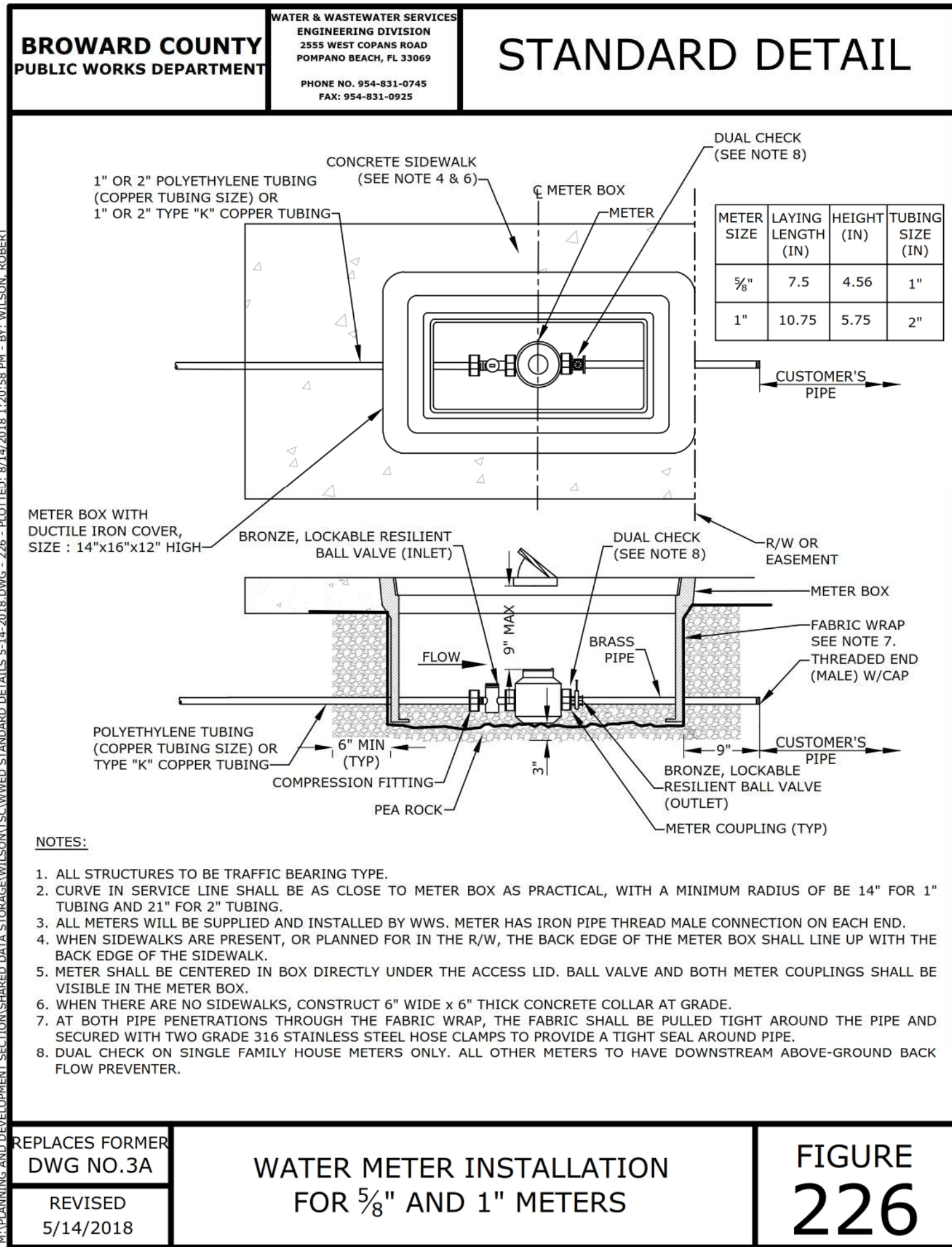
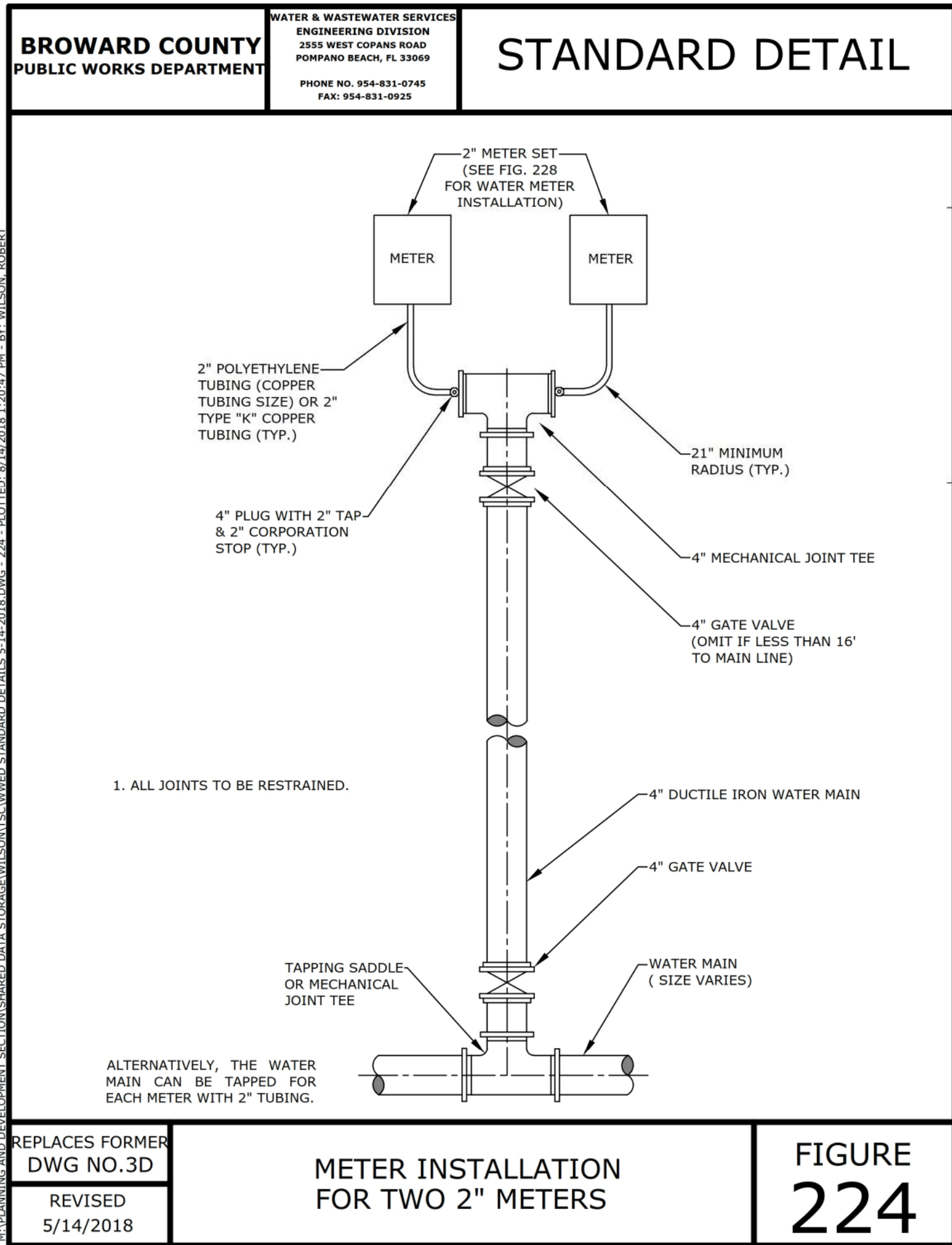
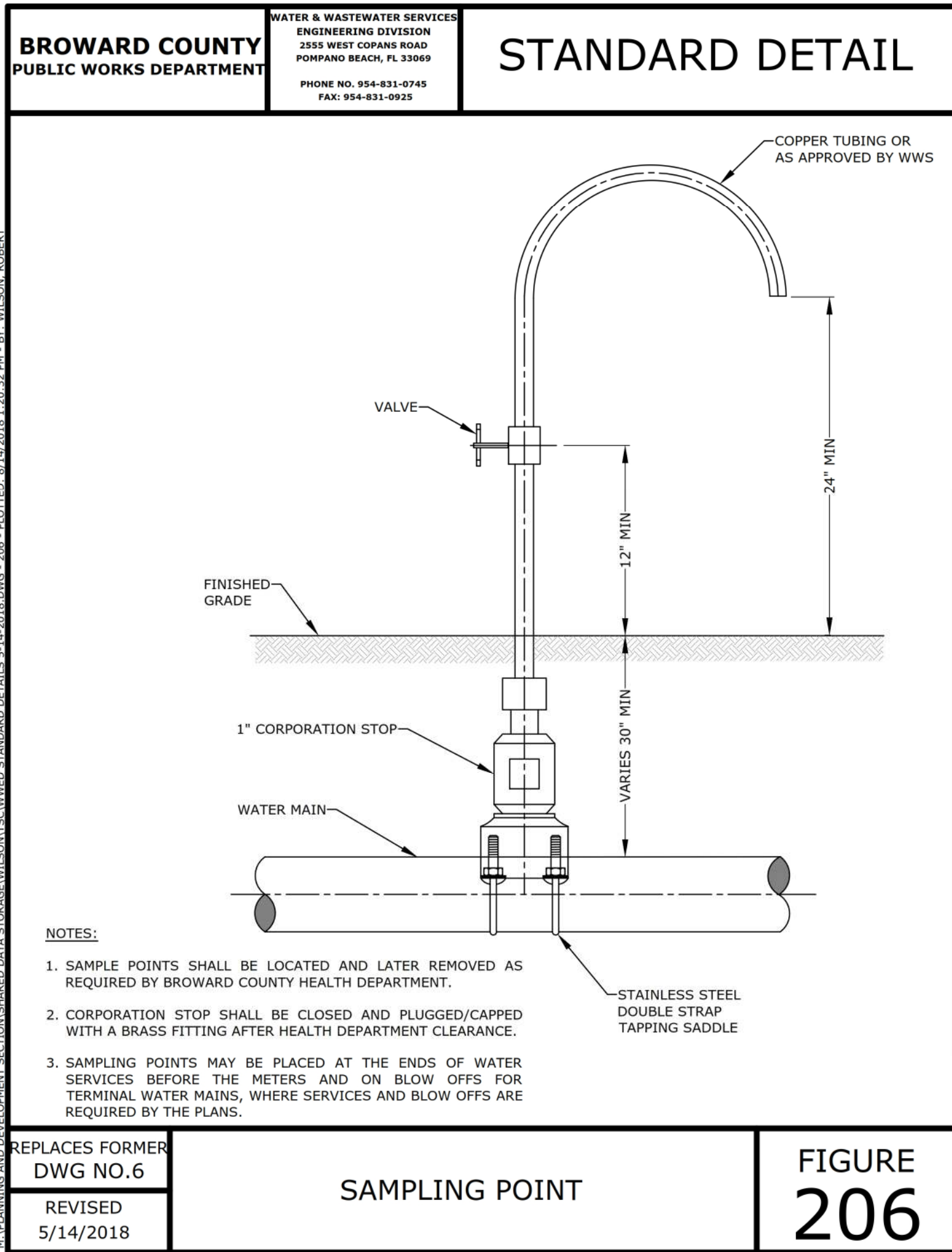
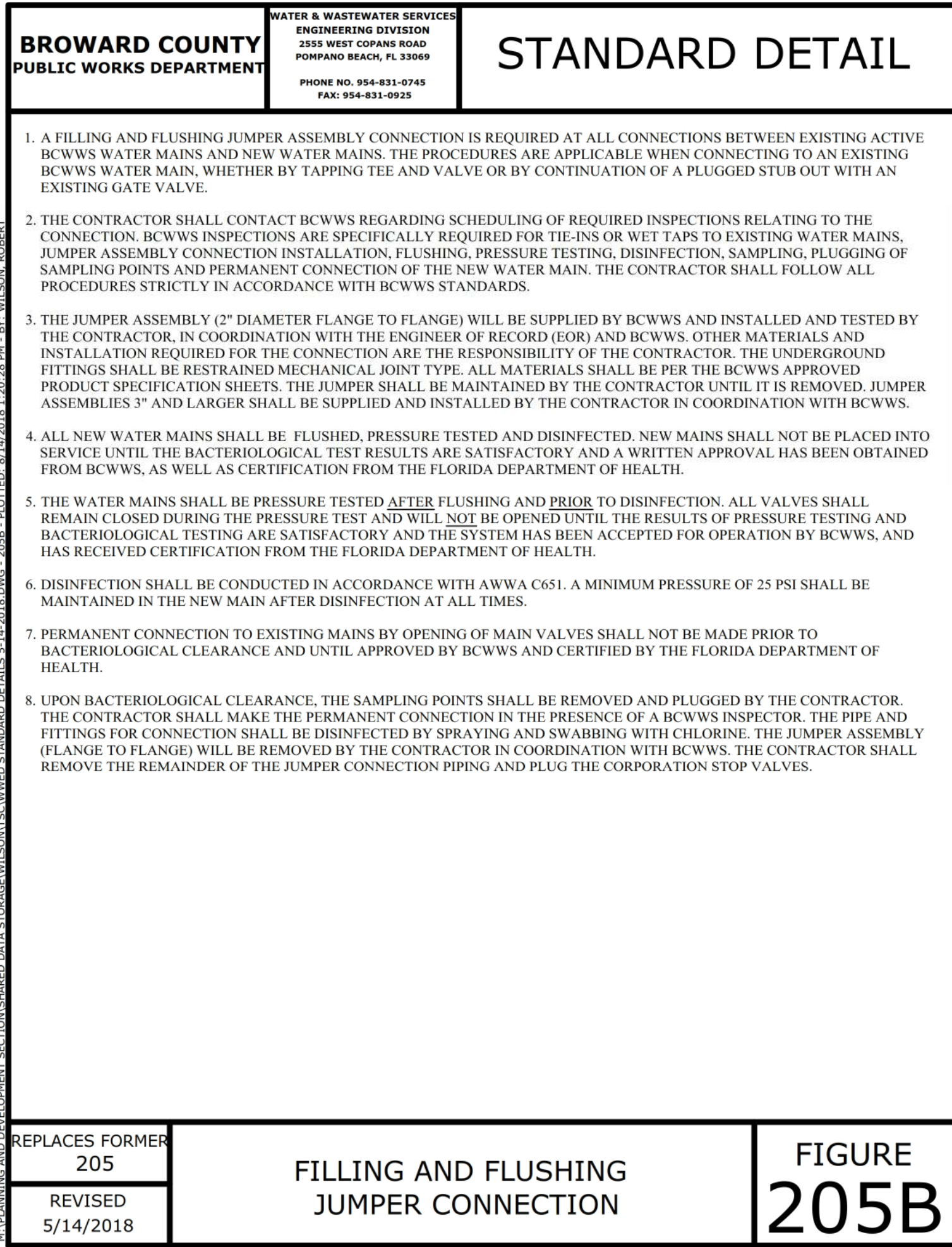
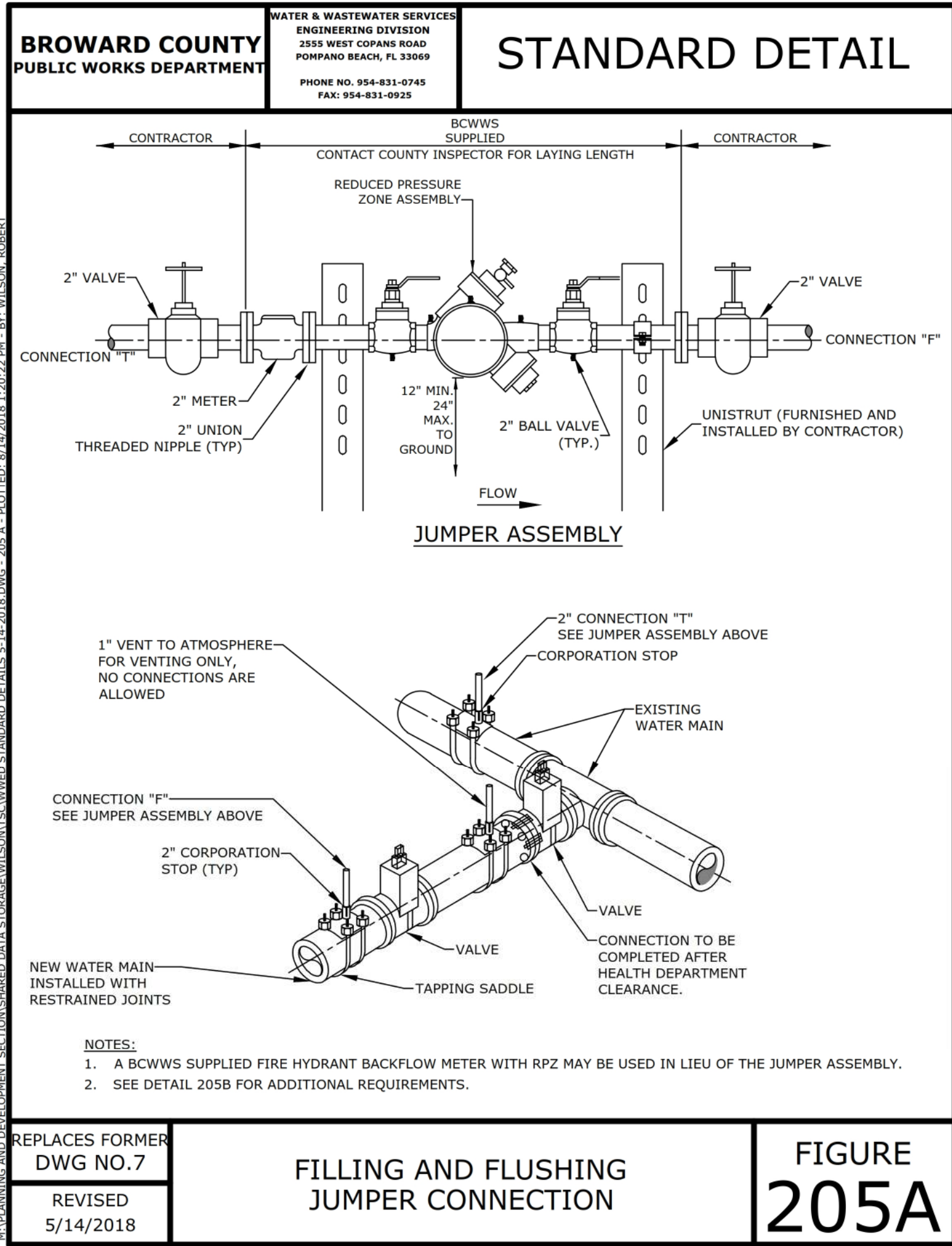
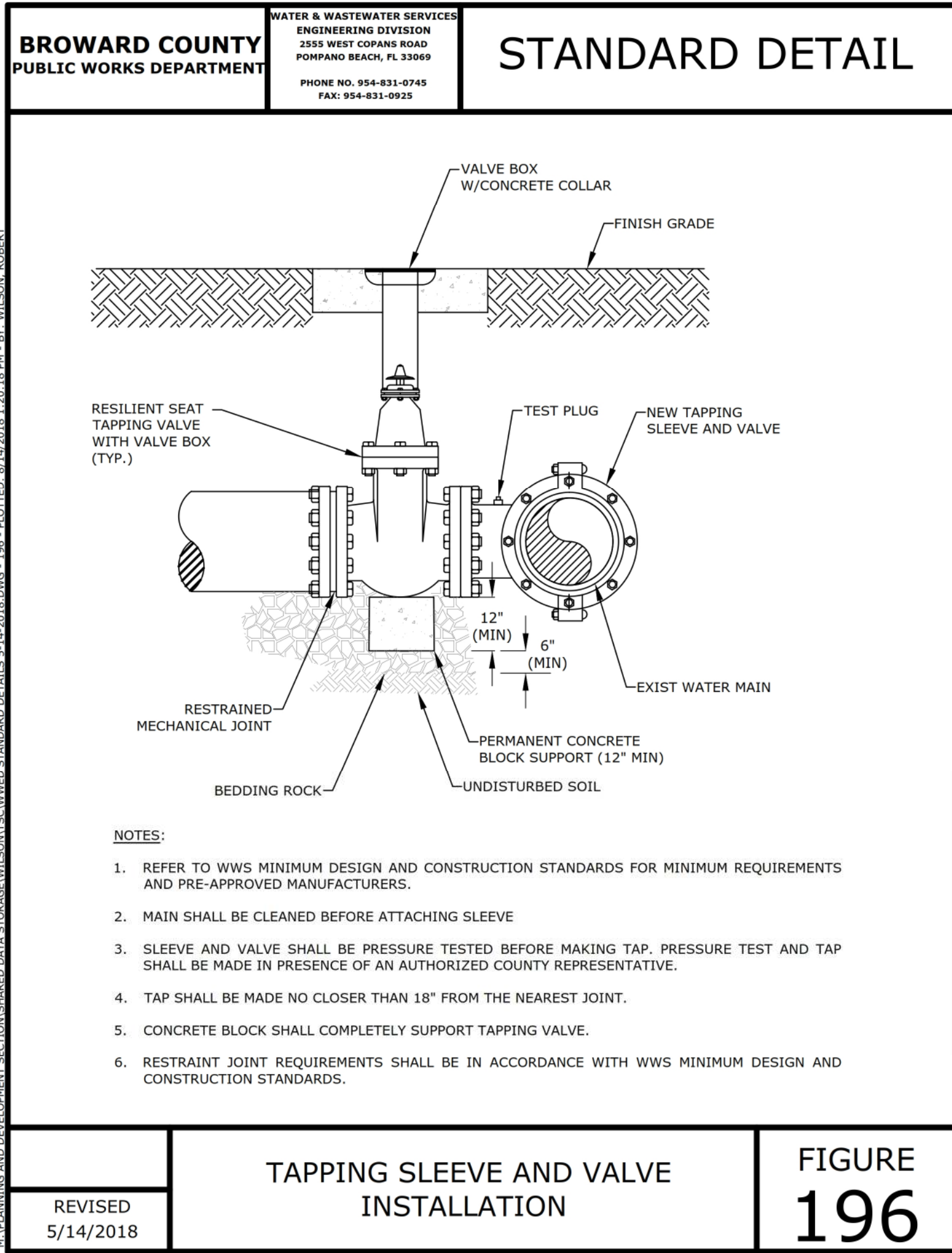
<div><div><div>BROWARD COUNTY PUBLIC WORKS DEPARTMENT</div></div></div>	<div><div>WATER &amp; WASTEWATER SERVICES</div><div>WATER TREATING DIVISION</div><div>3555 WEST COPANS ROAD FORDLAND BEACH, FL 33069</div><div>PHONE NO. 954-831-0745 FAX: 954-831-0925</div></div>	<div>STANDARD DETAIL</div>
	<div><div><div>1. A FILLING AND FLUSHING JUMPER ASSEMBLY CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE BCWWS WATER MAINS AND NEW WATER MAINS. THE PROCEDURES ARE APPLICABLE WHEN CONNECTING TO AN EXISTING BCWWS WATER MAIN, WHETHER BY TAPPING TEE AND VALVE OR BY CONTINUATION OF A PLUGGED STUB OUT WITH AN EXISTING GATE VALVE.</div><div>2. THE CONTRACTOR SHALL CONTACT BCWWS REGARDING SCHEDULING OF REQUIRED INSPECTIONS RELATING TO THE CONNECTION. BCWWS INSPECTIONS ARE SPECIFICALLY REQUIRED FOR TIE-INS OR WET TAPS TO EXISTING WATER MAINS, JUMPER ASSEMBLY CONNECTION INSTALLATION, FLUSHING, PRESSURE TESTING, DISINFECTION, SAMPLING, PLUGGING OF SAMPLING POINTS AND PERMANENT CONNECTION OF THE NEW WATER MAIN. THE CONTRACTOR SHALL FOLLOW ALL PROCEDURES STRICTLY IN ACCORDANCE WITH BCWWS STANDARDS.</div><div>3. THE JUMPER ASSEMBLY 12" DIAMETER FLANGE TO FLANGE WILL BE SUPPLIED BY BCWWS AND INSTALLED AND TESTED BY THE CONTRACTOR, IN COORDINATION WITH THE ENGINEER OF RECORD (EOR) AND BCWWS. OTHER MATERIALS AND INSTALLATION REQUIRED FOR THE CONNECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE UNDERGROUND FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT TYPE. ALL MATERIALS SHALL BE PER THE BCWWS APPROVED PRODUCT SPECIFICATION SHEETS. THE JUMPER SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL IT IS REMOVED. JUMPER ASSEMBLIES 3" AND LARGER SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR IN COORDINATION WITH BCWWS.</div><div>4. ALL NEW WATER MAINS SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. NEW MAINS SHALL NOT BE PLACED INTO SERVICE UNTIL THE BACTERIOLOGICAL TEST RESULTS ARE SATISFACTORY AND A WRITTEN APPROVAL HAS BEEN OBTAINED FROM BCWWS, AS WELL AS CERTIFICATION FROM THE FLORIDA DEPARTMENT OF HEALTH.</div><div>5. THE WATER MAINS SHALL BE PRESSURE TESTED AFTER FLUSHING AND PRIOR TO DISINFECTION. ALL VALVES SHALL REMAIN CLOSED DURING THE PRESSURE TEST AND WILL NOT BE OPENED UNTIL THE RESULTS OF PRESSURE TESTING AND BACTERIOLOGICAL TESTING ARE SATISFACTORY AND THE SYSTEM HAS BEEN ACCEPTED FOR OPERATION BY BCWWS, AND HAS RECEIVED CERTIFICATION FROM THE FLORIDA DEPARTMENT OF HEALTH.</div><div>6. DISINFECTION SHALL BE CONDUCTED IN ACCORDANCE WITH AWWA C651. A MINIMUM PRESSURE OF 25 PSI SHALL BE MAINTAINED IN THE NEW MAIN AFTER DISINFECTION AT ALL TIMES.</div><div>7. PERMANENT CONNECTION TO EXISTING MAINS BY OPENING OF MAIN VALVES SHALL NOT BE MADE PRIOR TO BACTERIOLOGICAL CLEARANCE AND UNTIL APPROVED BY BCWWS AND CERTIFIED BY THE FLORIDA DEPARTMENT OF HEALTH.</div><div>8. UPON BACTERIOLOGICAL CLEARANCE, THE SAMPLING POINTS SHALL BE REMOVED AND PLUGGED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE THE PERMANENT CONNECTION IN THE PRESENCE OF A BCWWS INSPECTOR. THE PIPE AND FITTINGS FOR CONNECTION SHALL BE DISINFECTED BY SPRAYING AND SWABING WITH CHLORINE. THE JUMPER ASSEMBLY (FLANGE TO FLANGE) WILL BE REMOVED BY THE CONTRACTOR IN COORDINATION WITH BCWWS. THE CONTRACTOR SHALL REMOVE THE REMAINDER OF THE JUMPER CONNECTION PIPING AND PLUG THE CORPORATION STOP VALVES.</div></div></div>	
<div><div>REPLACES FORMER 205</div><div>REVISED 5/14/2018</div></div>	<div>FILLING AND FLUSHING JUMPER CONNECTION</div>	<div>FIGURE 205B</div>

PROJECT:		613 Hallandale Beach Blvd. HALLANDALE BEACH FLORIDA 33304	
TASK:		CONSTRUCTION DETAILS	
DATE: March 2018		SCALE: N.T.S.	
DESIGNED BY: G.G.B.		DRAWN BY: F.M.	
PROJECT NO. 18-0425			
SHEET C - 4			
REVISIONS:  1. 2. 3. 4. 5. 6. 7. 8.			
CLIENT:		Kaller Architects 2417 Hollywood Boulevard Hollywood, Florida 33020-6605 (954) 920-5746	









REVISIONS:

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CLIENT:

PROJECT:

613 Hallandale Beach Blvd.  
HALLANDALE BEACH  
FLORIDA 33304

TASK:

2417 Hollywood Boulevard  
Hollywood, Florida 33020-6605  
(954) 920-5746

CONSTRUCTION DETAILS

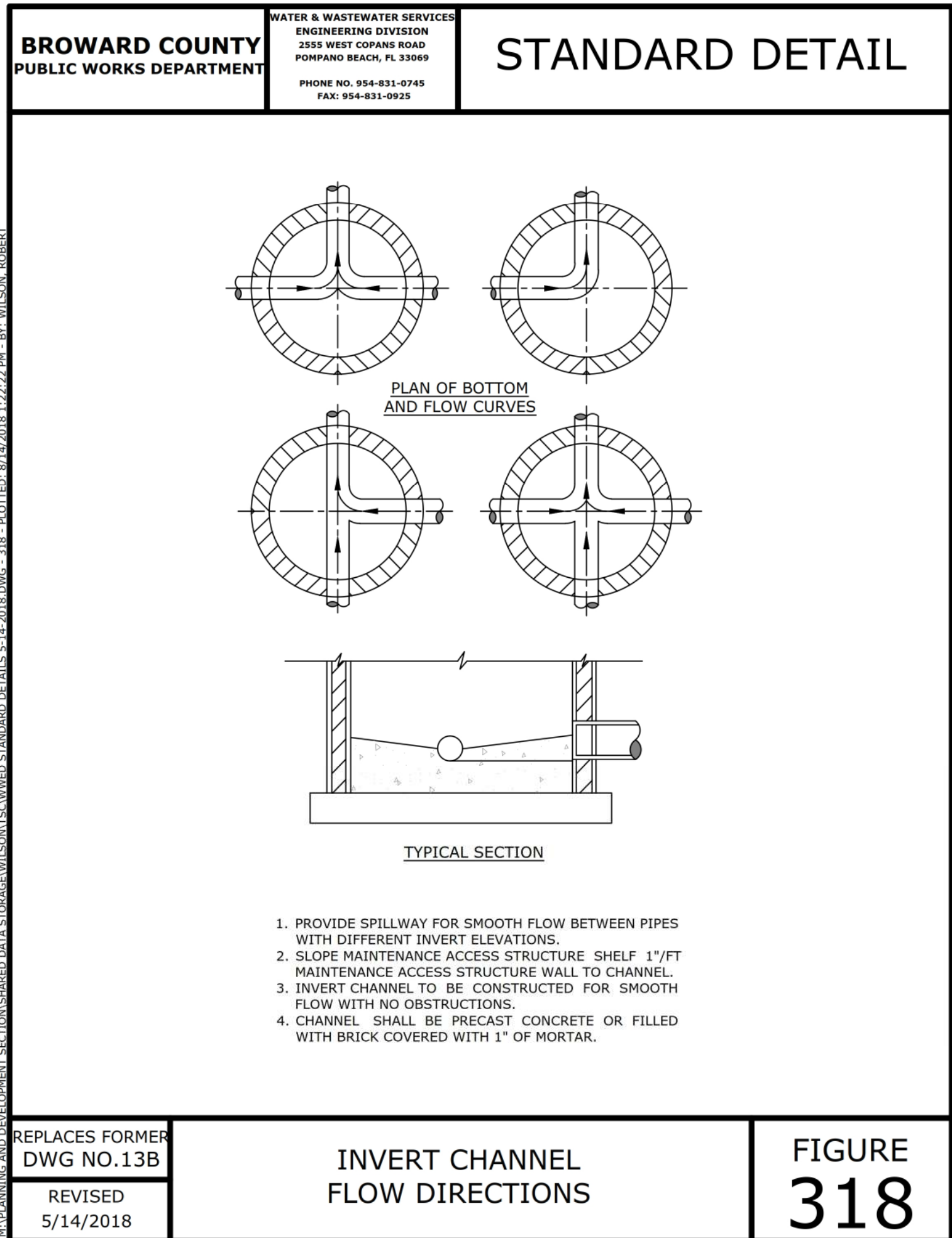
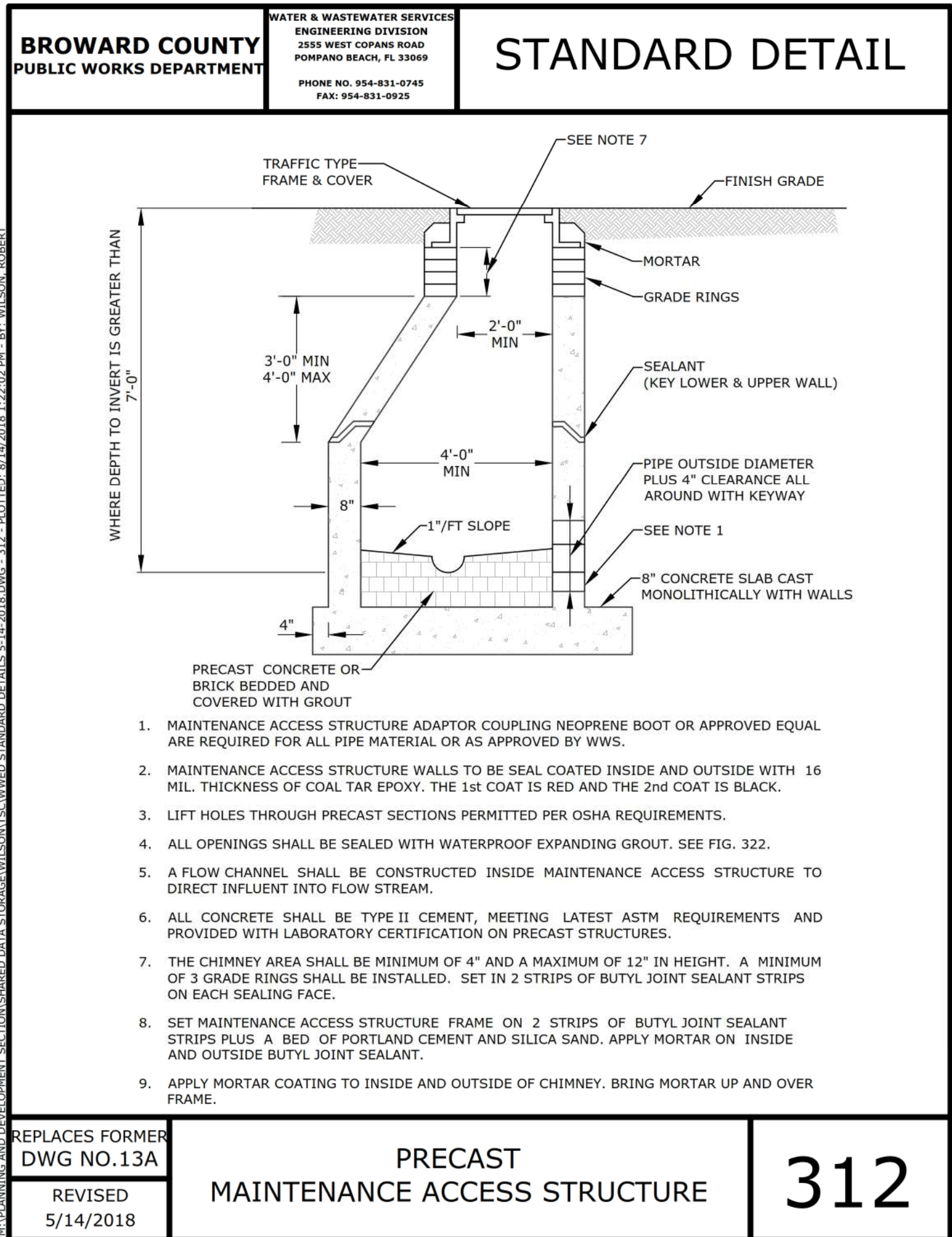
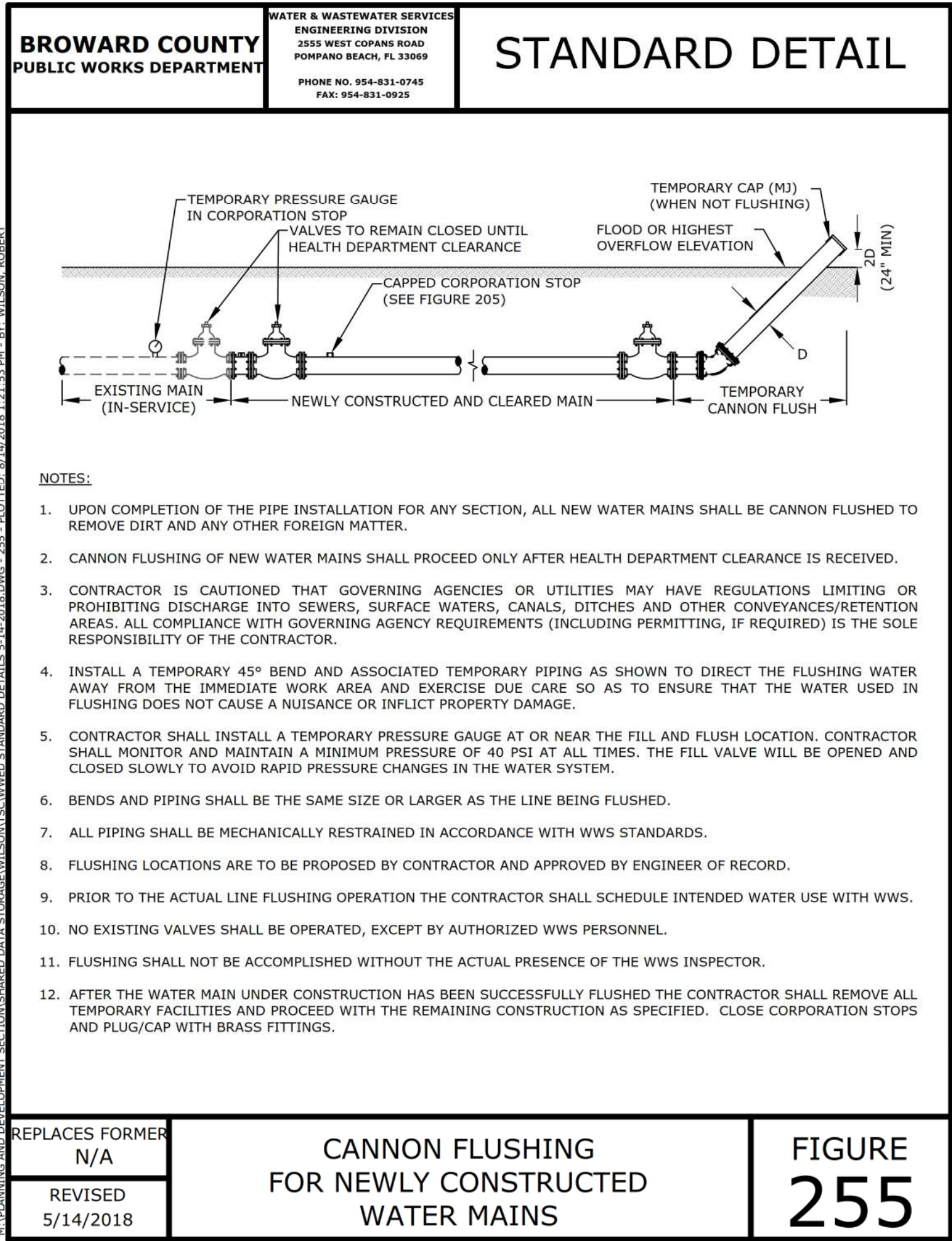
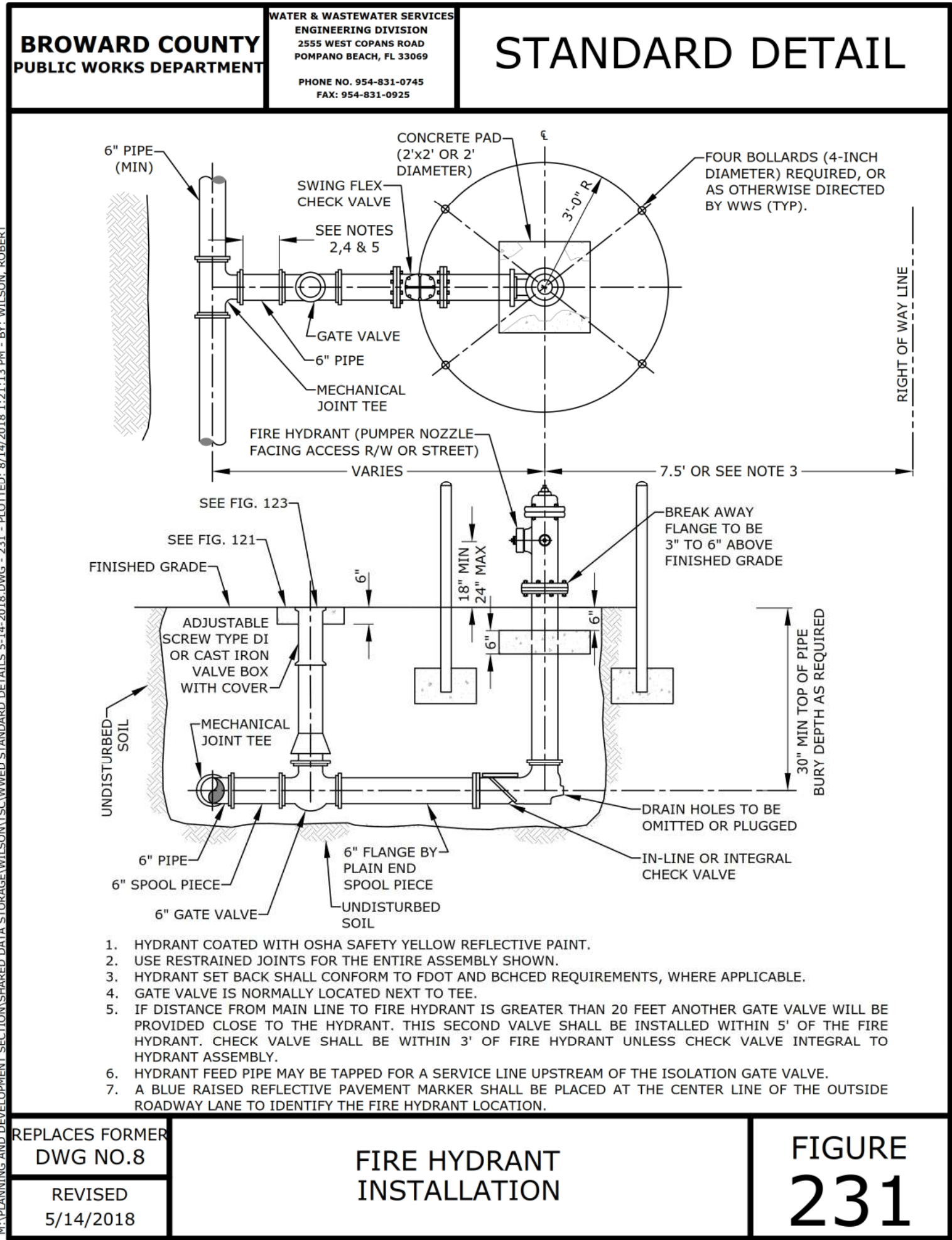
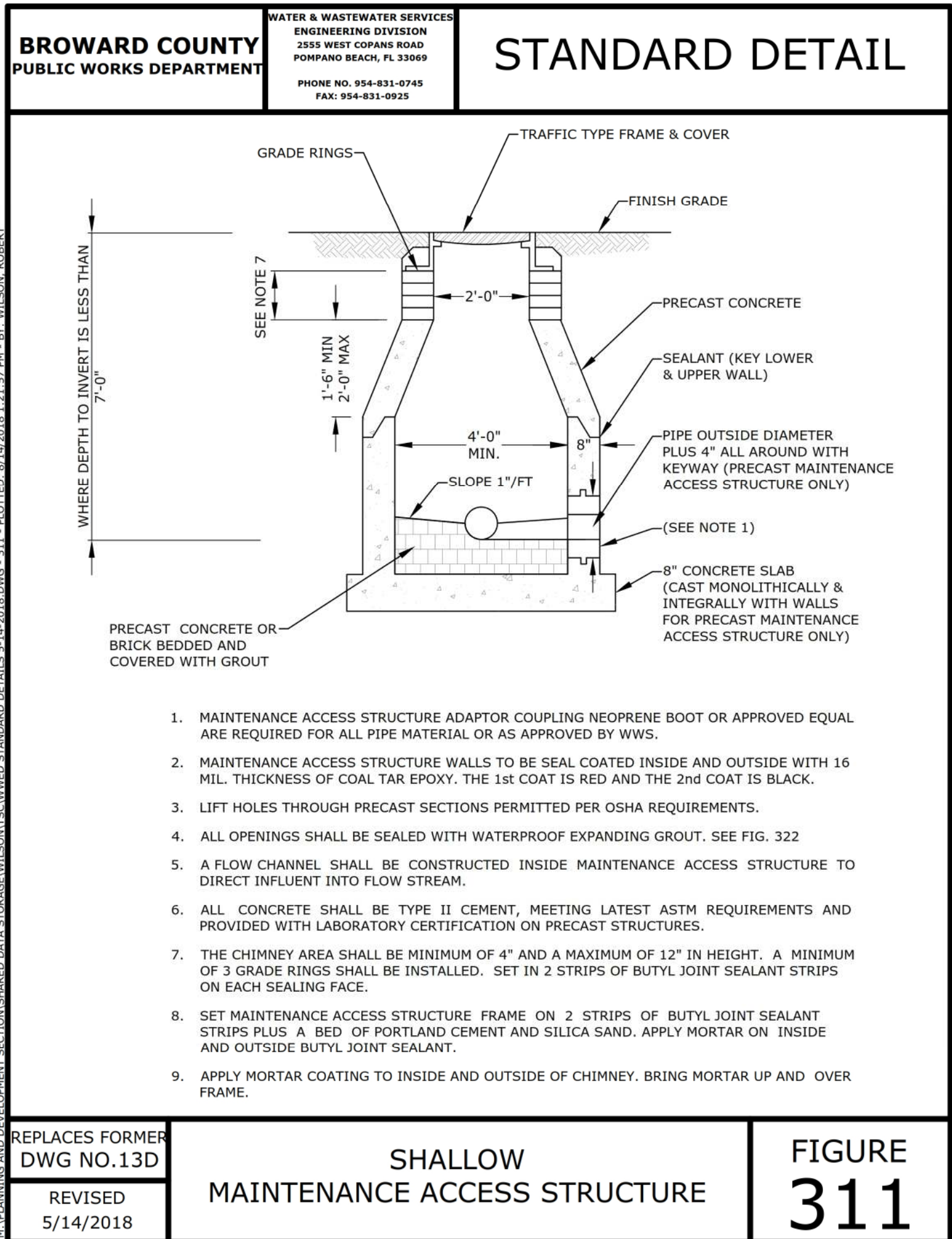
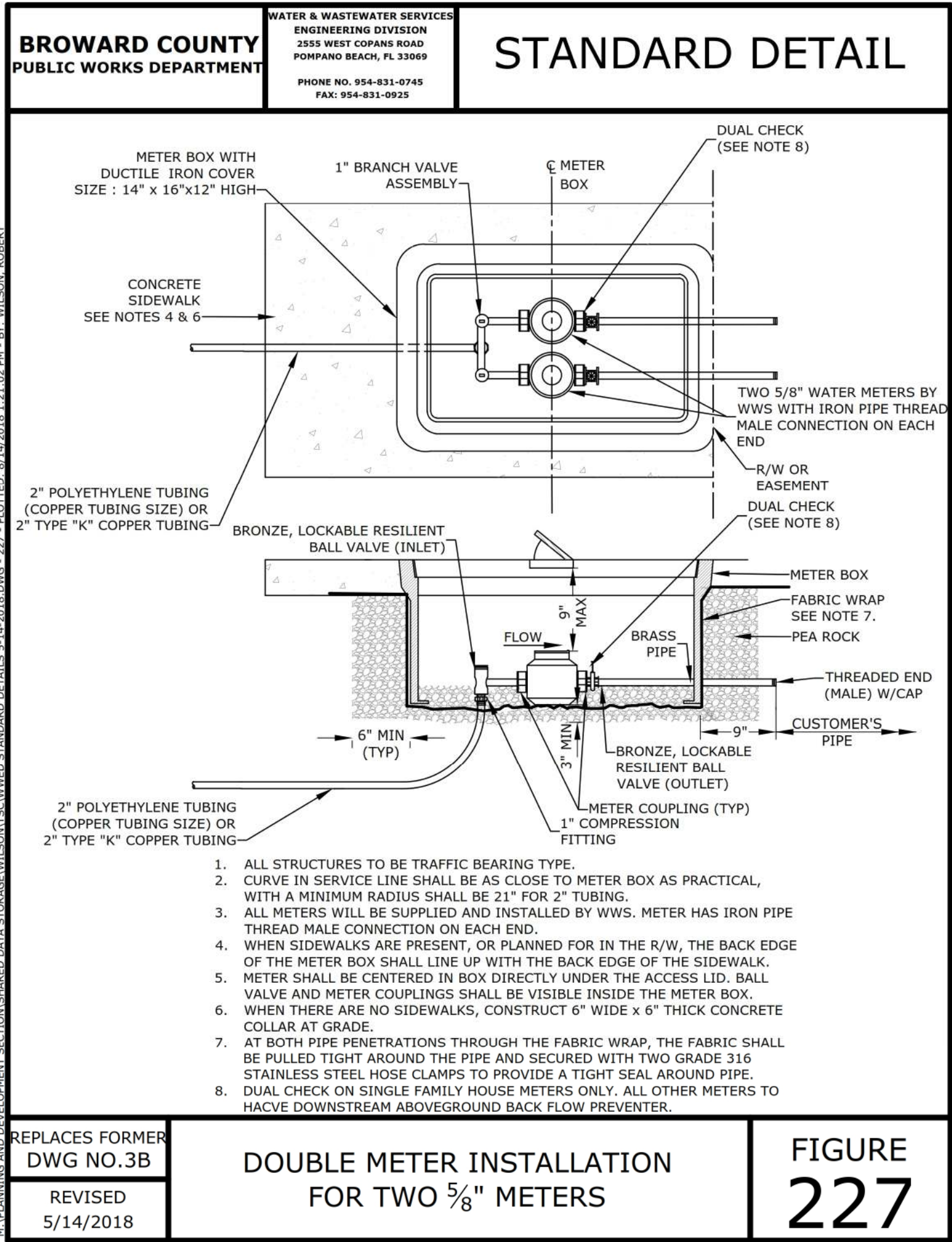
**GGB Engineering, Inc.**  
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
• CONSTRUCTION MANAGERS  
• FLORIDA REGISTRATION NO. 8118  
2699 Stirling Road, Suite 202  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 886-8655

DATE: March 2018  
DESIGNED BY: C.G.B.  
PROJECT NO. 18-0425  
SHEET C-6

SCALE: N.T.S.  
DRAWN BY: F.M.

GARY G. BLOOM, P.E.  
FLA. LIC. NO. 78832  
NOT VALID UNLESS SIGNED  
AND SEALED BY ENGINEER





REVISIONS:

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CLIENT:

PROJECT:

613 Hallandale Beach Blvd.  
HALLANDALE BEACH  
FLORIDA 33304

TASK:

CONSTRUCTION DETAILS

**Kaller Architects**  
2417 Hollywood Boulevard  
Hollywood, Florida 33020-6605  
(954) 920-5746

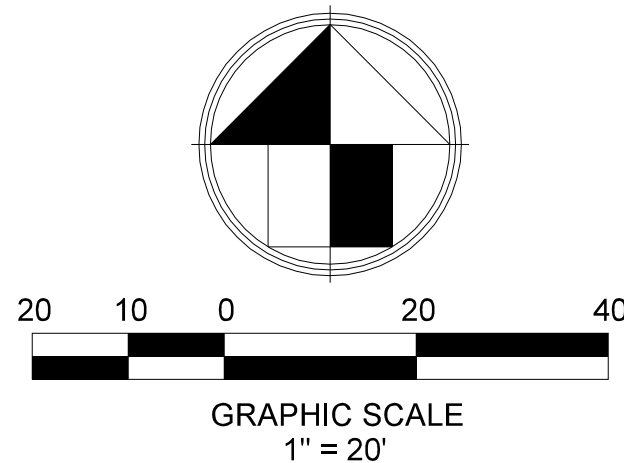
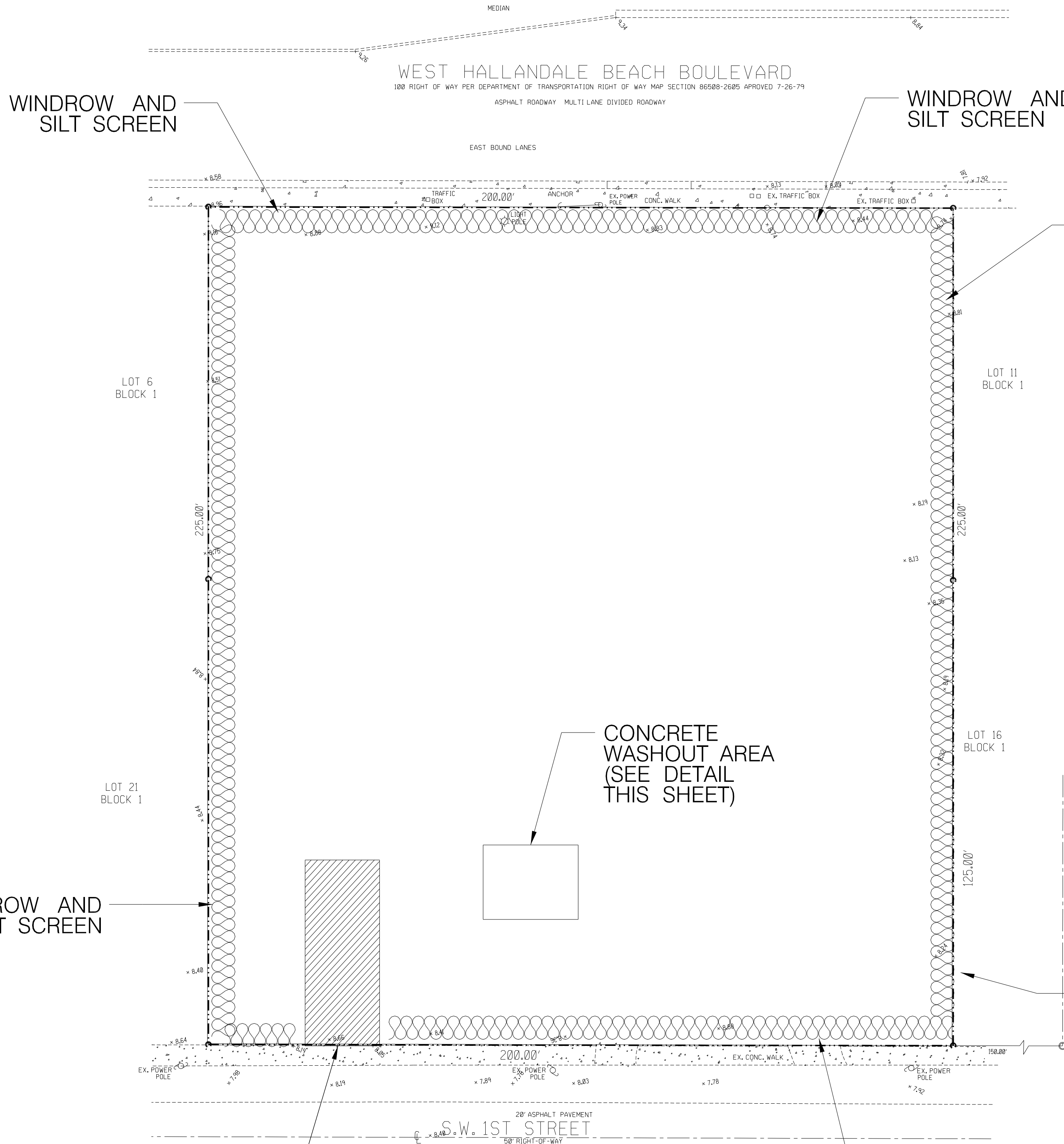
**GGB Engineering, Inc.**  
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
• CONSTRUCTION MANAGERS  
• FLORIDA REGISTRATION NO. 8118  
2899 Stirling Road, Suite 202  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655

DATE: March 2018  
DESIGNED BY: C.G.B.  
SCALE: N.T.S.  
DRAWN BY: F.M.

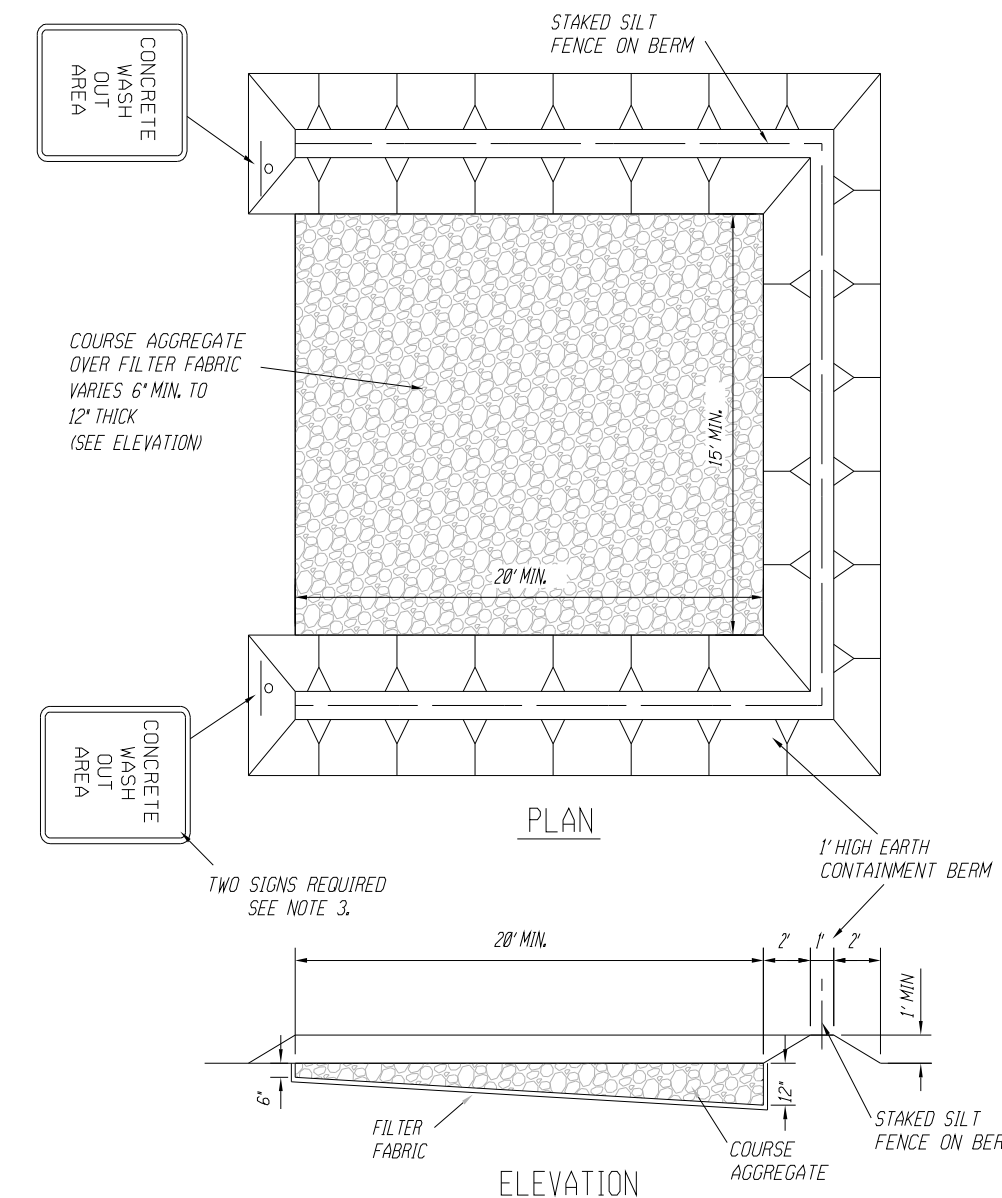
PROJECT NO. 18-0425  
SHEET C-7

GARY G. BLOOM, P.E.  
FLA. LIC. NO. 19832  
NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER



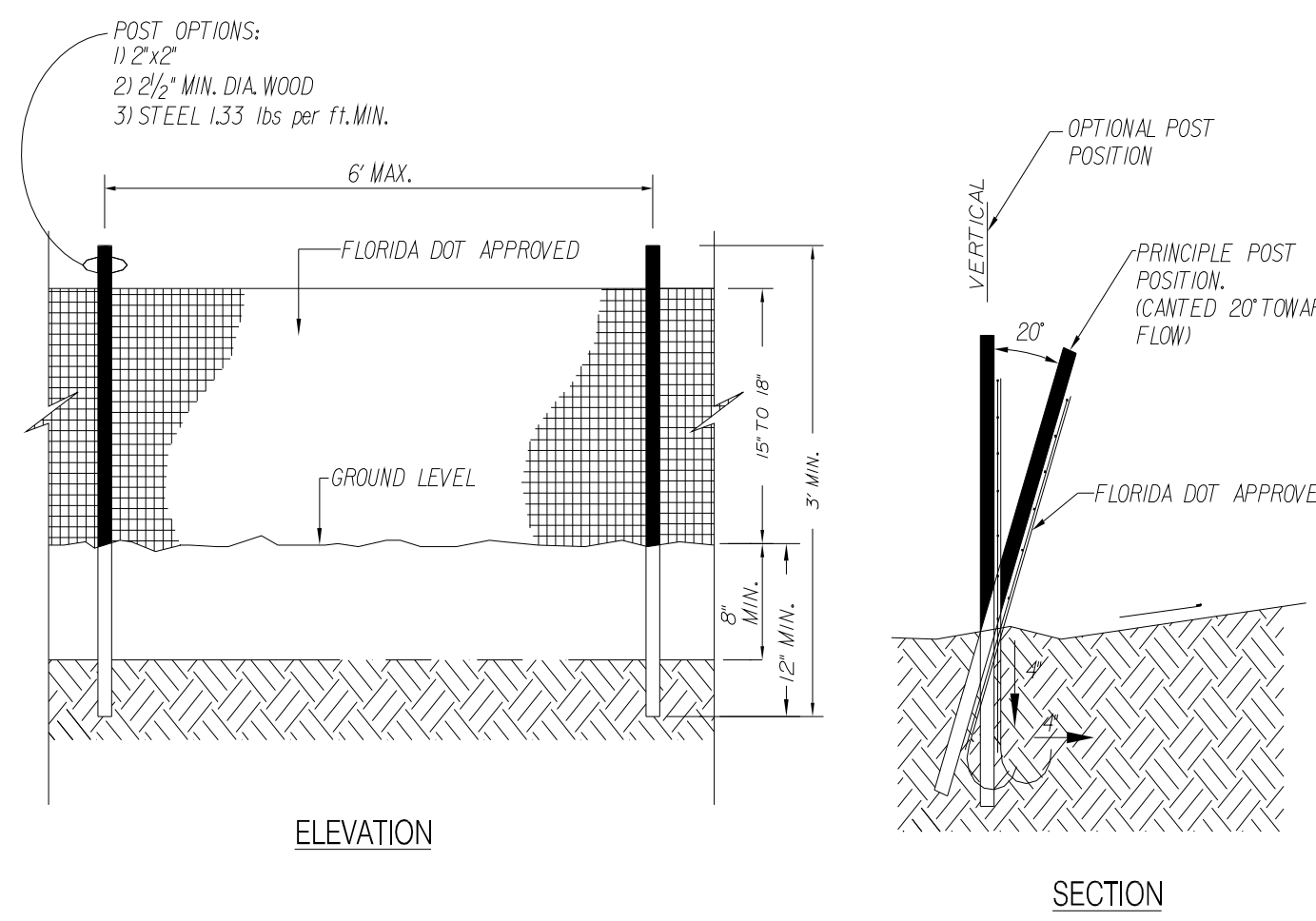


LOCATION MAP  
N.T.S.

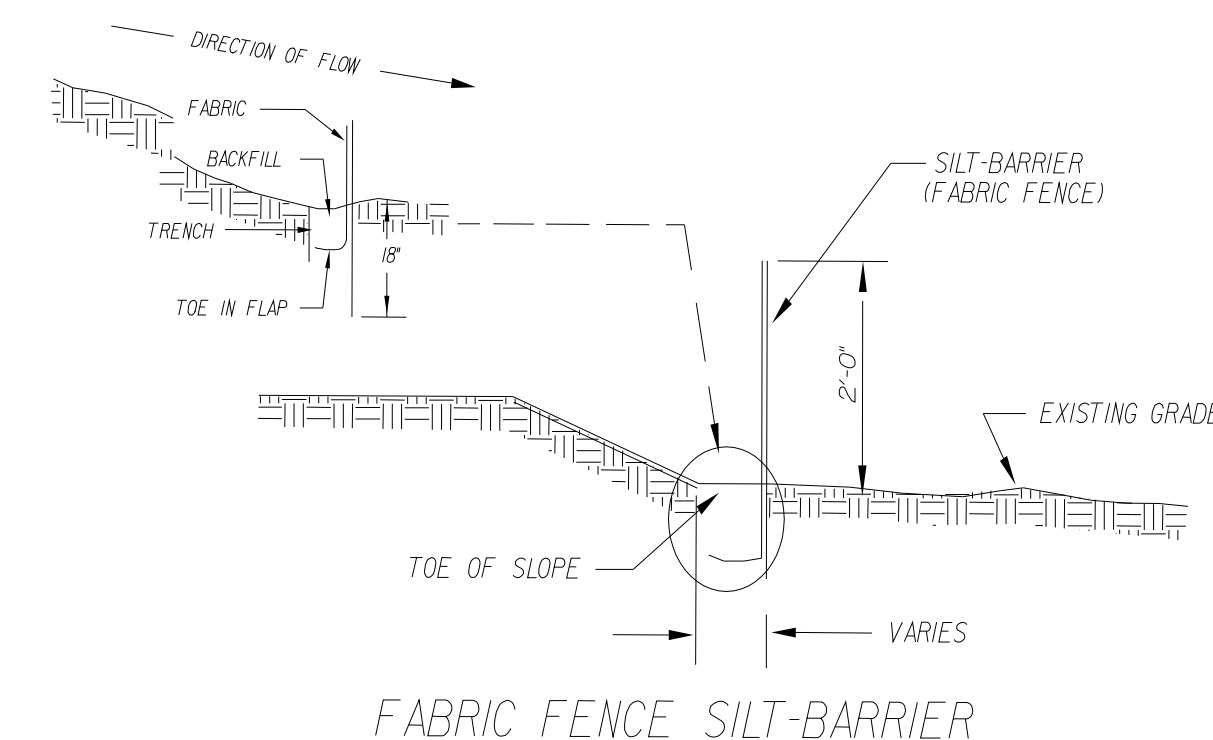


NOTES:  
1. ALL MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF THE PROJECT.  
2. AGGREGATE SHALL BE REPLACED AS DIRECTED BY THE ENGINEER OF RECORD AND/OR THE CITY WHEN EXCESSIVE MATERIALS BUILDUP RENDER THE WASH OUT AREA NO LONGER FUNCTIONAL.  
3. SIGNS SHALL BE 18" X 12" MIN. SIZE WITH 2" BLACK LETTERING ON A WHITE BACKGROUND AND MOUNTED A MINIMUM OF 7 FEET ABOVE GRADE FROM THE LOWEST EDGE OF THE SIGN FACE.

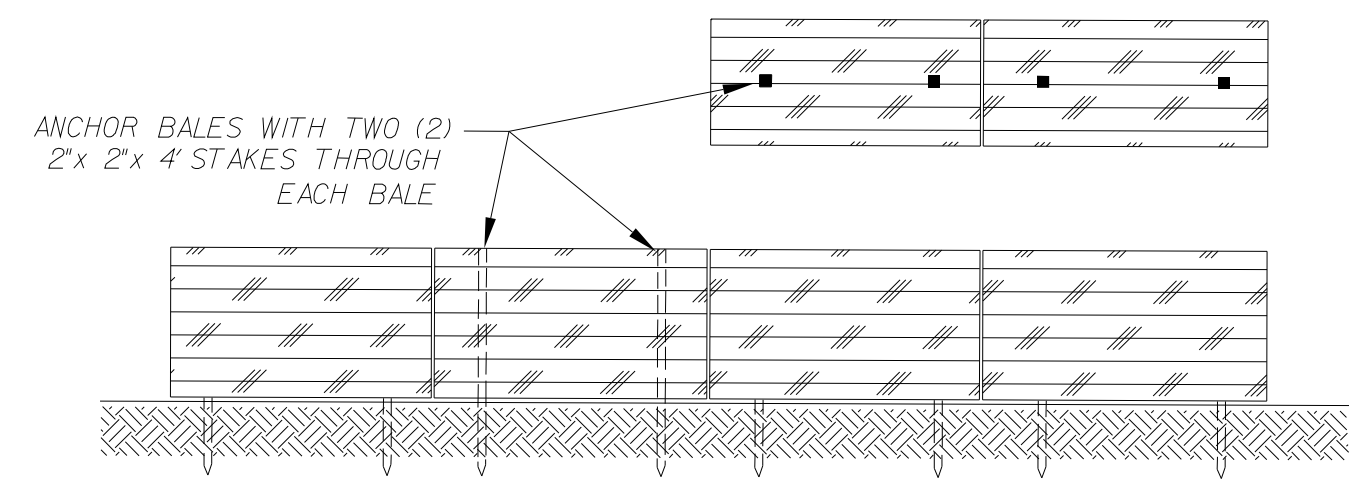
CONCRETE TRUCK WASH OUT AREA



TYPICAL SILT FENCE DETAIL  
N.T.S.



FABRIC FENCE SILT-BARRIER



BALED HAY SILT-BARRIER

PERIMETER EROSION AND SEDIMENT CONTROL

NOTES:  
1. CONTRACTOR IS REQUIRED TO PREVENT ANY SEDIMENT TRANSPORT FROM THE PROJECT SITE ON TO ADJACENT PROPERTY. INSTALLATION OF EITHER BALED HAY OR FABRIC FENCE TYPE SILT BARRIER IS ACCEPTABLE. THE BARRIER MUST REMAIN IN PLACE UNTIL UPLAND VEGETATION IS ESTABLISHED.  
2. BEFORE REMOVING SILT BARRIER, CONTRACTOR SHALL COLLECT AND DISPOSE OF ANY ACCUMULATED SILT.

SILT BARRIER DETAIL  
N.T.S.

20'x50'x6" ENTRY DRIVE  
FLORIDA #1 WASHED STONE  
ON TOP OF FILTER FABRIC

NOTE:  
UTILIZE HAY BALE AND FILTER FABRIC  
OVER INLET PER FDOT INDEX No. 102  
FOR ALL PROPOSED AND EXISTING INLETS.

LEGEND



DENOTES WINDROW AND SILT SCREEN  
ALONG PROPERTY LINE DURING  
CONSTRUCTION OF GRADING AND DRAINAGE

- NOTES:
1. Stabilize Disturbed Soil (S3.2)  
Use and document the use of Best Management Practices (BMPs) for soil stabilization (keeping good soil in place during the construction process) such as hydro mulch, nonfloatable conventional or alternative mulch, groundcovers, rye grass or millet, and retaining walls.  
Silt fence without other measures does not meet the requirement.
  2. General Contractor have to take photos

REVISIONS:  

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	


CUSTOMER:  

Kaller Architects  
2417 Hollywood Boulevard  
Hollywood, Florida 33020-6605  
(954) 920-5746

PROJECT:  

613 Hallandale Beach Blvd.  
HALLANDALE BEACH  
FLORIDA 33304

TASK:  
STORMWATER POLLUTION  
PREVENTION PLAN



GGB Engineering, Inc.  
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
• CONSTRUCTION MANAGERS  
FLORIDA REGISTRATION No. 8118  
gary@ggberg.com  
2699 Stirling Road, Suite 202  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655

DATE: March 2018	SCALE: 1"=20'
DESIGNED BY: G.C.B.	DRAWN BY: F.M.
PROJECT NO. 18-0425	
SHEET C-8	

GARY G. BLOOM, P.E.  
FLA. LIC. No. 19832  
NOT VALID UNLESS SIGNED  
AND SEALED BY ENGINEER



STORM WATER POLLUTION PREVENTION PLAN																			
SITE DESCRIPTION	GENERAL																		
<p>THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN.IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS.DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.</p> <p>SEQUENCE OF MAJOR ACTIVITIES:</p> <p>SEQUENCE OF MAJOR ACTIVITIES:</p> <p>1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES. 2. DEMO AND CLEAR SITE 3. INSTALL UNDERGROUND UTILITIES. 4. COMPLETE FINAL GRADING OPERATIONS. 5. CONTINUE WITH E&amp;S CONTROL MEASURES. 6. START BUILDING FOUNDATION. 7. CONTINUE WITH E&amp;S CONTROL MEASURES. 8. COMPLETE BUILDING CONSTRUCTION. 9. CONTINUE WITH E&amp;S CONTROL MEASURES. 10. COMPLETE CURB AND SIDEWALK CONSTRUCTION 11. REMOVE ACCUMULATED SEDIMENTS FROM STORM WATER MANAGEMENT SYSTEM.</p>	<p>3. BRUSH BARRIER WITH FILTER FABRIC:BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.</p> <p>4. LEVEL SPREADER:A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS.THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL UP IS STABILIZED.THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.</p> <p>5. STOCKPIILING MATERIAL:NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.</p> <p>6. EXPOSED AREA LIMITATION:THE SURFACE AREA OF OPEN,RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE MINIMIZED.</p> <p>7. INLET PROTECTION:INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LOADED STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.</p> <p>8. DUST CONTROL:AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL TREATMENT WITHIN 30 DAYS SHALL BE STABILIZED.</p> <p>9. TEMPORARY SEEDING AND MULCHING:SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.</p> <p>10. TEMPORARY GRASSING:THE SEEDED OR SEEDED AND MULCHED AREAS) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX &amp; AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.</p> <p>11. TEMPORARY REGRESSING :IF,AFTER 14 DAYS FROM SEEDING,THE TEMPORARY GRASSSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER,THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.</p> <p>12. MAINTENANCE:ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.</p> <p>13. PERMANENT EROSION CONTROL:THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.</p> <p>14. PERMANENT SEEDING:ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL AS A MINIMUM BE SEEDED.THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID-GROWTH SEASONAL VEGETATION.SLOPES STEEPER THAN 4:1SHALL BE SEEDED AND MULCHED OR SODDED.</p>																		
	TIMING OF CONTROLS/MEASURES																		
	<p>AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES,THE SILT FENCES AND HAY BALES WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTIONS OF THE SITE.AS CONSTRUCTION PROCEEDS,THE CONTRACTOR MUST BE DILIGENT TO UN-INSTALL AND RE-INSTALL PORTIONS OF ALL OF THE SILT FENCE OR HAY BAYS OR TAKE OTHER MEASURES NECESSARY TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH ALL REGULATIONS.</p>																		
	CONTROLS																		
	<p>THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION CAUSED BY STORM WATER RUN OFF.FAN EROSION PROTECTION PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINT AN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL,STATE AND LOCAL LAWS. REFER TO CONTRACTORS RESPONSIBILITY FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.</p>																		
	ENDANGERED SPECIES AND CRITICAL HABITAT																		
	<p>1. ARE THERE ENDANGERED SPECIES ON SITE? NO.</p> <p>2. ARE THERE CRITICAL HABITAT ON SITE? NO.</p> <p>IF YES TO EITHER QUESTION,PLEASE EXPLAIN.</p> <p>_____</p> <p>_____</p> <p>_____</p>																		
CONTROLS																			
<p>IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE GRADING,DRAINAGE &amp; EROSION CONTROL PLAN.IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED,MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE.THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE GRADING,DRAINAGE &amp; EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES,AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL,STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS.THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE GRADING,DRAINAGE &amp; EROSION CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.</p>																			
TIMING OF CONTROLS/MEASURES																			
<p>IT IS THE CONTRACTOR IS RESPONSIBLE FOR THE TIMING OF CONTROLS AND MEASURES AS REQUIRED TO MEET REQUIREMENTS.</p>																			
CERTIFICATION OF COMPLIANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS																			
<p>IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS,THE FOLLOWING PERMITS HAVE BEEN OBTAINED.</p> <p>• ERP APPLICATION _____</p> <p>• BRO COUNTY DEP _____</p>																			
POLLUTION PREVENTION PLAN CERTIFICATION																			
<p>I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED.BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM,OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION,THE INFORMATION SUBMITTED IS,TO THE BEST OF MY KNOWLEDGE AND BELIEF,TRUE,ACCURATE,AND COMPLETE.I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION,INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.</p>																			
OTHER CONTROLS																			
WASTE DISPOSAL (IF APPLICABLE):																			
WASTE MATERIALS																			
ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LODED METAL DUMPSTER.THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL.ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL.NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT.THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.																			
HAZARDOUS WASTE																			
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT,THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.																			
SANITARY WASTE																			
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE.THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.																			
OFFSITE VEHICLE TRACKING																			
A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS.THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEP AS NEEDED TO REMOVE ANY EXCESS MUD,DIRT OR ROCK TRACKED FROM THE SITE.DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.																			
INVENTORY FOR POLLUTION PREVENTION PLAN																			
<p>THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:</p> <table><tr><td><input checked="" type="checkbox"/> Concrete</td><td><input checked="" type="checkbox"/> Fertilizers</td><td><input checked="" type="checkbox"/> Wood</td></tr><tr><td><input checked="" type="checkbox"/> Asphalt</td><td><input checked="" type="checkbox"/> Petroleum Based Products</td><td><input checked="" type="checkbox"/> Masonry Blocks</td></tr><tr><td><input checked="" type="checkbox"/> Tar</td><td><input checked="" type="checkbox"/> Cleaning Solvents</td><td><input checked="" type="checkbox"/> Roofing Materials</td></tr><tr><td><input checked="" type="checkbox"/> Detergents</td><td><input checked="" type="checkbox"/> Paints</td><td><input checked="" type="checkbox"/> Metal Studs</td></tr><tr><td><input type="checkbox"/> -----</td><td><input type="checkbox"/> -----</td><td><input type="checkbox"/> -----</td></tr></table>					<input checked="" type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Fertilizers	<input checked="" type="checkbox"/> Wood	<input checked="" type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Petroleum Based Products	<input checked="" type="checkbox"/> Masonry Blocks	<input checked="" type="checkbox"/> Tar	<input checked="" type="checkbox"/> Cleaning Solvents	<input checked="" type="checkbox"/> Roofing Materials	<input checked="" type="checkbox"/> Detergents	<input checked="" type="checkbox"/> Paints	<input checked="" type="checkbox"/> Metal Studs	<input type="checkbox"/> -----	<input type="checkbox"/> -----	<input type="checkbox"/> -----
<input checked="" type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Fertilizers	<input checked="" type="checkbox"/> Wood																	
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<input type="checkbox"/> -----	<input type="checkbox"/> -----	<input type="checkbox"/> -----																	
SPILL PREVENTION																			
MATERIAL MANAGEMENT PRACTICES																			
<p>THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.</p> <p>GOOD HOUSEKEEPING</p> <p>THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.</p> <p>• AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.</p> <p>• ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT,ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND,IF POSSIBLE,UNDER A ROOF OR OTHER ENCLOSURE.</p> <p>• PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.</p> <p>• SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.</p> <p>• WHENEVER POSSIBLE,ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.</p> <p>• MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.</p> <p>• THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.</p>																			
HAZARDOUS PRODUCTS																			
<p>THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.</p> <p>• PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.</p> <p>• ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED,THEY CONTAIN IMPORTANT PRODUCT INFORMATION.</p> <p>• IF SURPLUS PRODUCT MUST BE DISPOSED OF,MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.</p>																			
PRODUCT SPECIFIC PRACTICES																			
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:																			
PETROLEUM PRODUCTS																			
ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED,ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.																			
FERTILIZERS																			
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER.ONCE APPLIED,FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA.THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.																			
PAINTS																			
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.																			
CONCRETE TRUCKS																			
CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.																			
SPILL CONTROL PRACTICES																			
<p>IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN,THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:</p> <p>MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN</p>																			

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8.

**Kaller Architects**  
2417 Hollywood Boulevard  
Hollywood, Florida 33020-6605  
(954) 920-5746

**613 Hallandale Beach Blvd.**  
**HALLANDALE BEACH**      **FLORIDA 33304**

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**TASK:**

**STORMWATER POLLUTION  
PREVENTION PLAN**

**GGB Engineering, Inc.**  
CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
2699 Stirling Road, Suite C-202  
email: [gray@ggbeng.com](mailto:gray@ggbeng.com)  
FLORIDA REGISTRATION NO. 8118  
Phone: (954) 966-9699

DATE: March 2018	SCALE: N.T.S.
DESIGNED BY: G.G.B.	DRAWN BY: F.M.

PROJECT NO.  
18-0425

SHEET  
C-9

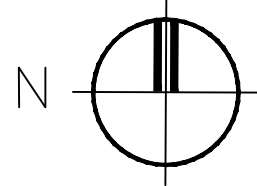
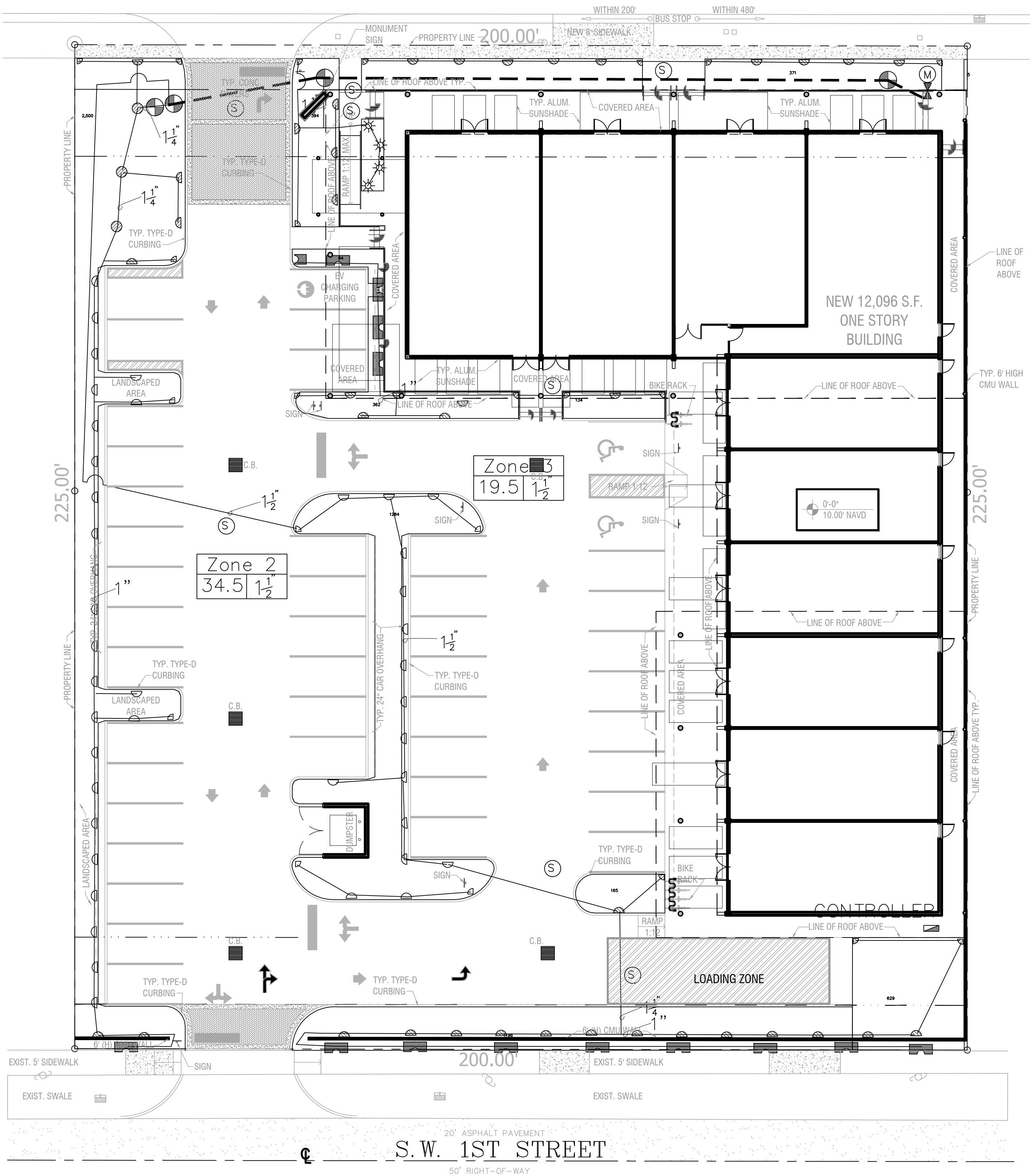
GARY G. BLOOM, P.E.  
FLA LIC. No. 19832  
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AND SEALED BY ENGINEER



WEST HALLANDALE BEACH BOULEVARD

100 RIGHT OF WAY PER DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 86508-2605 APPROVED 7-26-79

ASPHALT ROADWAY MULTI LANE DIVIDED ROADWAY



IRRIGATION PLAN

SCALE: 1/16" = 1'-0"



IRRIGATION NOTES:

Piping:

Main Lines: PVC SDR 26, Class 160 Solvent Weld.

Zone Lines: PVC, 1/2 in. and 3/4 in. are not used. Min. pipe is 1 in. 315 PSI: 1 in. = SDR 21. 200 PSI: 1-1/4 in. and greater = SDR 26, 160 PSI. All solvent weld.

All end of the line unmarked pipe = 1 in. (min.).

Sleeves and suction Line: PVC, SCH 40.

Fittings: SCH 40 PVC

Fabrication: To manufacturers specifications. Use blue or grey PVC cement, square cut, clean and prime all joints.

Allow all main lines to cure for 24 hours before pressuring.

All pipe, fittings, and solvents to conform to latest ASTM specs.

Depth of Lines: Main Line and wiring = 18 in. depth, min. Steeving under pavement = 24 in. depth, min. Suction Line = 24 in. depth, nominal. Zone Lines 1-1/2 in. and smaller = 10 in. depth, min.

Control Wires: AWG 14 for all hot wires and AWG 12 for common. Solid copper type UF UL listed for direct burial. Run wires under main and tape every 20 feet. Run spores, two min. Splice wires only in a valve box. All splices shall be moisture proof using Snap title or DBT UL connectors. Common shall be white, hot shall be red or color coded. Spore shall be black. Run in conduit where no Main line runs.

Backfill all trenches free of debris, compact to original density, flush all lines, use screens in all heads, adjust heads for proper coverage avoiding excess water on walls, walks, etc.

All details are graphically shown only. All quantities shall be verified by the contractor prior to installation. It shall be the contractors responsibility to assure complete overlapping coverage. Any discrepancies shall be reported to the owner and landscape architect before proceeding. Codes and local regulations shall take precedence over these plans, it is the contractors responsibility to comply. The landscape architect reserves the right to make minor field changes, the contractor may field adjust spray nozzle selection to provide for proper 100% min. coverage.

Provide owner with an accurate as installed plan(s) at completion showing main lines, wiring, valves, crossings, etc. using dimensions from fixed datums.

Contractor shall verify all underground utilities prior to commencement of work.

The perimeter irrigation and landscape may be required to be installed prior to either or both pump stations and all main line / valve wiring. A separate plan showing modifications and alternate water source will be provided prior to construction. The modifications will not impact upon the design intent or substantially affect the construction plan.

IRRIGATION LEGEND:

MAIN LINE - 1-1/2" Feed From City Water Source  
LATERAL ZONE LINES - SDR PVC as noted  
ZONE BOUNDARIES  
BACK FLOW: See Point of Connection Detail.  
CONTROLLER - Toro Custom Command Series Electric 6 station controller #CC-P-6 mounted on Southeast corner of structure, with a Rain Check automatic rain sensor shut-off switch mounted outside on eave of structure.

ZONE VALVES - Toro 252 Series

EXISTING WATER METER - 1" or per City Code.

SLEEVES - Sch. 40, 2 Sizes Larger. NITE - Pipe Size Shown is the Lateral Size, NOT the Sleeve Size

6" PDP-UP SPRAY - Toro 570 Series MPR Spray Nozzles as Required. NITE - All of the below may not be used

15' Series -	12' Series -	10' Series -	8' Series -
15-D-PC - 1/4"	12-D-PC - 1/4"	10-D-PC - 1/4"	8-D-PC - 1/4"
15-T-PC - 1/3"	12-T-PC - 1/3"	10-T-PC - 1/3"	8-T-PC - 1/3"
15-H-PC - 1/2"	12-H-PC - 1/2"	10-H-PC - 1/2"	8-H-PC - 1/2"
15-TT-PC - 2/3"	12-TT-PC - 2/3"	10-TT-PC - 2/3"	8-TT-PC - 2/3"
15-TD-PC - 3/4"	12-TD-PC - 3/4"	10-TD-PC - 3/4"	8-TD-PC - 3/4"
15-F-PC - Full	12-F-PC - Full	10-F-PC - Full	8-F-PC - Full

4S-SST-PC 4 x 18"

4-EST-PC 4 x 15"

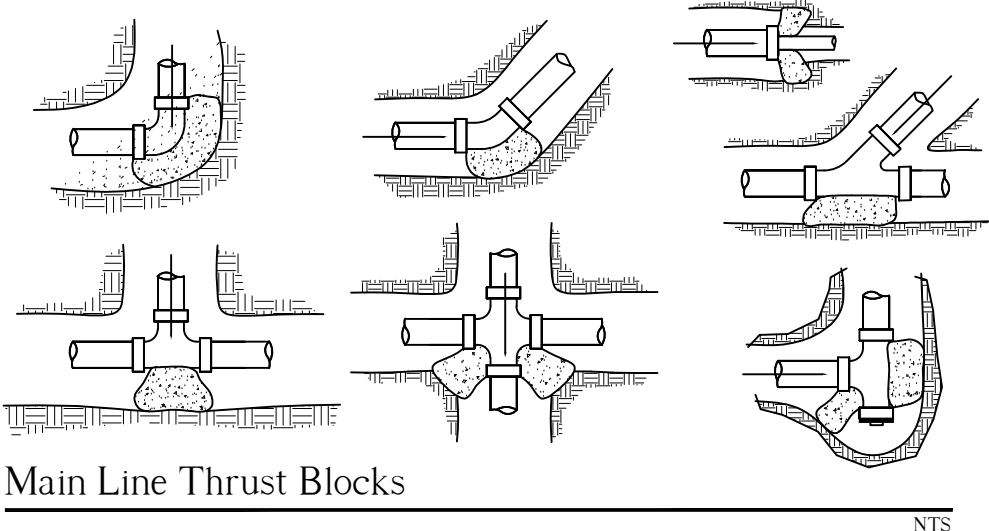
4-CST-PC 4 x 30"

6" PDP-UP FLOOD BUBBLER - Toro 570 Series MPR Pressure Compensating Nozzles as Required.

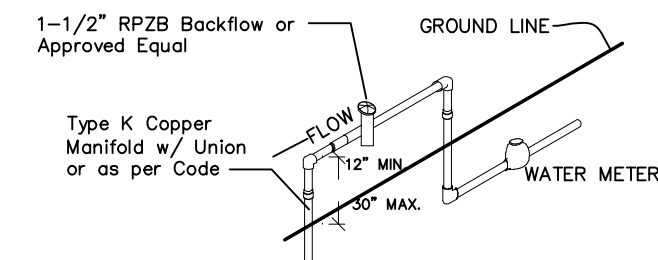
SYSTEM DESIGN OPERATING PRESSURE = Between 35 and 40 psi.

Zone 2  
37.6 1 1/2  
Zone Number  
Valve Size  
GPM per Zone

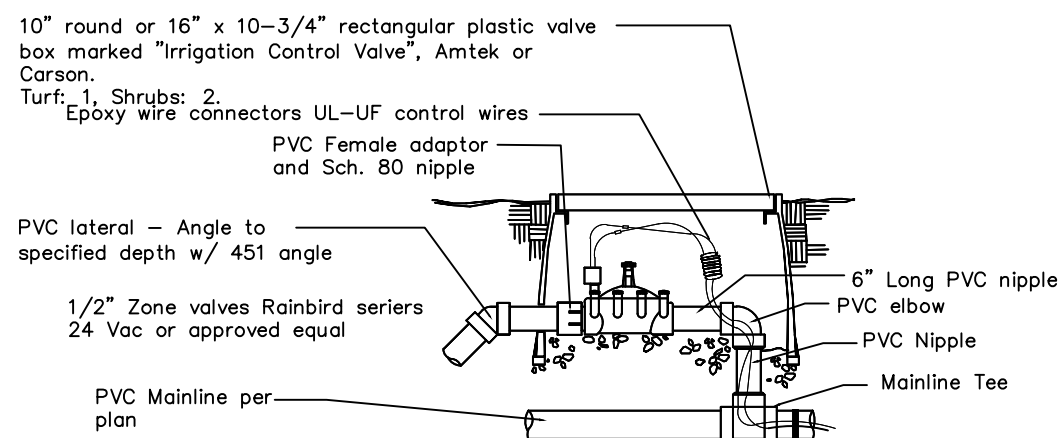
4" PDP-UP ROTOR - Hunter RGM Rotor V// Appropriate Nozzle as Required



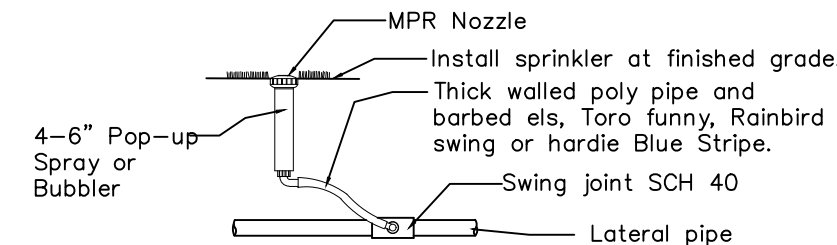
Main Line Thrust Blocks



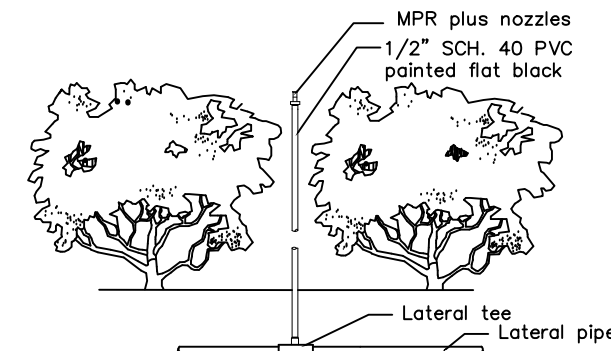
Point of Connection



Zone Valve Detail



4 or 6" Pop-up Spray / Bubbler Detail



Shrub Riser Spray Detail

DRWG. TITLE : IRRIGATION PLAN

PROJECT : HALLANDALE SHOPS  
625 WEST HALLANDALE BEACH BOULEVARD  
HALLANDALE BEACH, FLORIDA 33009

CLIENT : KALLER AND ASSOCIATES, INC.

SEAL

PROJECT NO. 18-118

DRAWN BY WKT

DESIGNED BY WKT

CHECKED BY WKT

DATE : 05-06-18

DWG. NO. LI-1

SHT. NO. 1 of 1

REVISIONS : 06-21-18

11-14-18

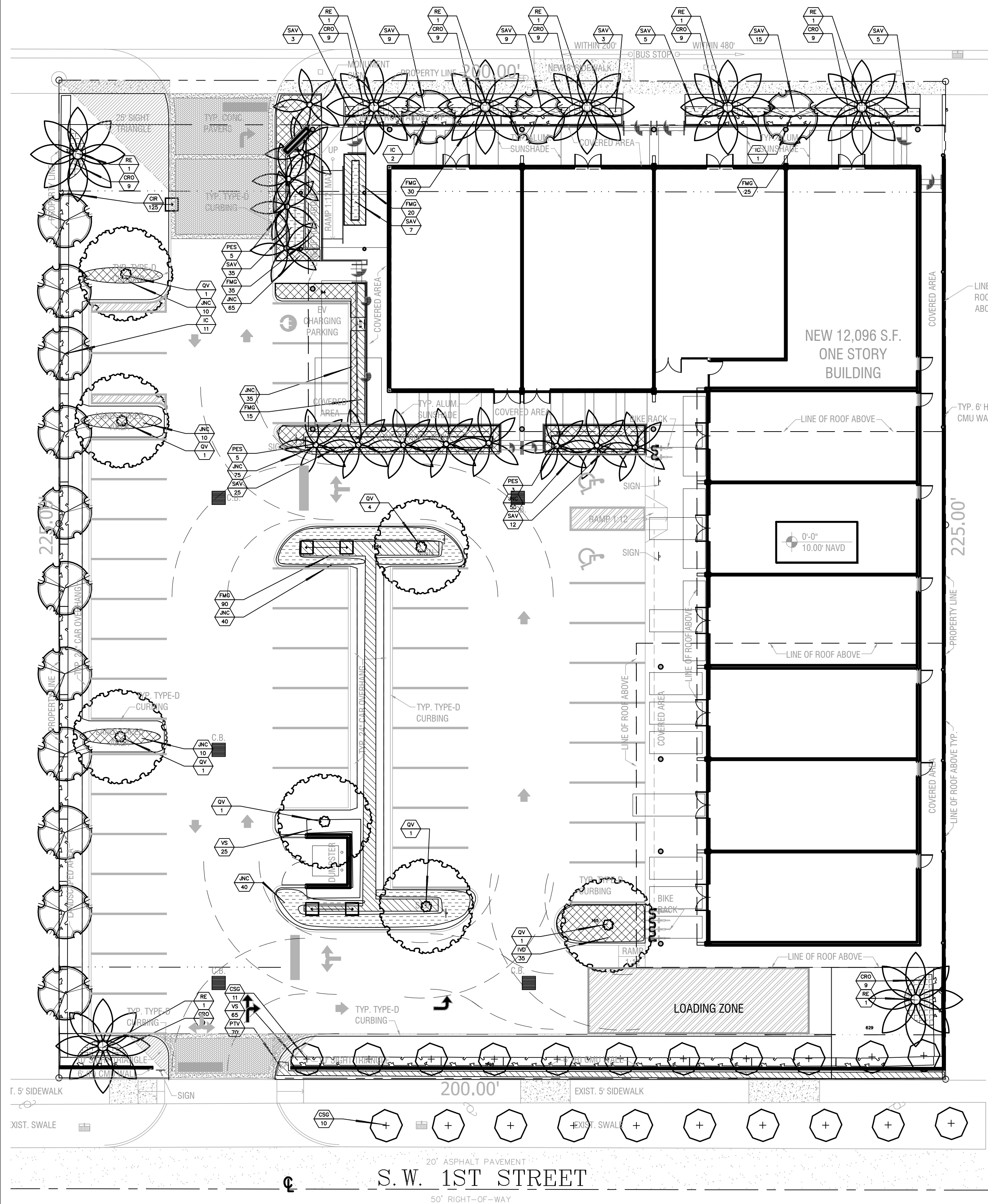


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# WEST HALLANDALE BEACH BOULEVARD

100' RIGHT OF WAY PER DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 86508-2605 APPROVED 7-26-79  
ASPHALT ROADWAY MULTI-LANE DIVIDED ROADWAY



## LANDSCAPE PLAN

SCALE: 1/16" = 1'-0"

### PROPOSED PLANT LIST

#### TREES / PALMS

Code	Drought	QTY.	Botanical Name / Common Name	Specifications	Soil Tolerance	Light Requirements
CSG (N)	V	21	Codia sebestena / Orange Geiger	B&B Field Grown, 2" DBH, 12' OA	Very Tolerant	Part Sun to Full Sun
IC (N)	V	14	Ilex cassina / Dahoon Holly	B&B Field Grown, 3" DBH, 15' OA	Very Tolerant	Part Sun to Full Sun
PES (N)	V	13	Pythosperma elegans / Solitaire Palms	B&B Field Grown, 8-10-12' OA Staggered	Very Tolerant	Part Sun to Full Sun
RE (N)	V	8	Roystonia elata / Florida Royal Palm	B&B Field Grown, 10-12' CT, 20' OA	Very Tolerant	Part Sun to Full Sun
QV (N)	V	10	Quercus virginiana / Live Oak	B&B Field Grown, 3" DBH, 15' OA	Very Tolerant	Part Sun to Full Sun

#### ACCENTS / SHRUBS / GROUND COVERS

CR (N)	V	125	Chrysodanum laevis / Red Tip Dogwood	3 Gal., 24" OA, 2' OC	Very Tolerant	Part Sun to Full Sun
CRD (N)	V	72	Crataegus spp. / Early Bay Crataegus	3 Gal., 24" OA, 2' OC	Very Tolerant	Part Sun to Full Sun
NC (N)	V	335	Juniperus conferta / Shore Juniper	3 Gal., 24" OA, 2' OC	Very Tolerant	Full Sun
ND (N)	V	35	Ilex vomitoria / Dwarf Schefflera flex	3 Gal., 24" OA, 2' OC	Very Tolerant	Part Sun to Full Sun
FAG (N)	V	215	Ficus macrocarpa / Green Island Ficus	3 Gal., 24" OA, 2' OC	Very Tolerant	Full Sun
PTV (N)	V	10	Pittosporum tiliifolium / Variegated Pittosporum	3 Gal., 12" OA, 24" OC	Very Tolerant	Part Sun to Full Sun
SV (N)	V	128	Schefflera abricosa / Tiliopsis	3 Gal., 24" OA, 24" OC	Very Tolerant	Part Sun to Full Sun
V (N)	V	90	Viburnum suspensum / Sandawaka Viburnum	3 Gal., 30" OA, 24" OC	Very Tolerant	Part Sun to Full Sun

#### MISCELLANEOUS

SOD	M		St Augustine Sod	Solid application - no gaps between seams		
(N)			Florida Native Plant Species			
V			Low Drought Tolerance			
M			Moderate Drought Tolerance			
L			Very Drought Tolerant			

### NOTES:

#### GENERAL PLANTING REQUIREMENTS

All sizes shown for plant material on the plans are to be considered Minimum. All plant material must meet or exceed these minimum requirements for both height and spread. Any other requirements for specific shape or effect as noted on the plan(s) will also be required for final acceptance.

All plant material furnished by the landscape contractor shall be Florida #1 or better as established by "Grades and Standards for Florida Nursery Plants" and "Grades and Standards for Florida Nursery Trees". All material shall be installed as per CSI specifications.

All plant material as included herein shall be warranted by the landscape contractor for a minimum period as follows: All trees and palms for 12 months, all shrubs, vines, groundcovers and miscellaneous planting materials for 90 days, and all lawn areas for 60 days after final acceptance by the owner or owner's representative.

All plant material shall be planted in planting soil that is delivered to the site in a clean loose and friable condition. All soil shall have a well drained characteristic. Soil must be free of all rocks, sticks, and objectionable material including weeds and weed seeds as per CSI specifications.

Twelve inches (12") of planting soil 50/50 sand/topsoil mix is required around and beneath the root ball of all trees and palms, and 1 cubic yard per 50 bedding or groundcover plants.

All landscape areas shall be covered with Eucalyptus or sterilized seed free Melaleuca mulch to a minimum depth of three inches (3") of cover when settled. Cypress bark mulch shall not be used.

All plant material shall be thoroughly watered in at the time of planting; no dry planting permitted. All plant materials shall be planted such that the top of the plant ball is flush with the surrounding grade.

All landscape and lawn areas shall be irrigated by a fully automatic sprinkler system adjusted to provide 100% coverage of all landscape areas. All heads shall be adjusted to 50% overlap as per manufacturers specifications and performance standards utilizing a rust free water source. Each system shall be installed with a rain sensor.

Each lot shall supply, install, and maintain an individual irrigation system for that individual lot.

It is the sole responsibility of the landscape contractor to insure that all new plantings receive adequate water during the installation and during all plant warranty periods. Deep watering of all new trees and palms and any supplemental watering that may be required to augment natural rainfall and site irrigation is mandatory to insure proper plant development and shall be provided as a part of this contract.

All plant material shall be installed with fertilizer, which shall be State approved as a complete fertilizer containing the required minimum of trace elements in addition to N-P-K, of which 50% of the nitrogen shall be derived from an organic source as per CSI specifications.

Contractors are responsible for coordinating with the owners and appropriate public agencies to assist in locating and verifying all underground utilities prior to excavation.

All ideas, designs and plans indicated or represented by this drawing are owned by and are the exclusive property of Wayne K. Tinning, RLA.

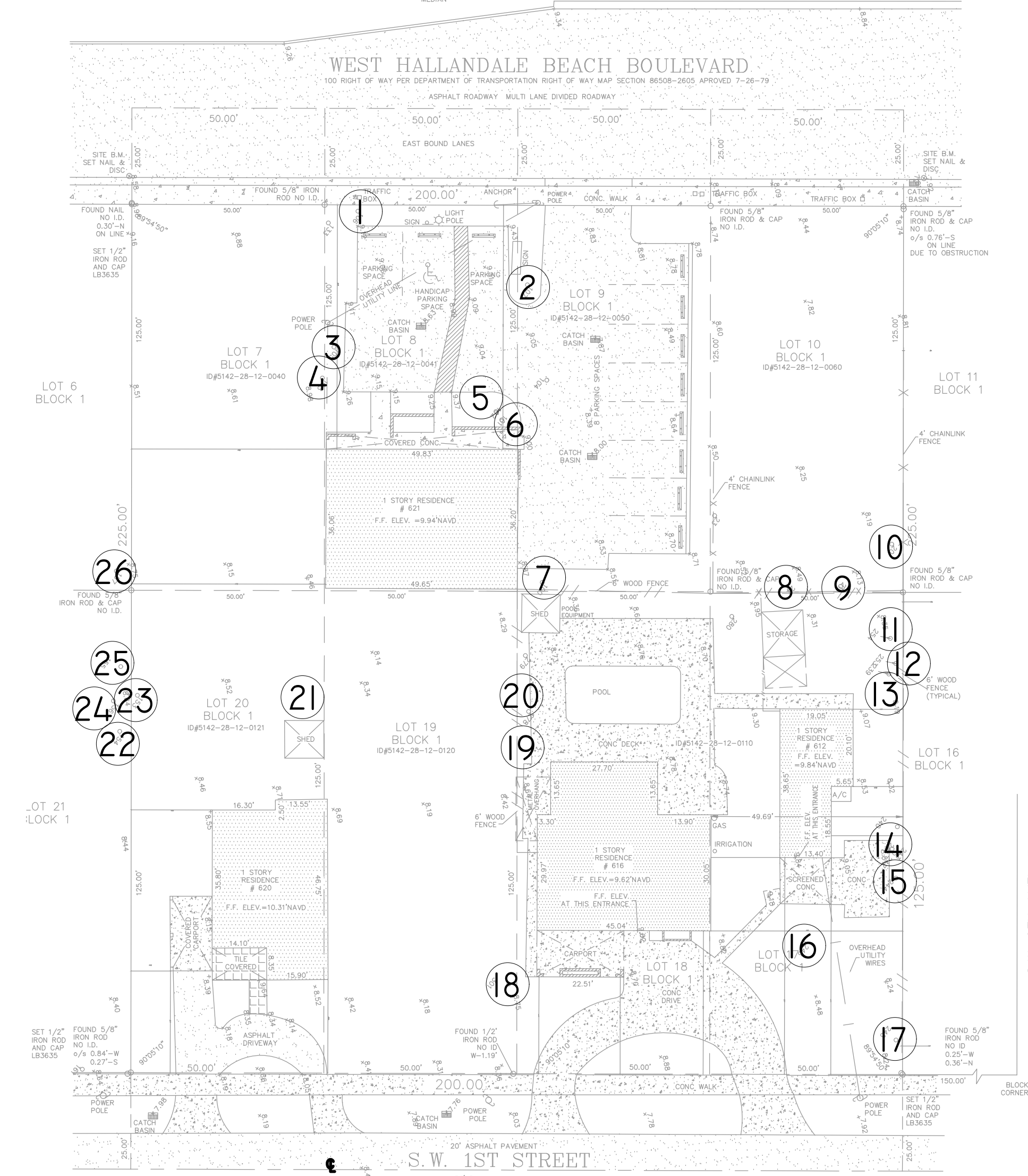
The plan takes precedence over the plant list.

#### SPECIAL INSTRUCTIONS

General site and berm grading to +/- 1 inch (1") shall be provided by the general contractor. All finished site grading and final decorative berm shaping shall be provided by the landscape contractor.

All sod areas as indicated on the planting plan shall receive Stenotaphrum secundatum, St. Augustine 'Floratum' solid sod. It shall be the responsibility of the landscape contractor to include in the bid, the repair of any sod which may be damaged from the landscape installation operations.

All existing palms to be trimmed and cleaned.



## TREE DISPOSITION PLAN

SCALE: NTS

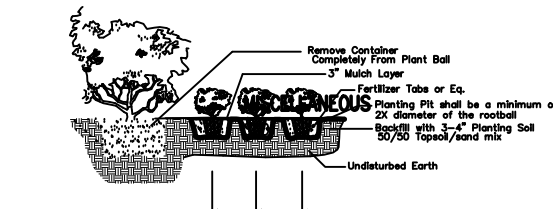
### LANDSCAPE CODES Sec. 32-384

REQUIRED : 30 Trees , 3 species

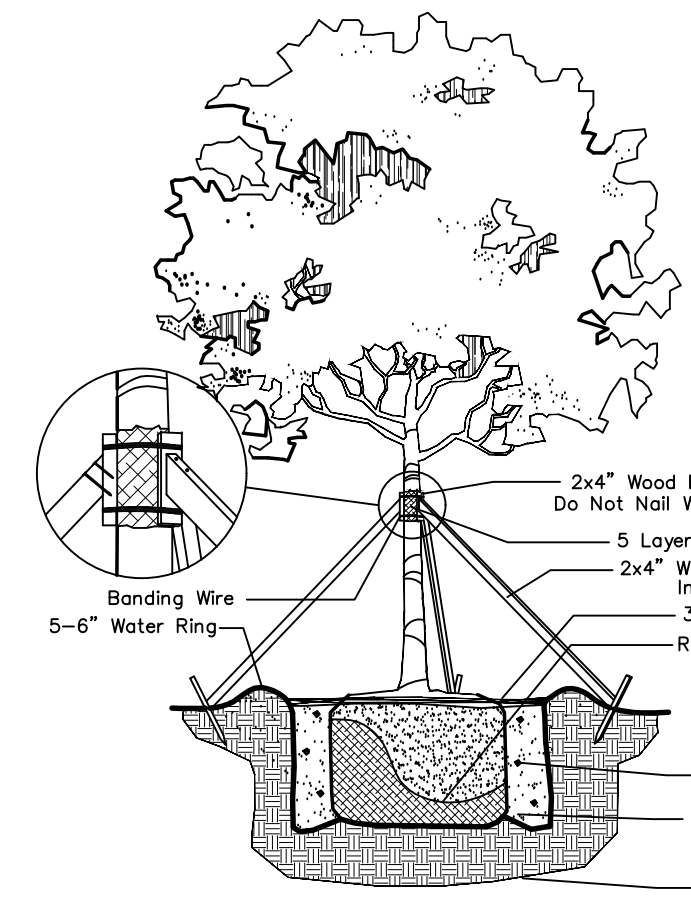
General Requirements: one tree per 1500 SF of site  
Perimeter Trees : 50% of required trees are to be Shade Trees  
Interior Landscaping: One tree per terminal island, 50% shade trees  
Street Trees: One tree per 40 linear feet, FPL RRP One tree per 20 linear feet

PROVIDED : 30 Trees , 3 species

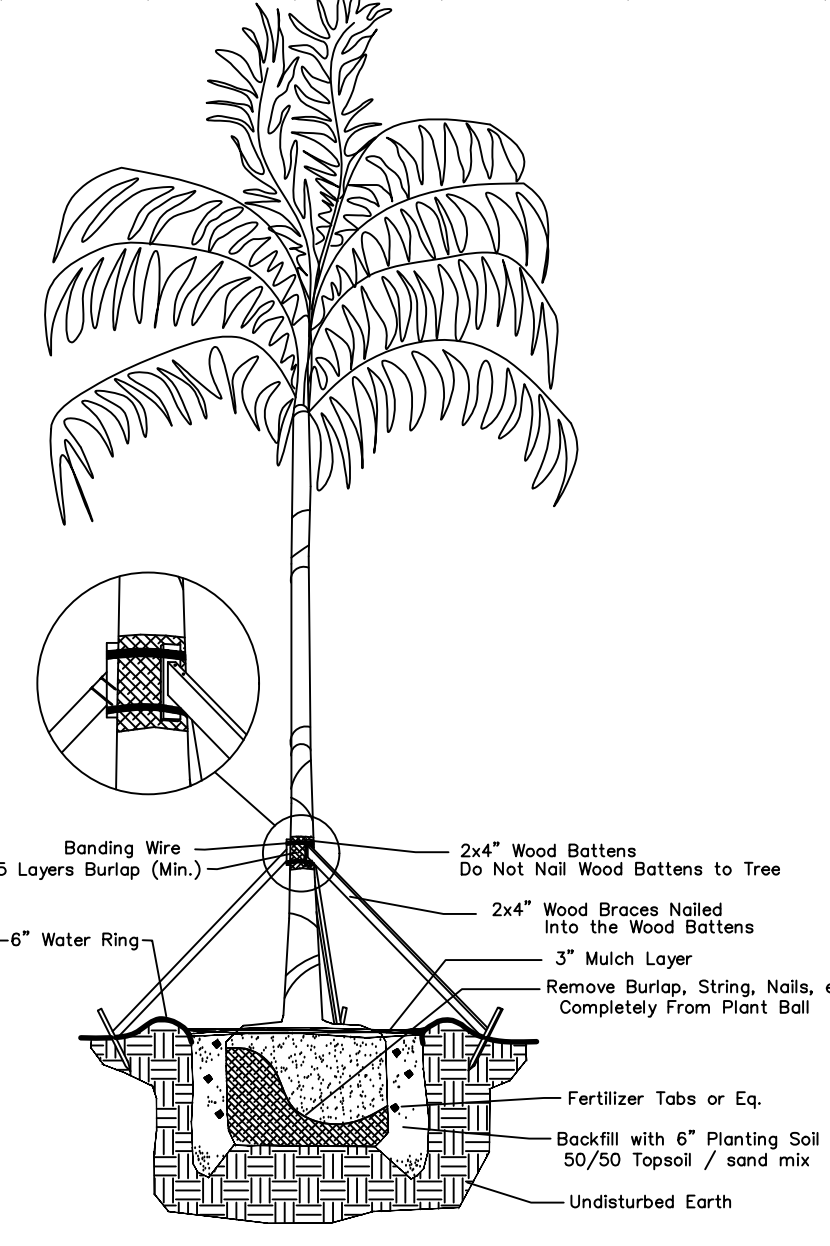
General Requirements: one tree per 1500 SF of site  
Perimeter Trees : 50% of required trees are to be Shade Trees  
Interior Landscaping: 12 Islands, 10 Trees (2 Islands Lightspires), more than 50% shade trees  
Street Trees: 200 linear feet : Hallandale Beach - 5 Trees, SW 1st Street - 10 Trees



Shrub & Ground Cover Planting Detail



Large Tree Planting Detail



Palm Planting Detail

DRWG. TITLE : LANDSCAPE PLAN

PROJECT : HALLANDALE SHOPS  
625 WEST HALLANDALE BEACH BOULEVARD  
HALLANDALE BEACH, FLORIDA 33009

CLIENT : KALLER AND ASSOCIATES, INC.

SEAL

PROJECT NO. 18-118

DRAWN BY WKT

DESIGNED BY WKT

CHECKED BY WKT

DATE : 05-06-18

DWG. NO. LP-1

SHT. NO. 1 of 1

REVISIONS : 06-21-18

09-21-18

11-14-18

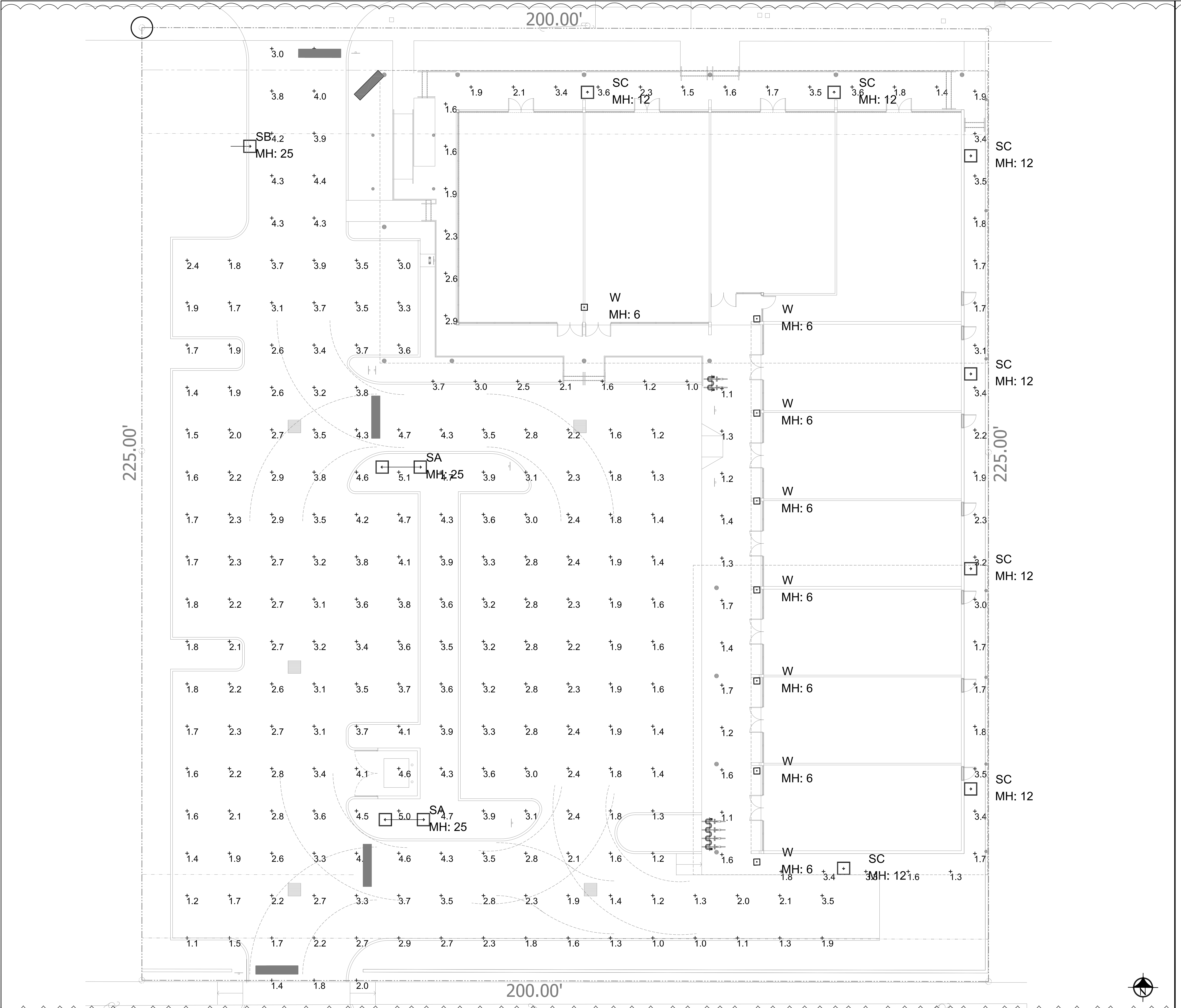


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Luminaire Schedule		Qty	Label	Description	LLF	Lum. Lumens
Symbol	Symbol					
	SA	2	SA	XTRA LTG#: (2) VNTLEDM022005MUNJ410XXBLHO / MTD AT 25' AFG	0.900	20139
	SB	1	SB	XTRA LTG#: VNTLEDM022004SNUINB10XXBLHO / MTD AT 25' AFG	0.900	20246
	SC	7	SC	XTRA LTG#: VNTW-3500L-40K-DIM-3M-BZ / WALL MTD AT 12' AFG	0.900	3450
	W	8	W	LIGHTWAY #: HAMW-15-LED-U-18W / WALL MTD AT 6' AFG	0.900	819

Calculation Summary						
Label	CalcType	Units	Avg	Max	Avg/Min	Max/Min
PARKING AREA	Illuminance	Fc	2.76	5.1	2.76	5.10
WALKWAY AREAS	Illuminance	Fc	2.37	3.6	1.82	2.77

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SEAL

JOSEPH B. KALLER  
FLORIDA R.A., # 0009239

PROJECT TITLE  
**W HALLANDALE SHOPPES**  
**613 -625 W. HALLANDALE BEACH BLVD**  
**HALLANDALE BEACH, FL 33009**

SHEET TITLE  
**SITE PHOTOMETRICS**

REVISIONS		
No.	DATE	DESCRIPTION
1	9/21/18	MDR COMMENTS
2	11.15.18	CITY COMMENTS

This drawing, as an instrument of service, is and shall remain the property of the Architect and shall not be reproduced, published or used in any way without the permission of the Architect.

PROJECT No.: 18048  
DATE: 08-30-18  
DRAWN BY: GMV / JP  
CHECKED BY: JBK

SHEET

**SPH-1**

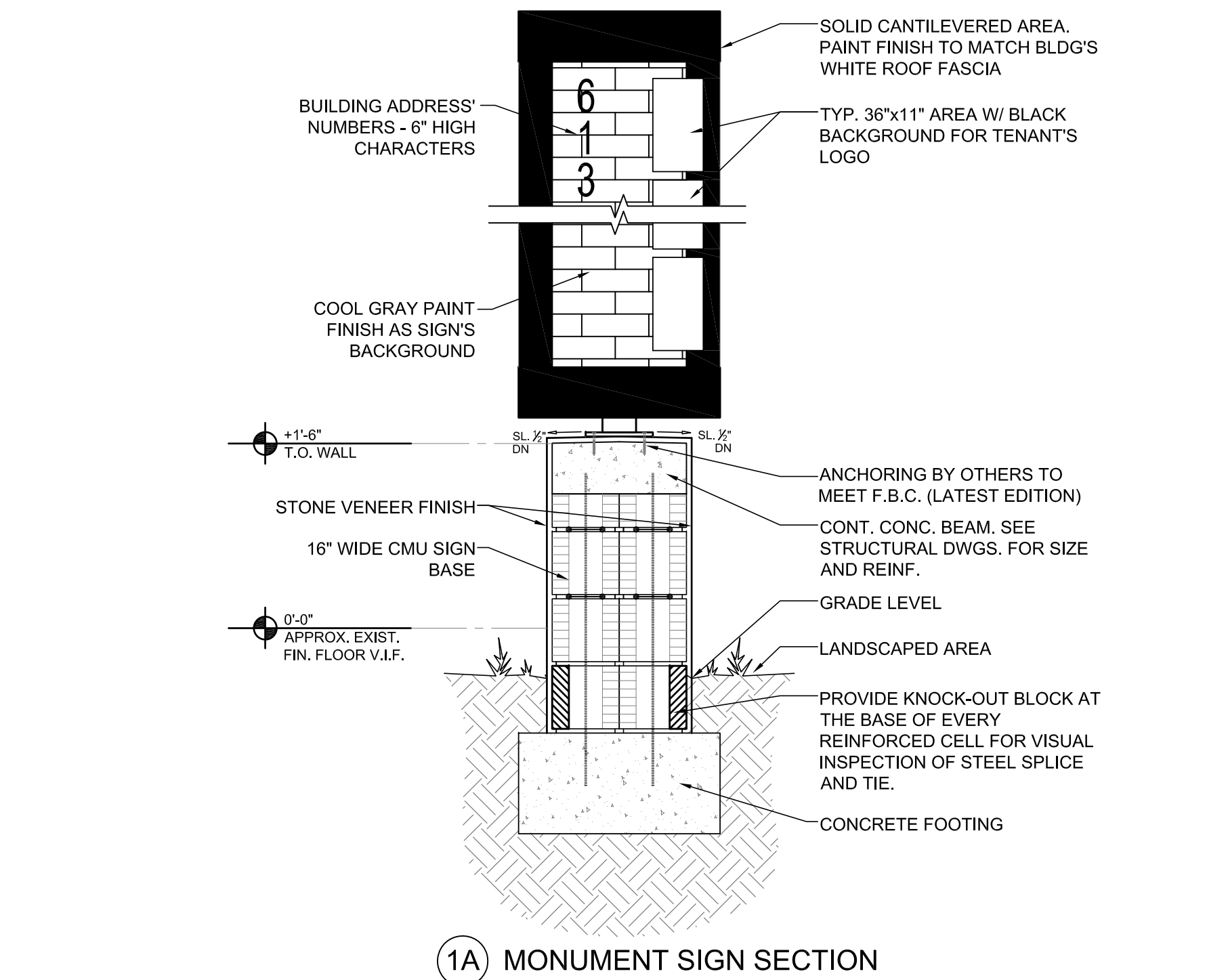
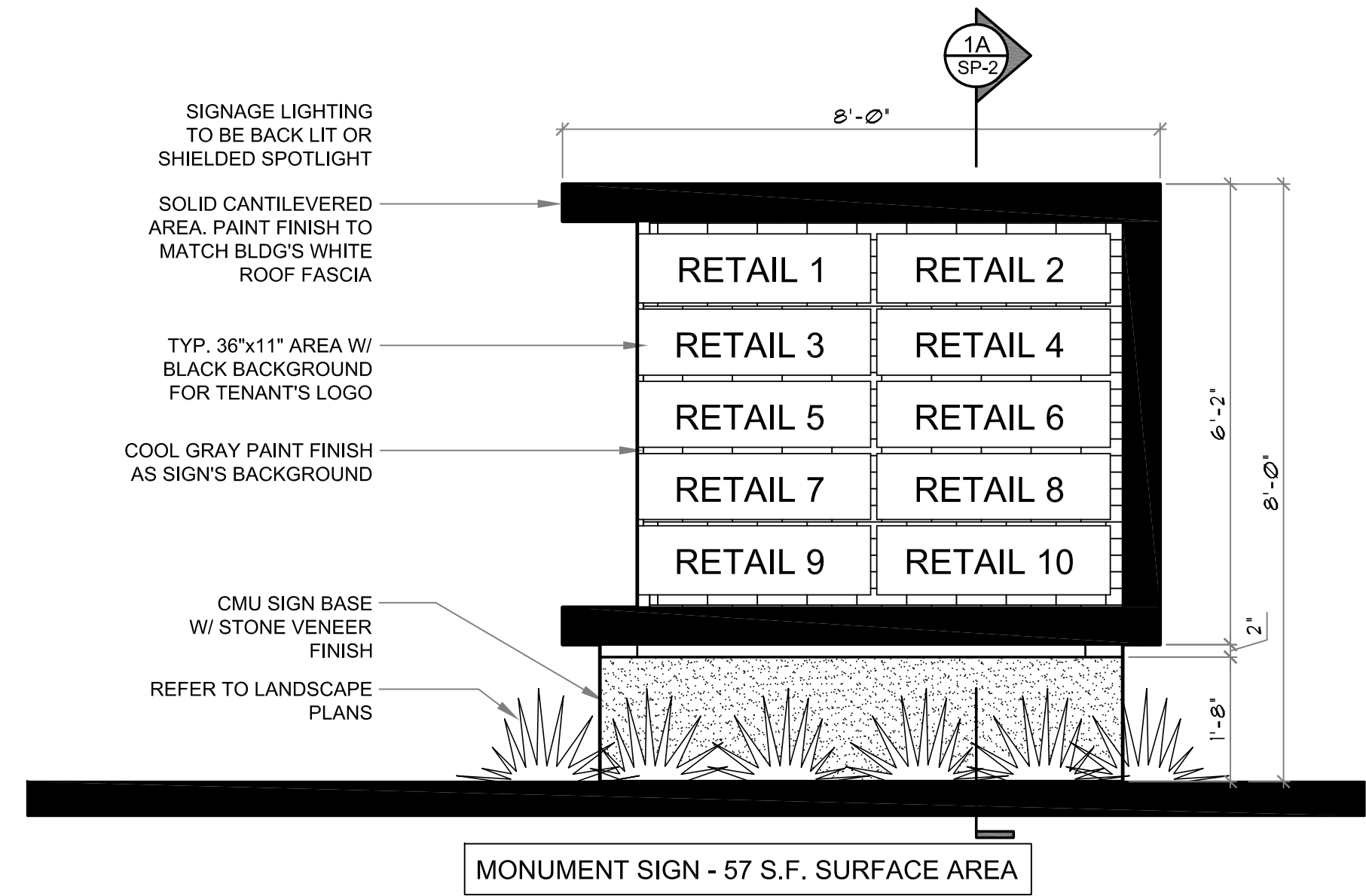




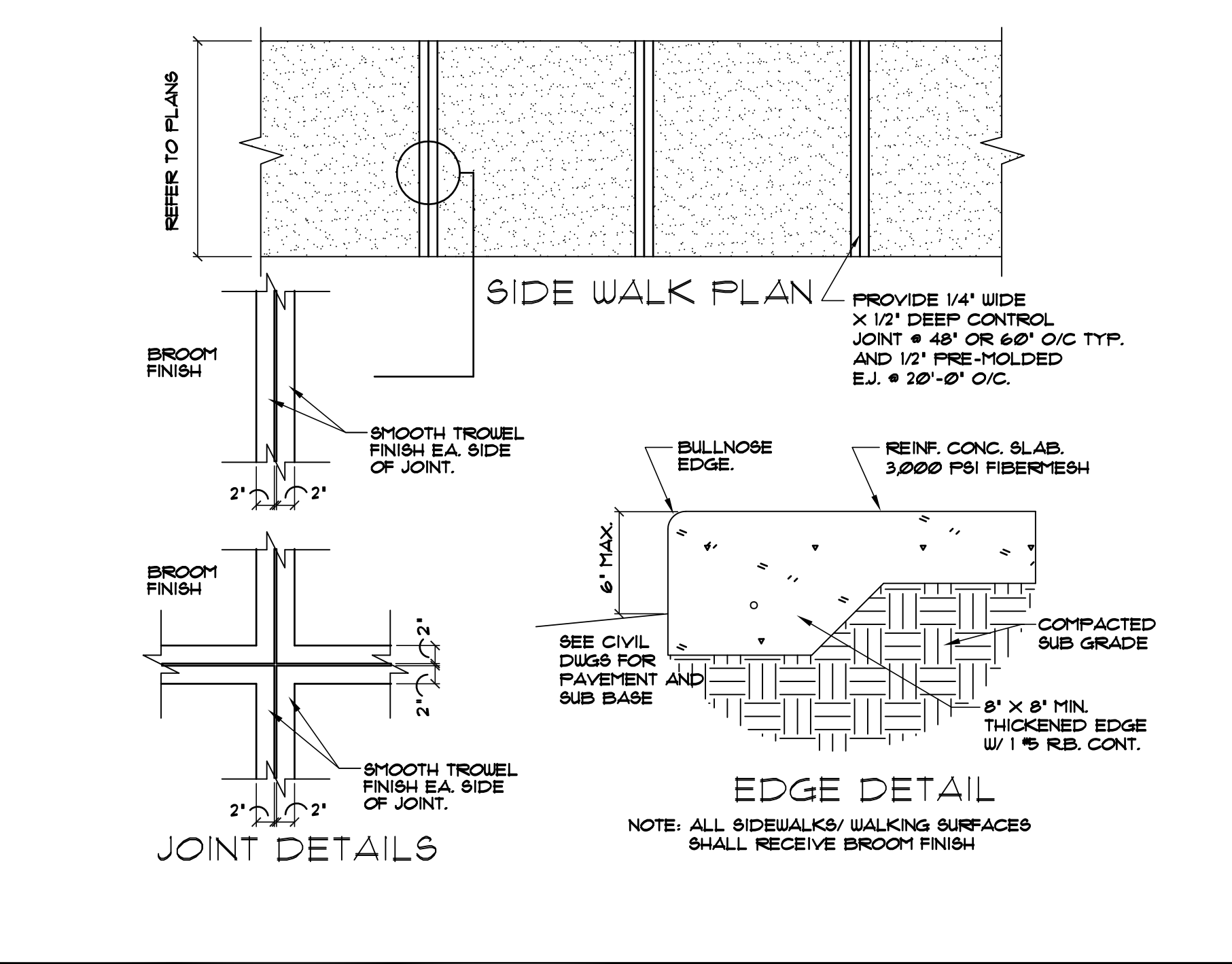




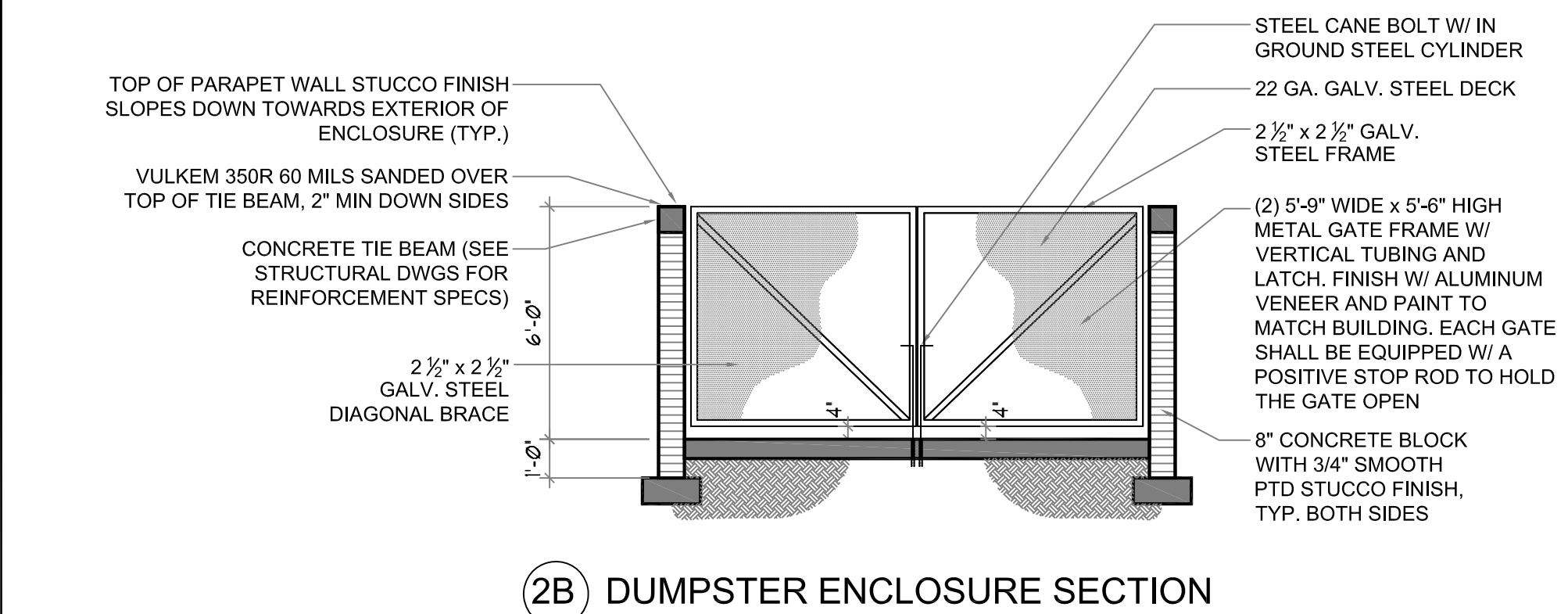
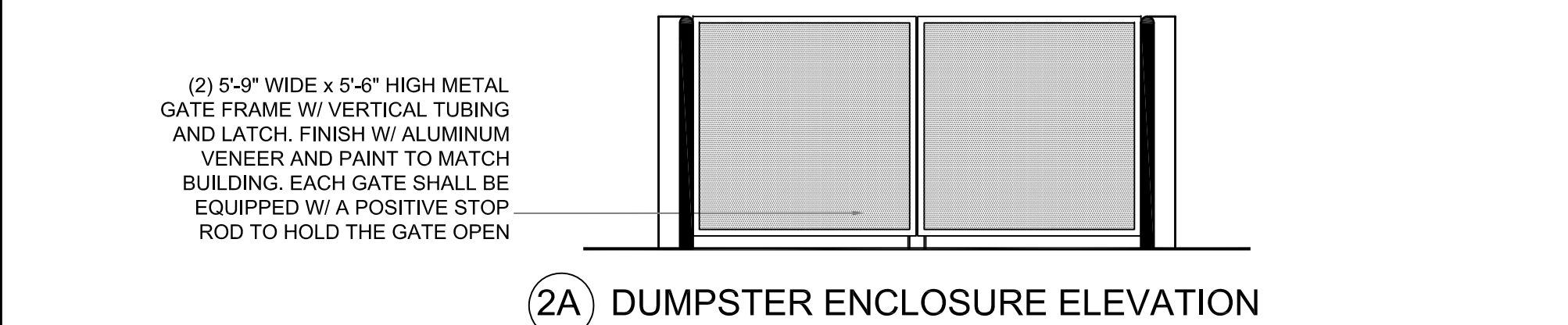
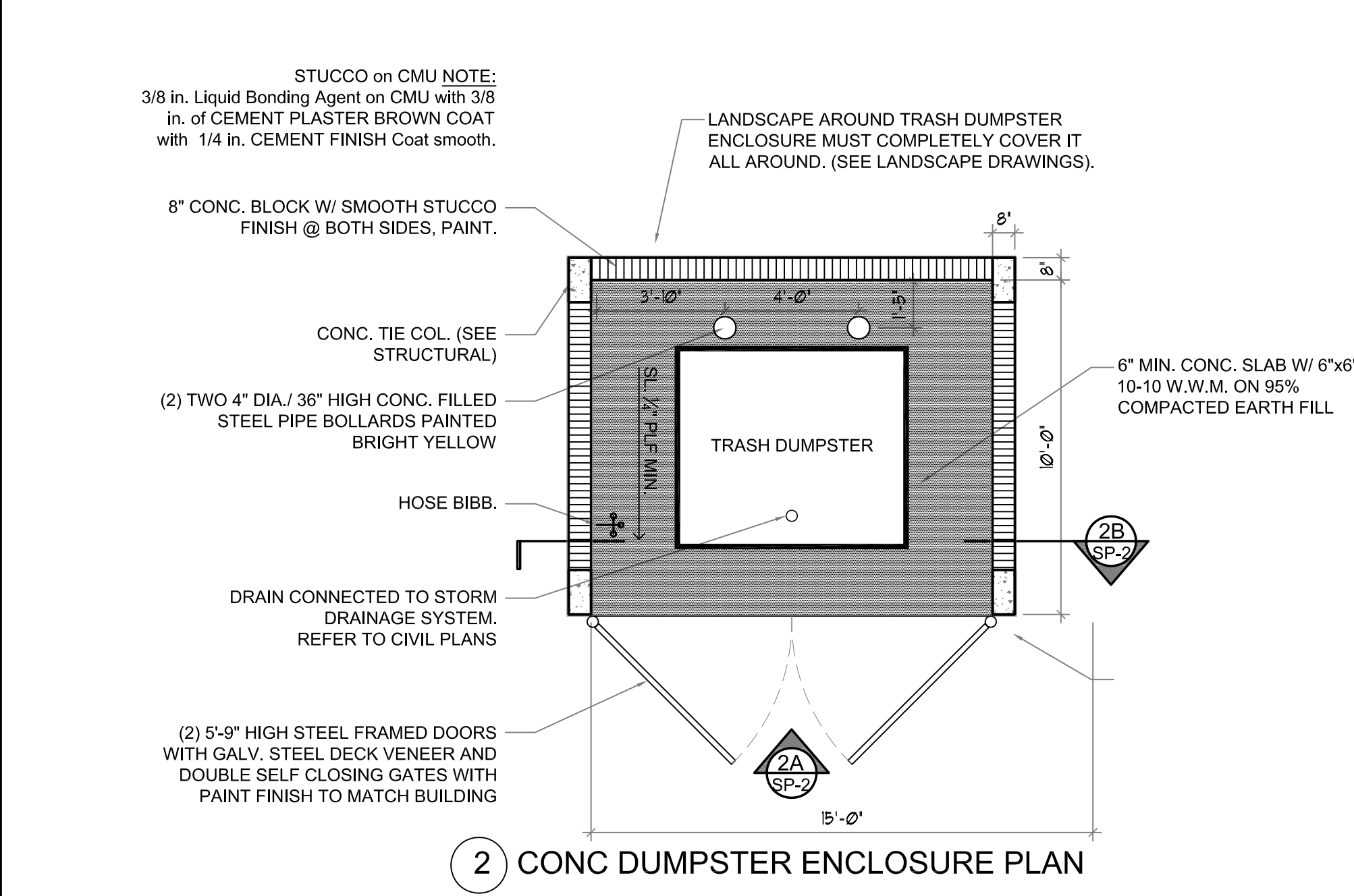




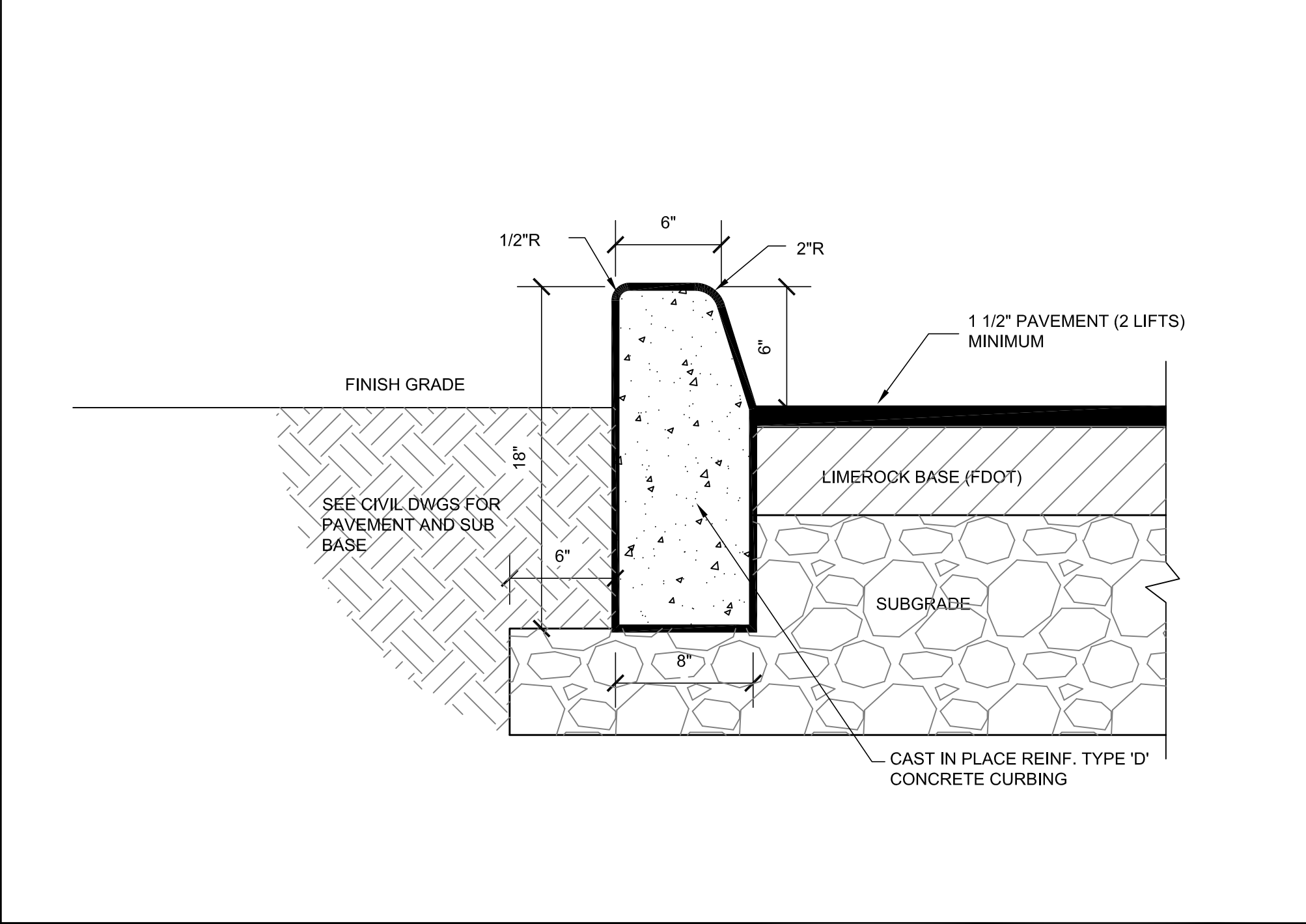
1 MONUMENT SIGN  
N.T.S.



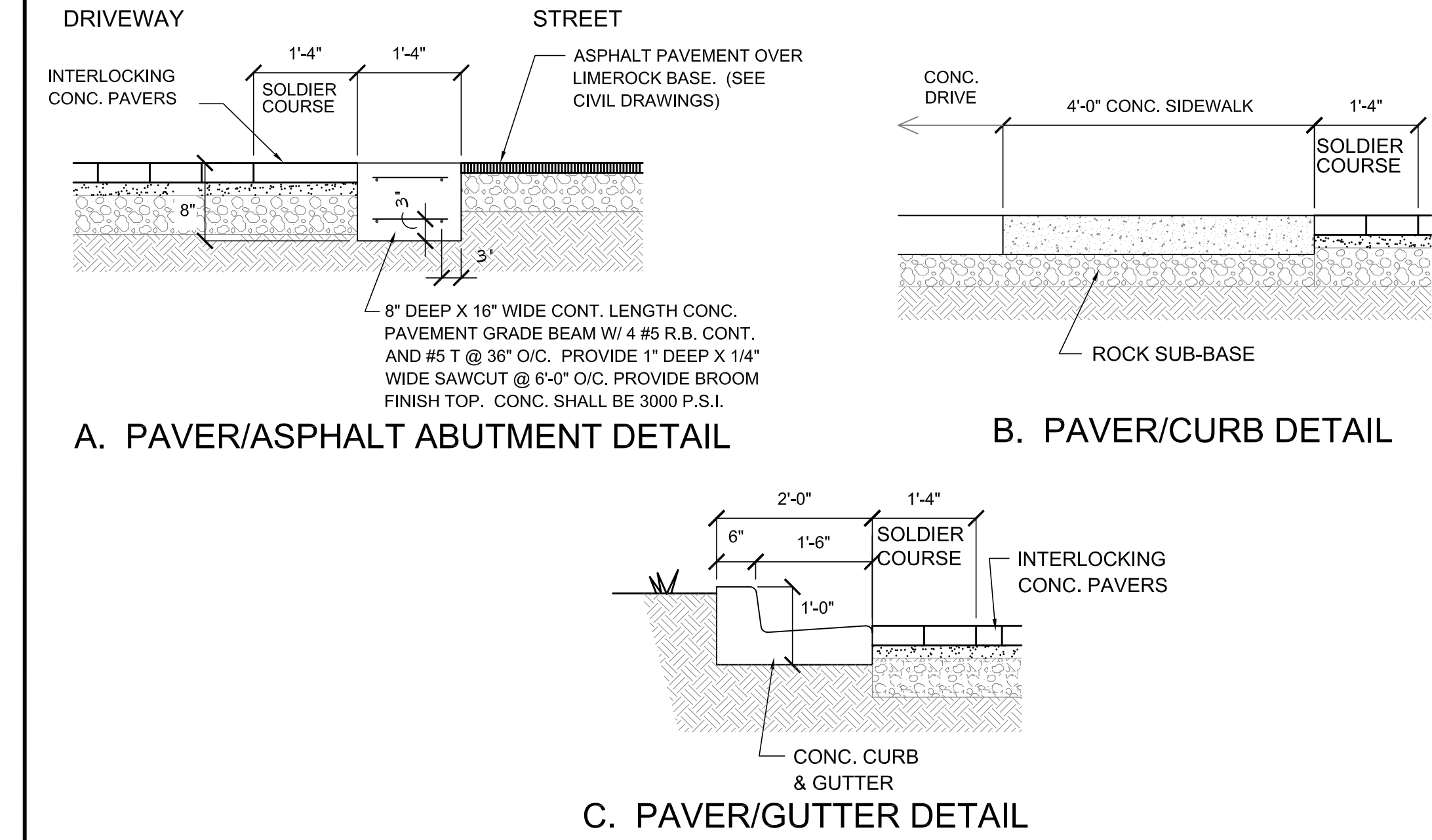
4 TYP. SIDEWALK DETAILS  
N.T.S.



2 DUMPSTER ENCLOSURE  
N.T.S.



5 TYPE 'D' CURB  
N.T.S.



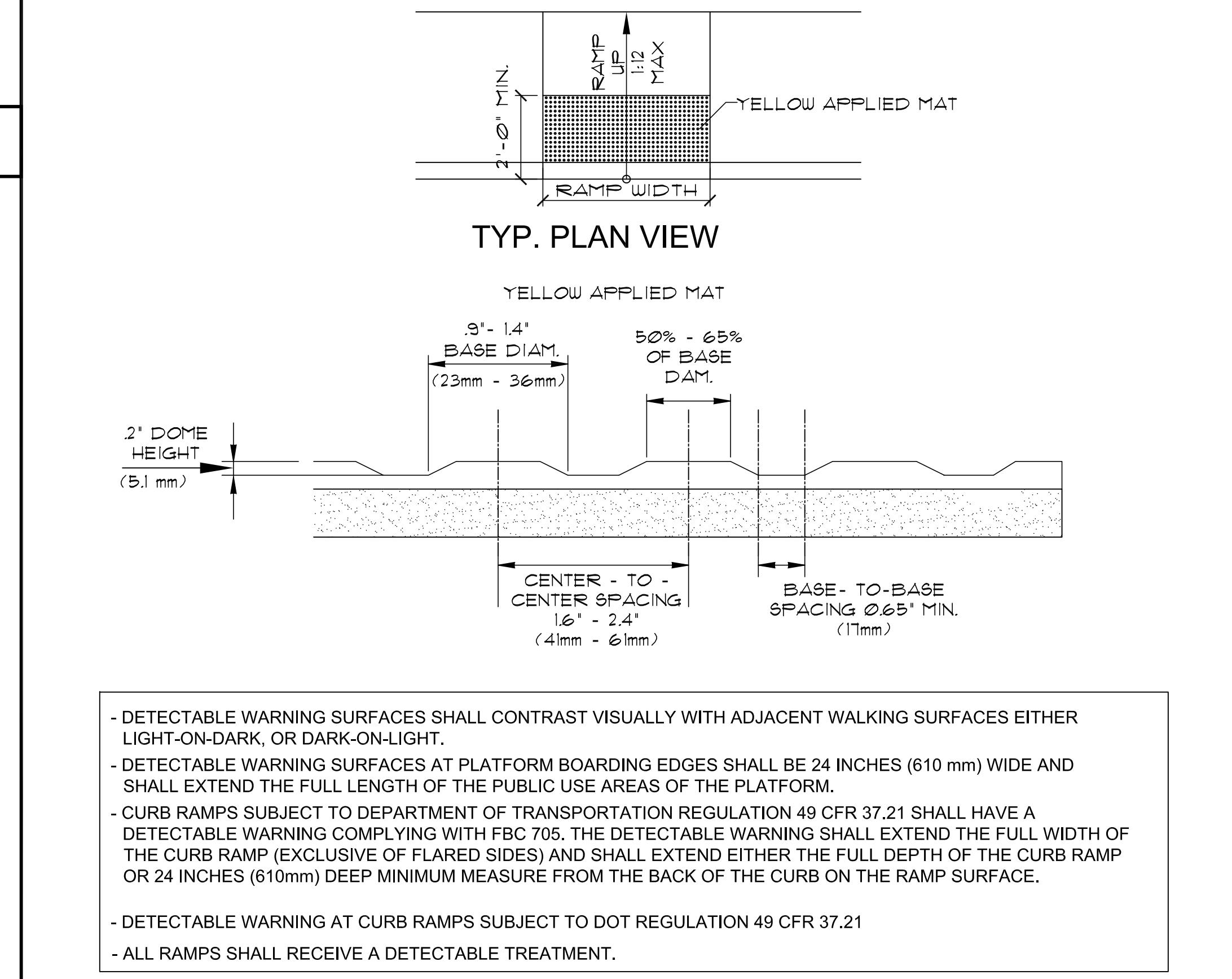
PAVER GENERAL NOTES

1. ALL PAVERS SHALL BE AS MANUF. BY PAVER MODULE HIGH TRAFFIC CONC. PSI STRENGTH OR APPROVED EQUAL.
2. ALL PERIMETER EDGES SOLDIER COURSE SHALL BE DOUBLE 4 X 8 PAVER 16" WIDE.
3. PAVER STYLE, COLOR AND PATTERN SHALL BE 4" X 8" GREY MIX COLOR "BROWN COLOR MIX" AND SHALL BE SET IN RUNNING BOND PATTERN. SUBMIT SAMPLES FOR APPROVAL PRIOR TO MANUFACTURING OR INSTALLING.
4. NO JOINT SHALL EXCEED 1/8"
5. ALL PAVERS SHALL BE SET OVER LEVELING SCREED SAND 2" THICK MAX.
6. ALL PAVERS SHALL BE SET OVER A MINIMUM OF 8" THICK CRUSHED AND MACHINE COMPACTED D.O.T. APPROVED LIMEROCK BASE.
7. ALL AREAS TO RECEIVE PAVER SHALL BE CUT DOWN MINIMUM 13" AND CLEARED OF DELETRIOUS MATERIALS.

3 TYP. PAVERS' DETAILS  
N.T.S.

CURB RAMP GENERAL NOTES:

- CURB RAMPS SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB.
- NO CURB RAMP MAY EXIST WITHIN ANY DISABLED PARKING STALL OR AISLE.
- MAXIMUM SLOPE OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.
- THE MAXIMUM SLOPE OF ANY RAMP SHALL NOT EXCEED 1:12 AND WIDTH 48" MINIMUM.



6 DETECTABLE SURFACE DETAILS  
N.T.S.

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SEAL

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SHEET

SP-2.0



