

# PAVING GRADING & DRAINAGE MODIFICATION PLANS: PARKING LOT ADDITIONS AND FLATWORK IMPROVEMENTS

## TOWNHOMES AT 214 NE 4TH STREET DELRAY BEACH, FLORIDA 33444

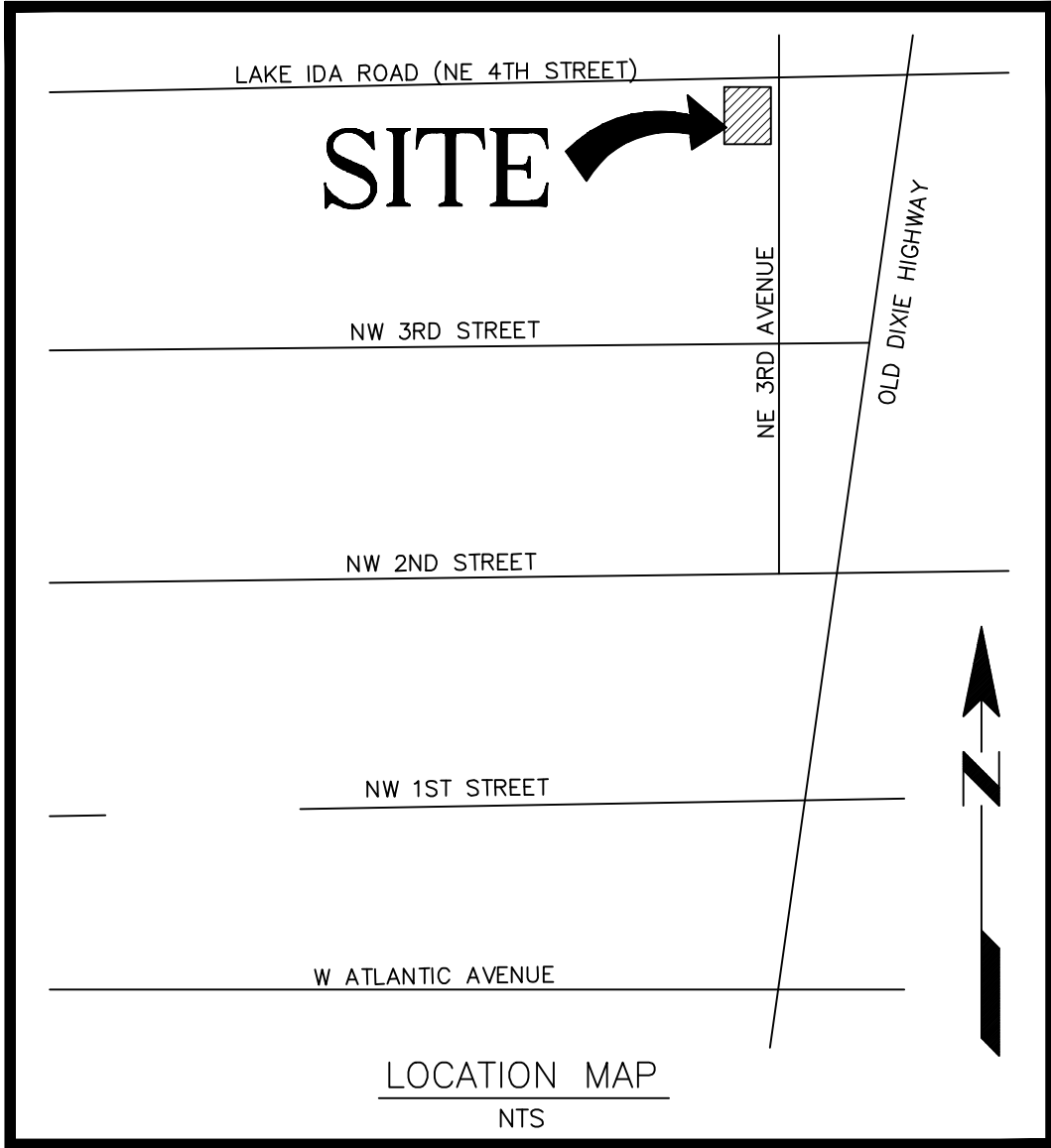
FOR

WFL LAND, L.L.C.  
15620 S.W. 77TH AVEUNE  
PALMETO BAY, FLORIDA 33157

BY

JOHN A. GRANT, JR., INC. 3333  
NORTH FEDERAL HIGHWAY  
BOCA RATON, FLORIDA  
561-395-3333

FOR PERMIT PURPOSES ONLY



PROJECT NO JG100-9738

- |   |  |
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| 1 | COVER SHEET                              |
| 2 | GENERAL NOTES & DRAINAGE DETAILS         |
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| 9 | WATER AND SEWER PLAN                     |



THOMAS F. LUBANOVIC  
Registered Engineer No. 56659  
State of Florida

1	REVISED AS PER TAC COMMENTS	AE	AUG 18
NO.	REVISION	BY	DATE



INLET APRON DETAIL D 5.1

**NOTES:**

1. ALL GRATES SHALL BE SUITABLE FOR H-20 LOADING (HIGHWAY TRAFFIC LOADS)
2. WHEN INSTALLED IN PAVEMENT OR WITHIN 6" OF PAVEMENT USE U.S.F. 4160-6210

TYPE C & E INLET GRATE DETAIL D 6.1

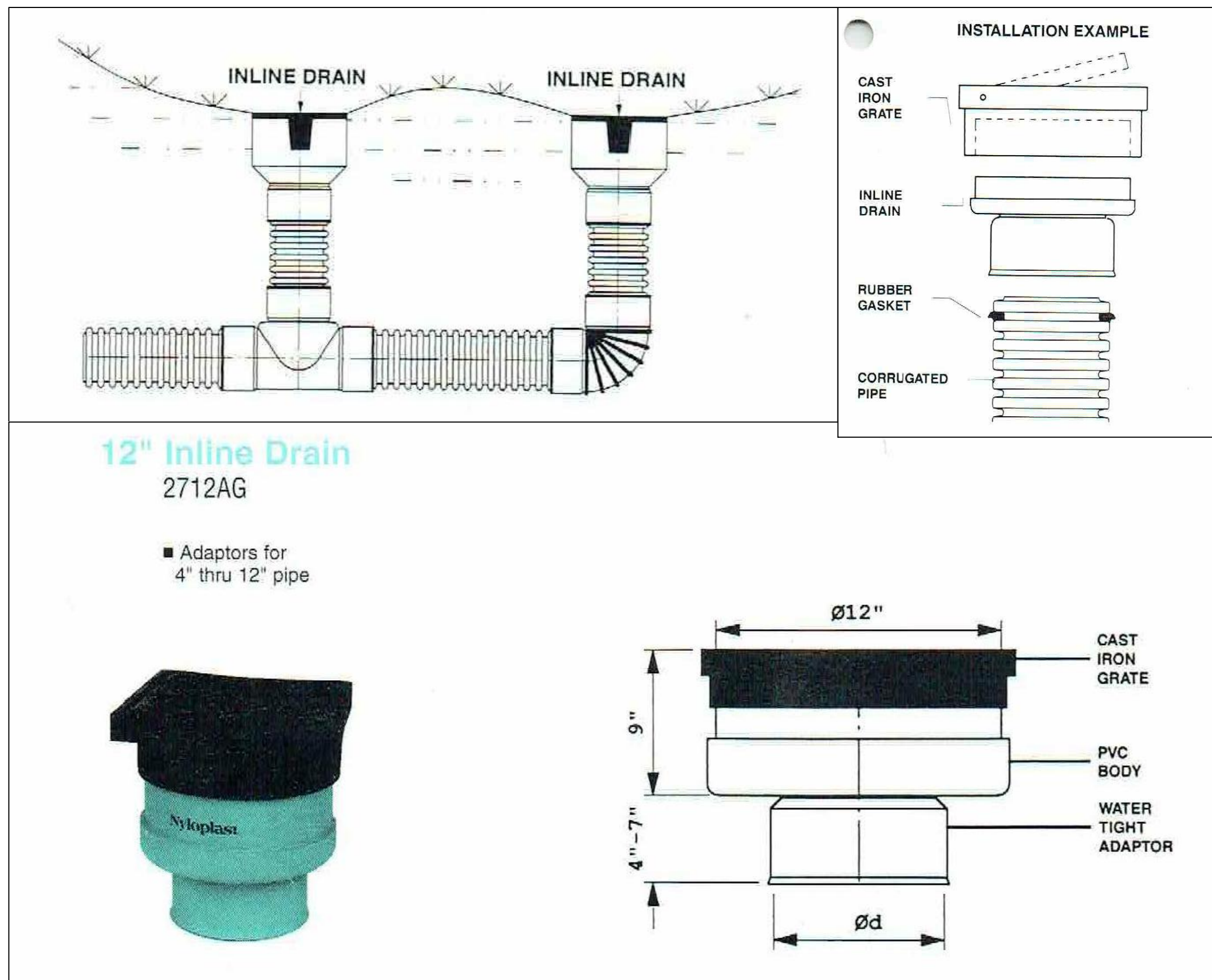
NOTES:

1. INLET TO BE PRECAST WITH CLASS 'A' 4000 P.S.I. CONCRETE.
2. ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
3. 12" DIA. W/EEP HOLE REQUIRED ON ALL STRUCTURES WHICH HAVE A BOTTOM ELEVATION ABOVE THE WATER TABLE.
4. 18" SUMP REQUIRED IN ALL DRAINAGE STRUCTURES.
5. SEE BEDDING DETAIL

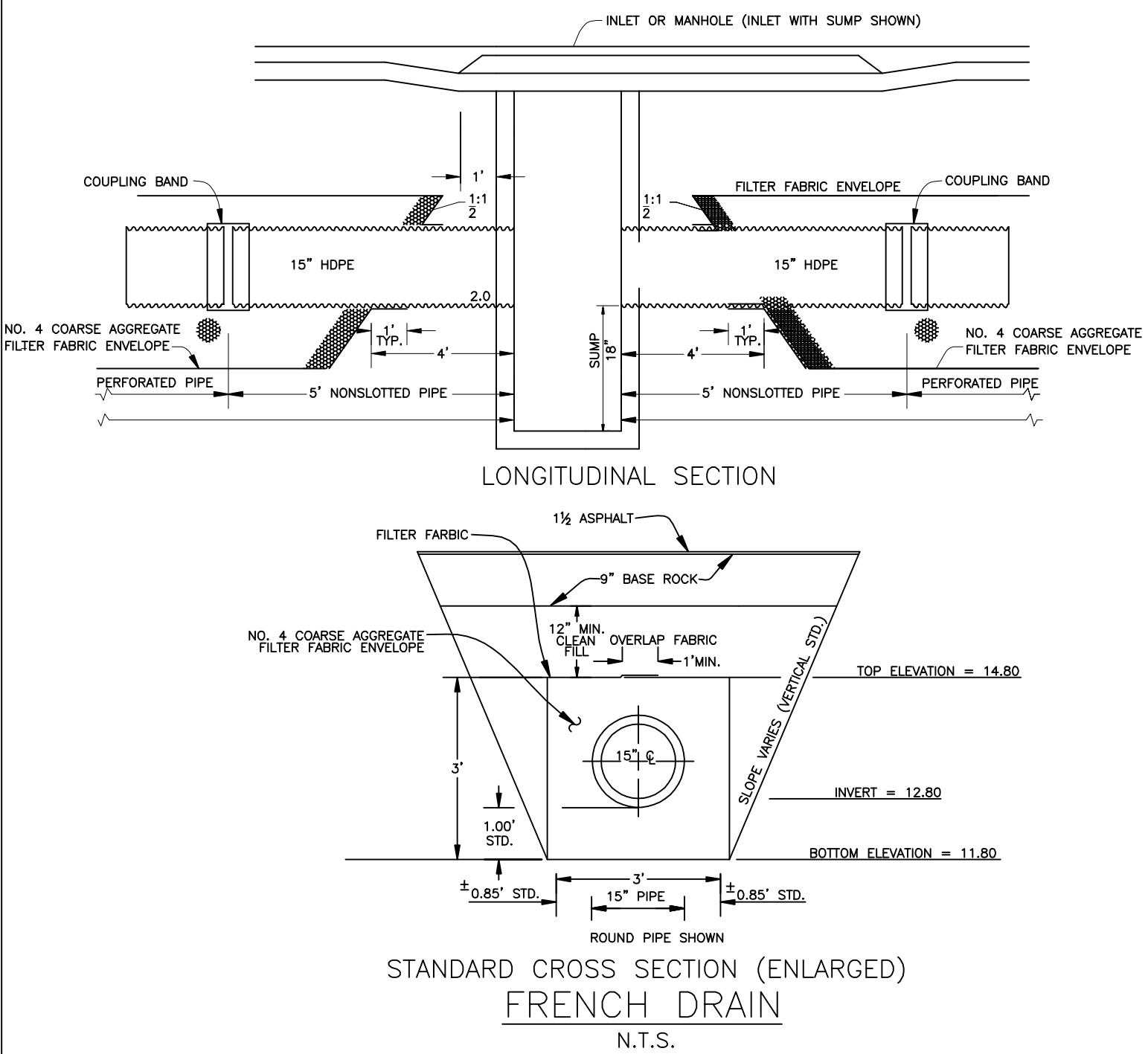
TYPE C & E INLET DETAIL D 7.1

GENERAL NOTES:

- SCOPE: WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR FOR GRADING, PAVING AND DRAINAGE, COMPLETE AND READY FOR USE AS PER DRAWINGS AND AS SPECIFIED HEREIN. ALL WORK SHALL BE CONSTRUCTED IN A WORKMAN LIKE MANNER AND IN ACCORDANCE WITH THE REGULATIONS AND PERMITS OF THE CITY OF DELRAY BEACH, PALM BEACH COUNTY, THE FLORIDA STATE DEPARTMENT OF TRANSPORTATION, ALL LOCAL CODES AND ALL OTHER GOVERNING AGENCIES HAVING JURISDICTION WITHIN THE LIMITS OF THE WORK.
2. THE CONTRACTOR SHALL PROVIDE FACILITIES AND BE RESPONSIBLE FOR THE PROTECTION OF ALL STRUCTURES, BUILDINGS AND UTILITIES UNDER GROUND, ON THE SURFACE, OR ABOVE GROUND, AGAINST TRENCHING, DEWATERING OR ANY OTHER ACTIVITY CONNECTED WITH THE CONSTRUCTION OF THIS PROJECT DURING THE CONSTRUCTION PERIOD AND PROTECT AND PRESERVE THE OWNER HARMLESS AGAINST ALL CLAIMS FOR SUCH DAMAGE.
3. EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
4. GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED.
5. ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
6. WRITTEN DIMENSIONS SHALL HAVE PREFERENCE OVER SCALED DIMENSION.
7. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI, UNLESS OTHERWISE NOTED.
8. ALL REINFORCING SHALL BE DEFORMED STEEL.
9. PAVING AND GRADING
  - A. SUBGRADE SHALL BE COMPACTED TO 98% DRY DENSITY AS DETERMINED BY AASHTO T-180.
  - B. BASE SHALL CONSIST OF APPROVED LOCAL LIMEROCK COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
  - C. PRIME COAT SHALL BE CUT BACK ASPHALT OR TAR APPLIED AT A RATE OF NOT LESS THAN 0.10 GAL. PER SQUARE YARD OVER COMPLETE AND DRY BASE COVERED WITH CLEAN SAND AND ALLOWED TO CURE FOR A MINIMUM OF 72 HOURS.
  - D. GRADING SHALL CONFORM TO THE GRADES ON THE PLANS.
  - E. MUCK OR PEAT SHALL BE COMPLETELY REMOVED AS DIRECTED BY THE ENGINEER.
10. DRAINAGE
  - A. EXCAVATION AND BACKFILL
    - A.A. THE CONTRACTOR SHALL DO ALL EXCAVATION OF WHATEVER SUBSTANCES ENCOUNTERED TO A DEPTH SHOWN ON DRAWINGS.
    - A.B. EXCAVATED MATERIALS NOT REQUIRED FOR BACKFILL SHALL BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
    - A.C. TRENCH EXCAVATION FOR MANHOLES AND INLETS SHALL BE DEWATERED. DEWATERING SHALL BE A CONTINUOUS OPERATION AND SHALL NOT BE INTERRUPTED OR DISCONTINUED UNTIL BACKFILLING IS COMPLETED.
    - A.D. AFTER PIPE HAVE BEEN LAID AND APPROVED THE TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH CLEAN SAND FREE OF ORGANIC MATERIAL.
    - A.E. UNSUITABLE SUBGRADE: IN CASE THE SOIL CONDITIONS ENCOUNTERED AT GRADE LINE OF THE PIPE TRENCH ARE FOUND TO BE UNSUITABLE FOR THE PIPE, THE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH APPROVED SUITABLE BEDDING MATERIALS AND STABILIZED AS DIRECTED BY THE ENGINEER. MATERIAL USED FOR REPLACEMENT SHALL BE SUITABLE SAND, GRAVEL, SAND, GRAVEL, CRUSHED LIMEROCK OR OTHER MATERIAL SPECIFICALLY APPROVED BY THE ENGINEER. THE ENGINEER SHALL DETERMINE THE DEPTH, WIDTH, AND LENGTH OF EXCAVATION REQUIRED FOR PROVIDING SUITABLE BEDDING.
11. PIPE MATERIALS
  - A. HOPE TO BE INSTALLED PURSUANT TO APPLICABLE REQUIREMENT INCLUDING, BUT NOT LIMITED TO FOOT SECTION 430, ASTM F-477, AASHTO M-294 AND MANUFACTURERS RECOMMENDATIONS, STANDARDS AND SPECIFICATIONS.
12. IT IS THE INTENT OF THESE PLANS TO PROVIDE THE DEVELOPER WITH CONSTRUCTION OF IMPROVEMENTS THAT ARE ACCEPTABLE TO THE CITY OF DELRAY BEACH, PALM BEACH COUNTY AND/OR OTHER GOVERNMENTAL AGENCIES. ALL WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE GOVERNMENTAL STANDARDS
13. SILT FENCE TO BE PLACED AS REQUIRED ADJACENT TO ALL PROPERTY LINES FOR EROSION CONTROL AND TO CONTAIN SILT.



IN-LINE DRAIN AND YARD INLET DETAIL  
N.T.S.



## FRENCH DRAIN GENERAL NOTES

1. PIPE SHALL BE ANY OF THE OPTIONAL TYPE PERMITTED IN SECTION 443 OF THE SPECIFICATIONS UNLESS OTHERWISE RESTRICTED IN THE PLANS. DISSIMILAR TYPES OF PIPE WILL NOT BE PERMITTED IN A CONTINUOUS RUN OF PIPE.
2. CONCRETE PIPE SHALL BE PLACED WITH THE SLOTS POSITIONED ON SIDE.
3. ALIGNMENT JOINTS ARE STANDARD ( GASKET NOT REQUIRED ).
4. RECORROGATION OF METAL PIPE ENDS NOT REQUIRED.
5. THE CONTRACTOR MAY SUBMIT OTHER METHODS OF PROVIDING SLOTS HAVING EQUAL OR GREATER AREA OF OPENING, FOR APPROVAL BY THE ENGINEER.
6. FRENCH FABRIC SHALL BE SUBSURFACE DRAINAGE TYPE MEETING THE REQUIREMENTS OF SECTION 985. ALL FILTER FABRIC JOINTS SHALL LAP A MINIMUM OF ONE (1) FOOT.
7. THE STANDARD CROSS SECTION SHALL BE CONSTRUCTED UNLESS OTHER SECTION(S) DESCRIBED OR DETAILED IN THE PLANS.
8. FOR SUPPLEMENTAL DETAILS SEE INDEX NO. 280.
9. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT CONTAMINATION OF THE TRENCH WITH SAND, SILT AND FOREIGN MATERIALS.
10. THE 12" DIAMETER WEEP HOLE SHALL BE ELIMINATED, WHEN THE BOTTOM OF INLET IS BELOW THE NORMAL WATER TABLE, UNLESS OTHERWISE SHOW IN THE PLANS.
11. FRENCH DRAINS SHALL BE THE TYPIC DRAINAGE SHALL BE AFFORD UNDER THE CONTRACT UNIT PRICE, FOR FRENCH DRAINS, LF. THE UNIT PRICE SHALL INCLUDE THE COST OF PIPE, PIPE PLUGS, PIPE FITTINGS, COARSE AGGREGATE AND FILTER FABRIC IN PLACE, AND THE COST FOR TRENCH EXCAVATION AND COMPACTION. THE UNIT PRICE SHALL ALSO INCLUDE THE COST FOR DISPOSAL OF SURPLUS EXCAVATED MATERIALS AND COST FOR RESTORATION OF PAVEMENT REMOVED OR DAMAGED BY FRENCH DRAIN CONSTRUCTION, BUT SHALL NOT INCLUDE PAYMENTS FOR ITEMS PAID FOR ELSEWHERE.
12. FRENCH DRAINS WITH A SIGNIFICANTLY DIFFERENT CROSS SECTION SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICES FOR SEPARATE ITEMS AS FOLLOWS:
  - (A) SLOTTED OR PERFORATED PIPE CULVERT, LF. UNIT PRICE SHALL INCLUDE COST FOR PIPE, PIPE PLUGS AND FITTINGS IN PLACE.
  - (B) BALLAST ROCK ( FRENCH DRAINS AGGREGATE), CY. UNIT PRICE SHALL INCLUDE COST FOR COARSE AGGREGATE IN PLACE, AND COST FOR TRENCH EXCAVATION, BACKFILL AND COMPACTION. THE UNIT PRICE SHALL INCLUDE THE COST FOR DISPOSAL OF SURPLUS EXCAVATED MATERIALS AND COST FOR RESTORATION OF PAVEMENT REMOVED OR DAMAGED BY FRENCH DRAIN CONSTRUCTION, BUT SHALL NOT INCLUDE PAYMENT FOR ITEMS PAID FOR ELSEWHERE.
  - (C) PLASTIC FILTER FABRIC (SUBSURFACE) , SY. UNIT PRICE SHALL BE FOR COST OF FABRIC IN PLACE. QUANTITY SHALL BE DETERMINED BY PLAN NEAT DIMENSIONS OF THE FABRIC ENVELOPE.

NO.	REVISION	BY	DATE
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## GENERAL NOTES & DRAINAGE DETAILS

**TOWNHOMES AT  
214 NE 4TH STREET  
DELRAY BEACH, FL 33444**

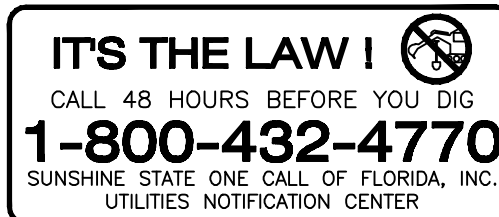
**JOHN A. GRANT, JR., INC.**

CONSULTING ENGINEERS

3333 NORTH FEDERAL HIGHWAY  
BOCA RATON, FLORIDA 33431  
PH. NO. 561-395-3333 FAX NO. 561-395-3315  
LICENSED BUSINESS NO. LB 50

MADE	AE	DATE	FEB 2018	F.B. N/A	PG	
CHECKED		DATE		SCALE	1" = 10'	
JOB NO.	JG-100-9738			SHEET	C2	OF 9

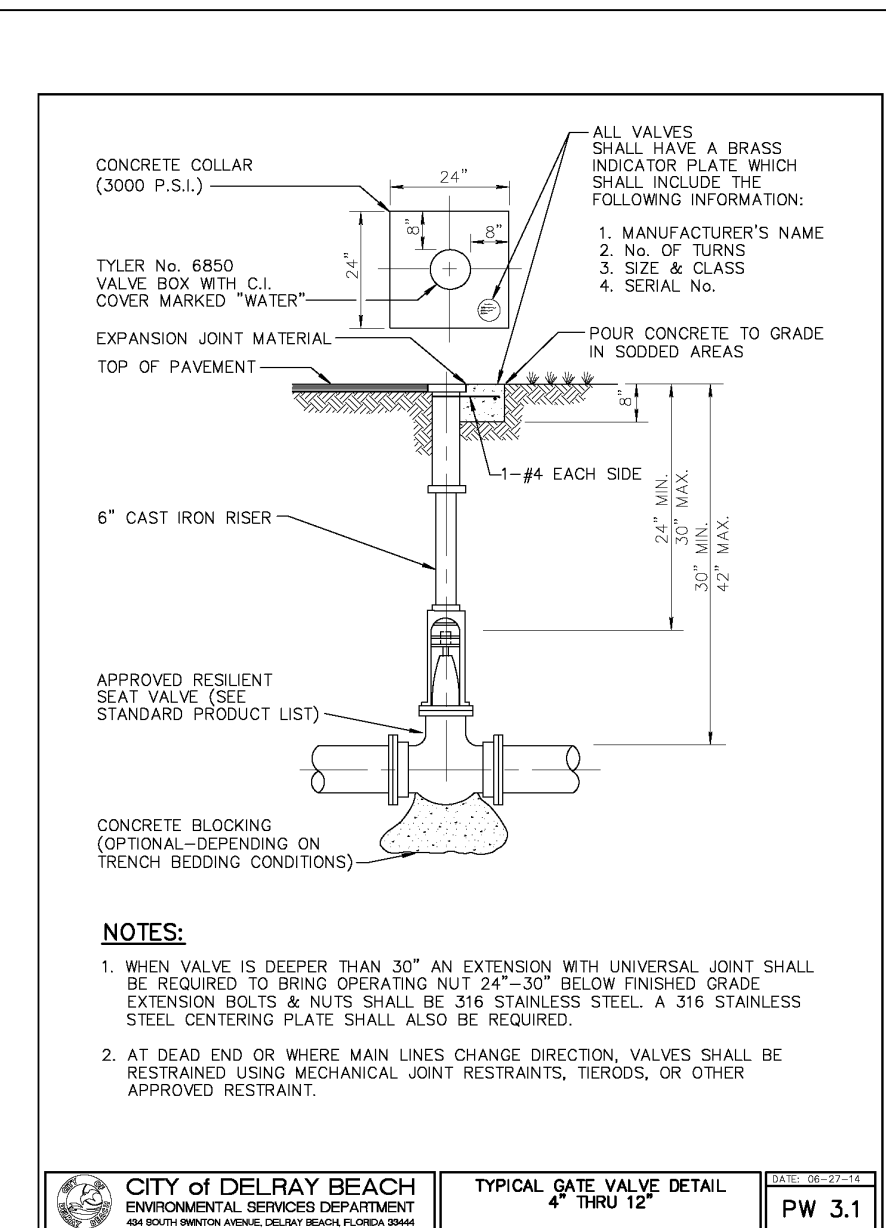
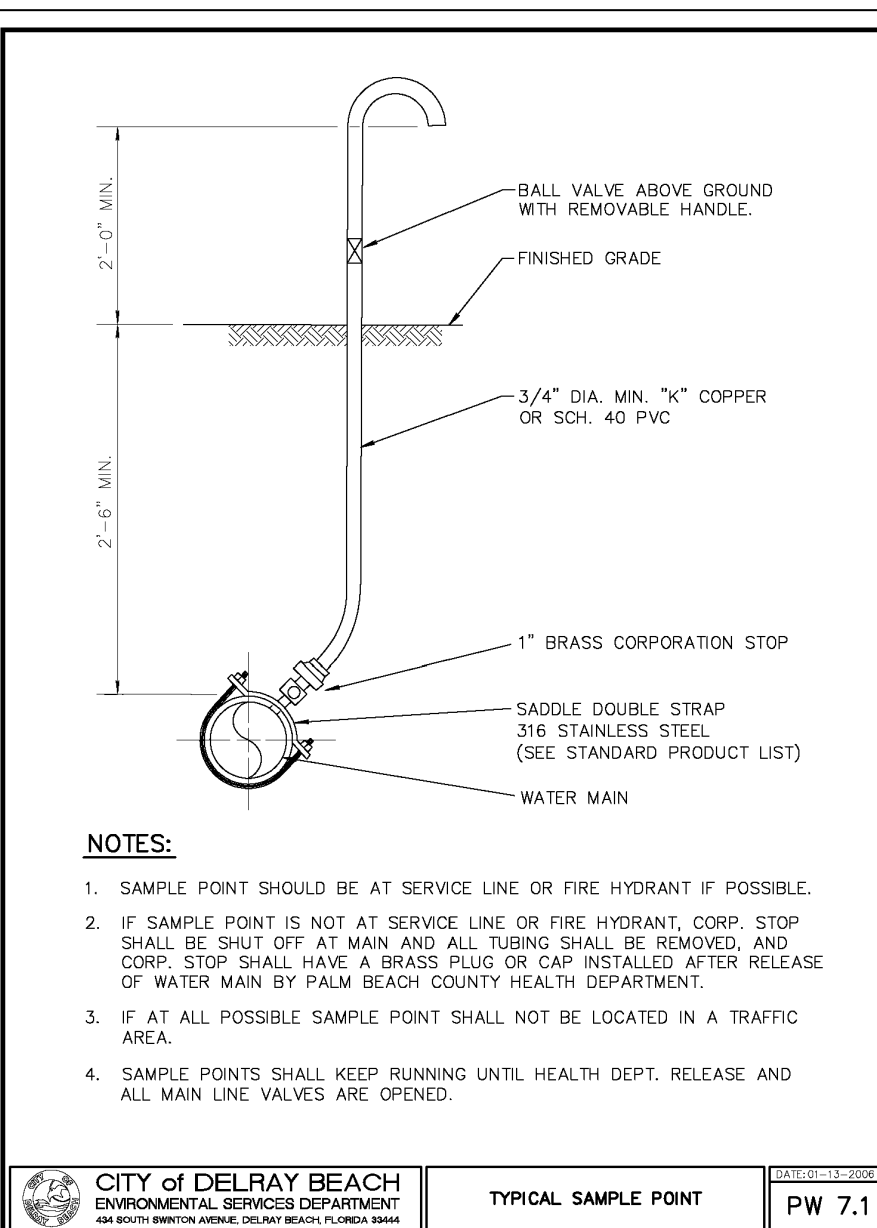
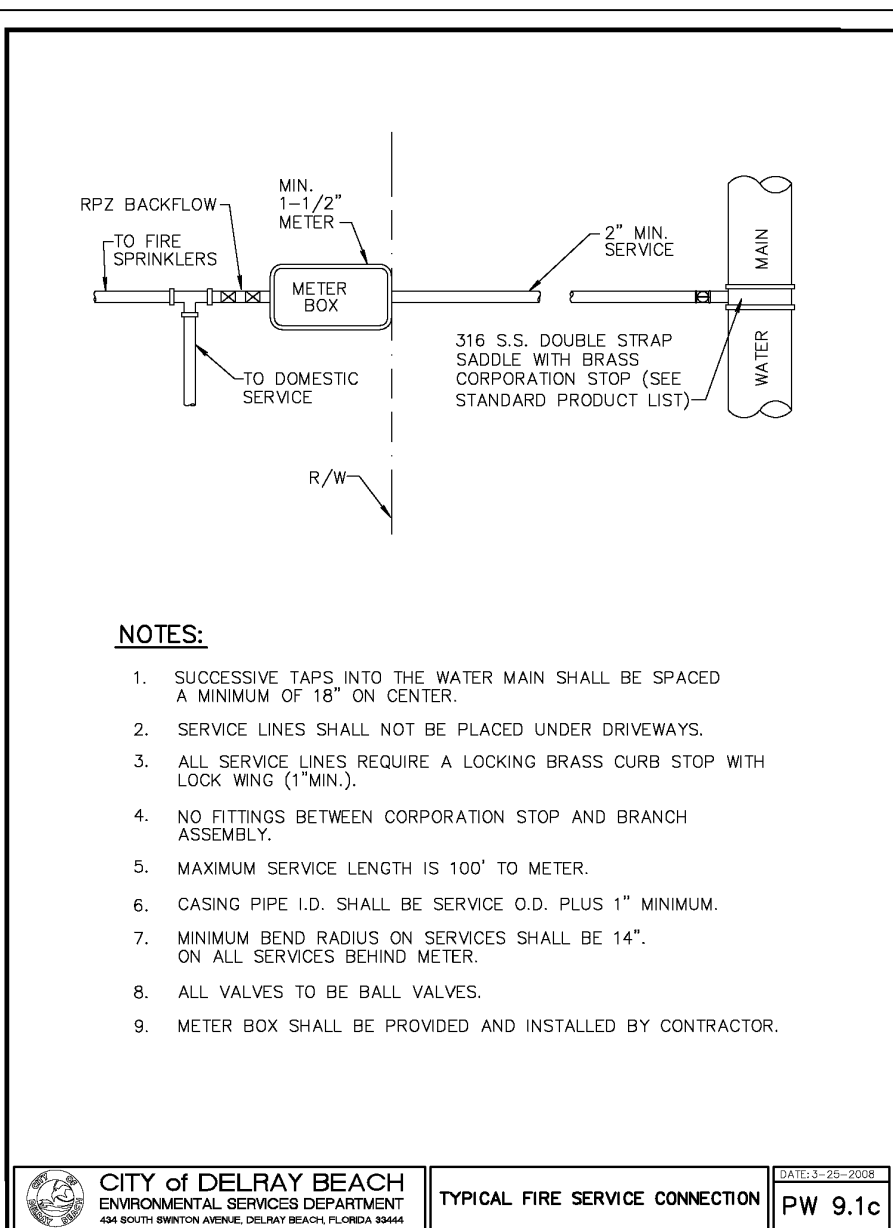
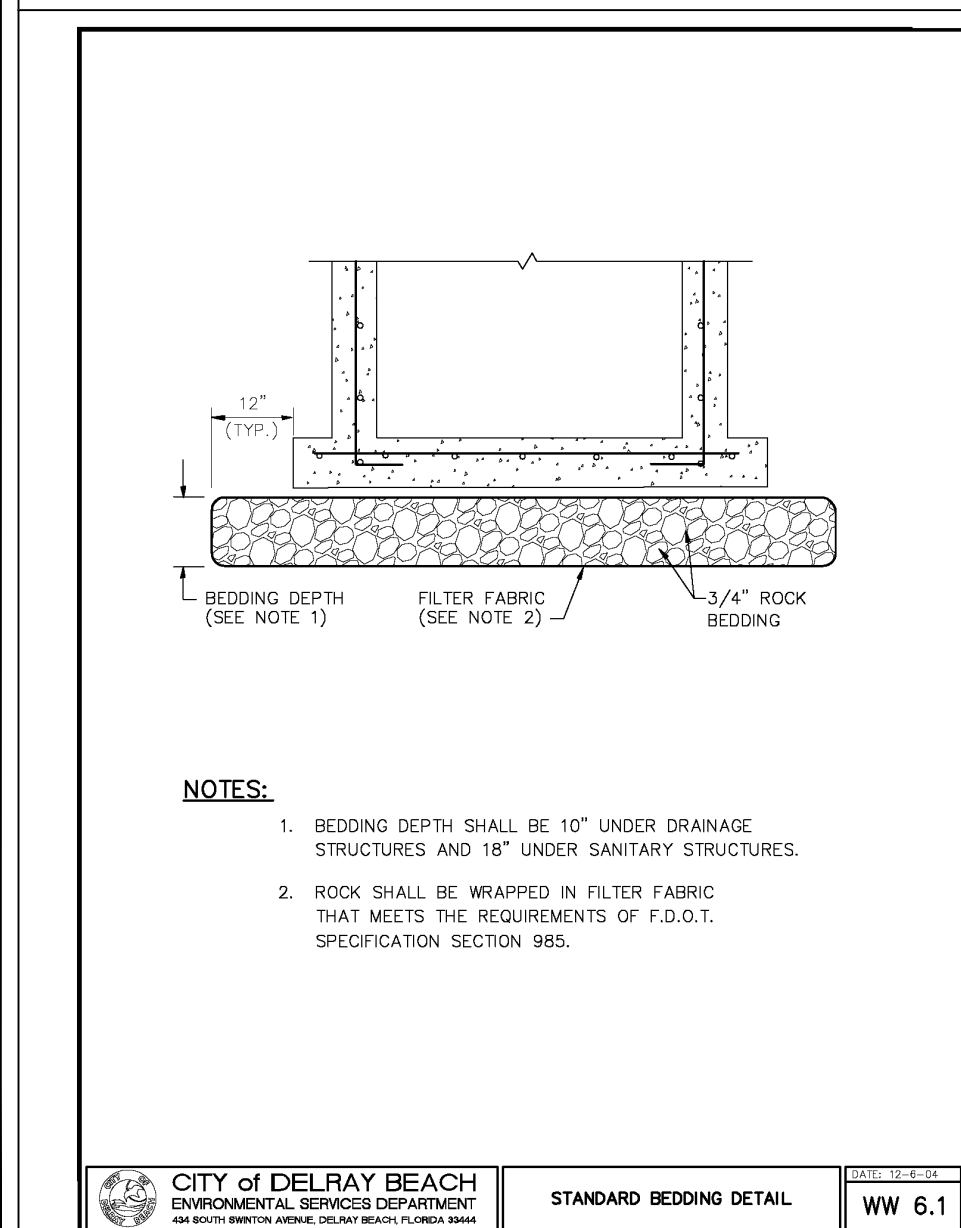
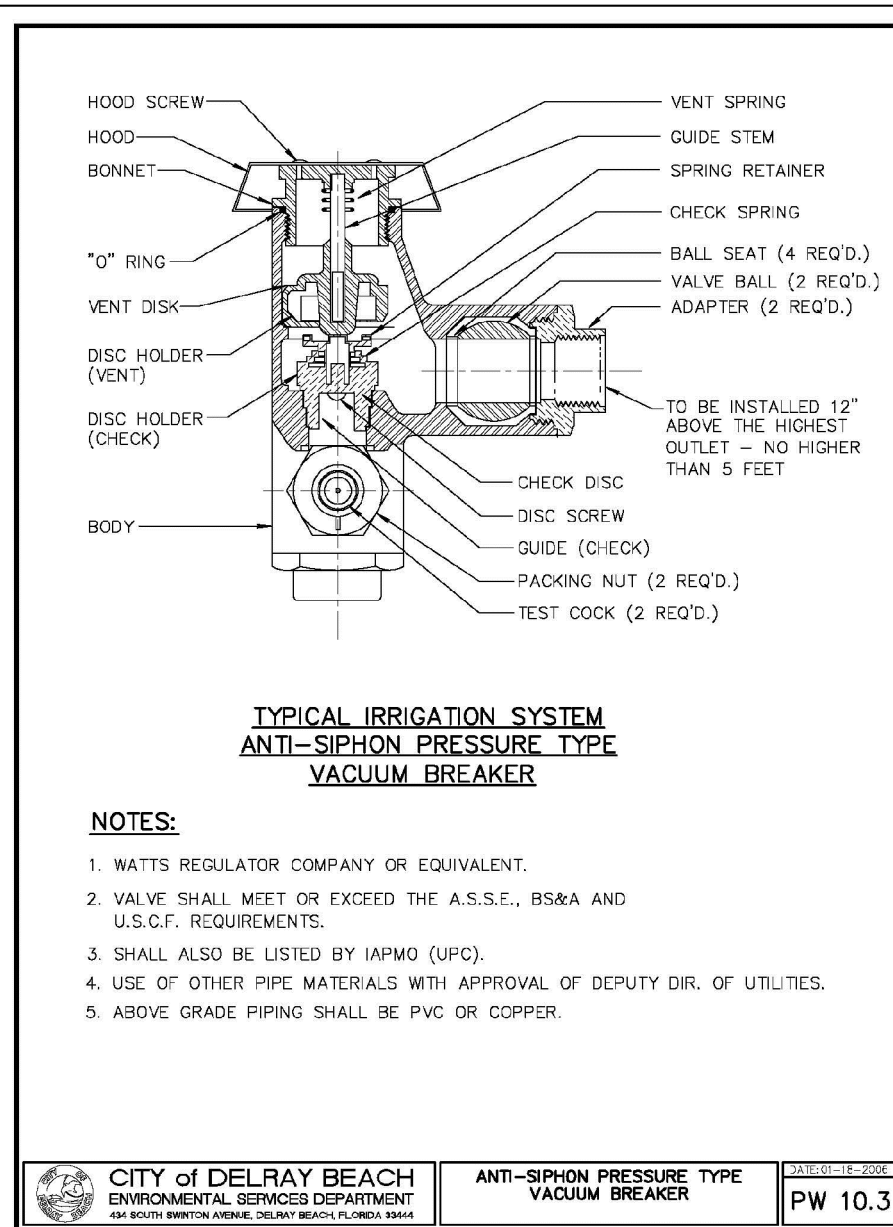
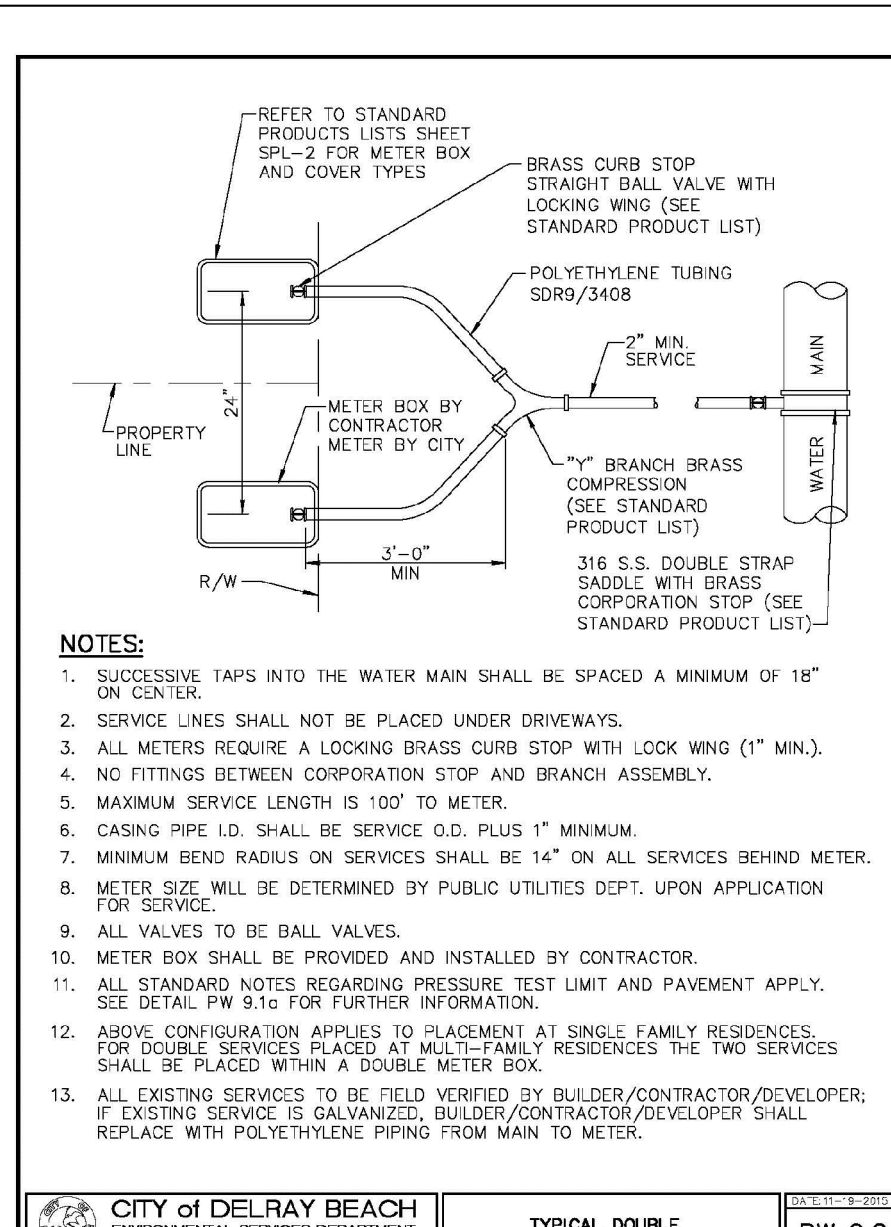
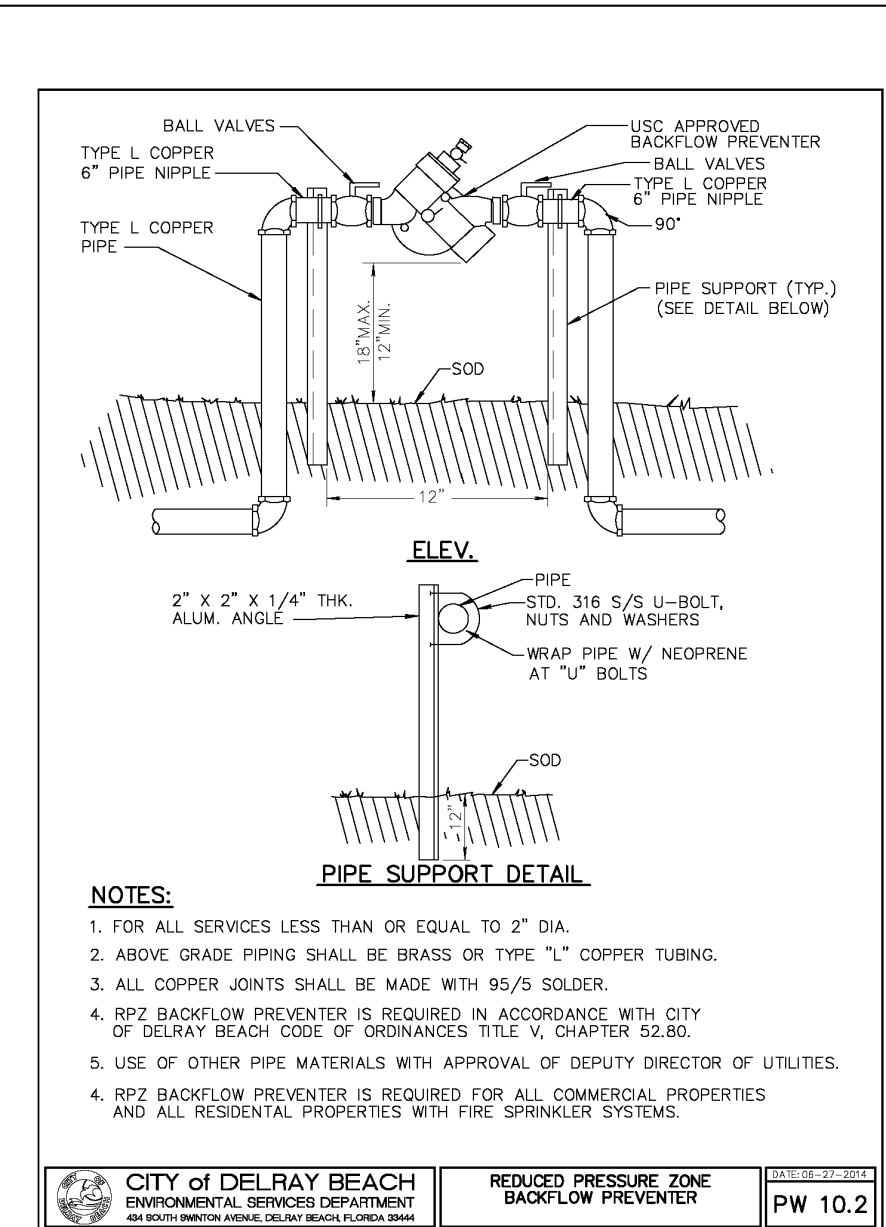
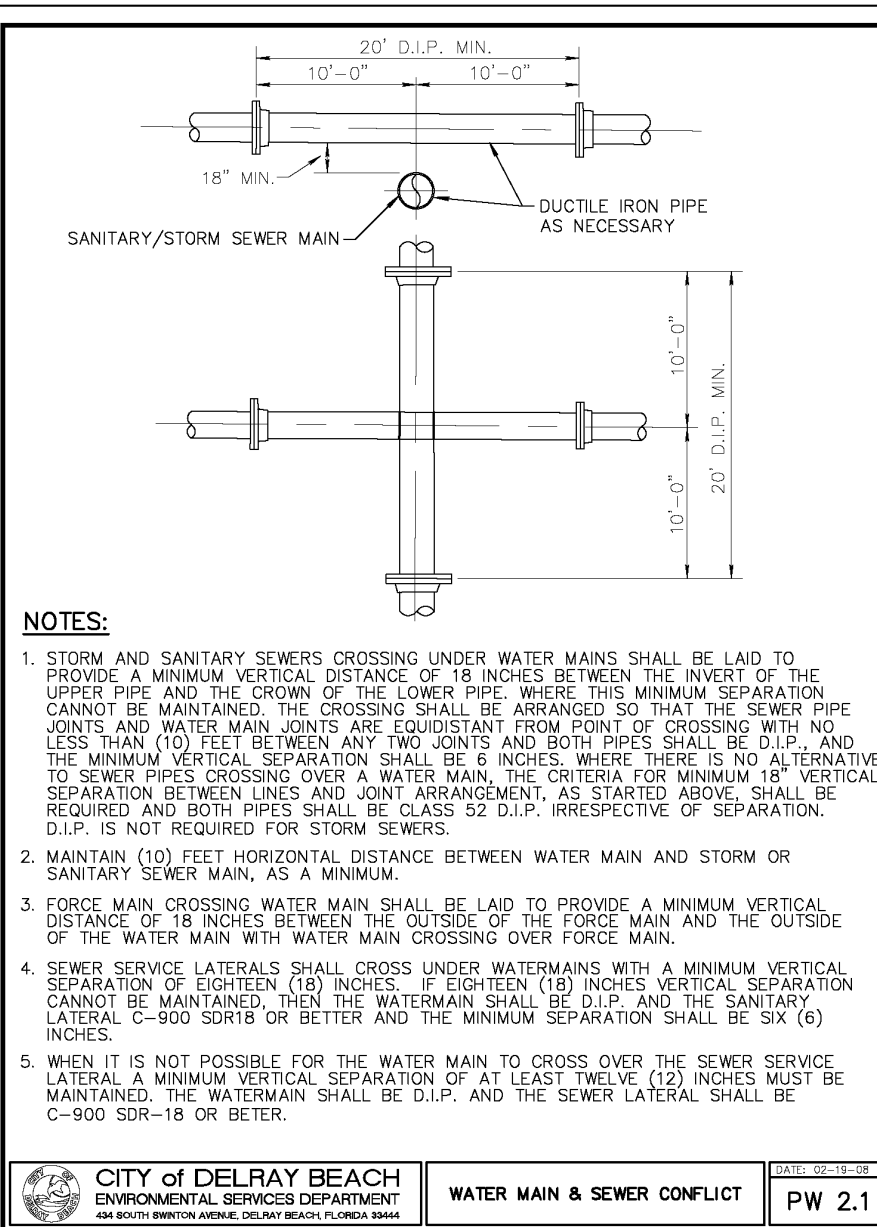
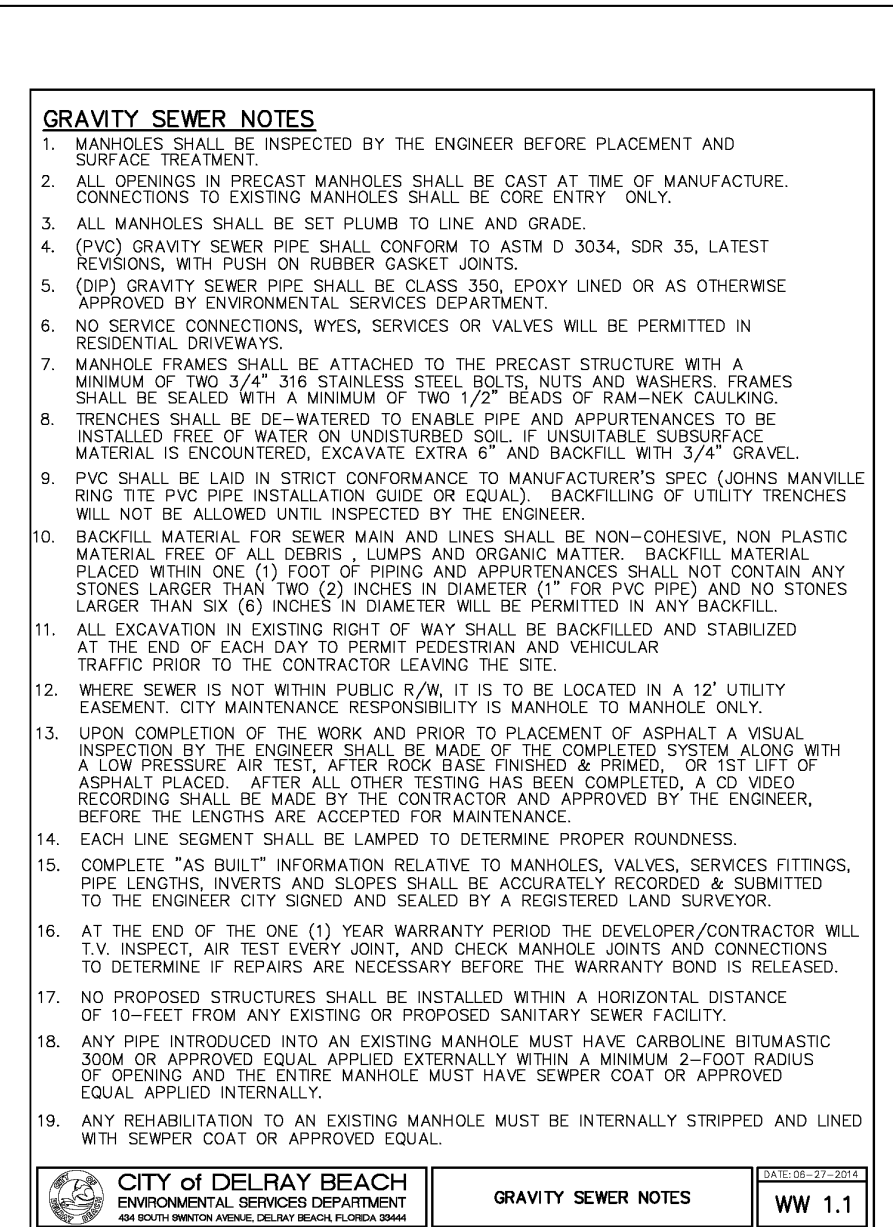
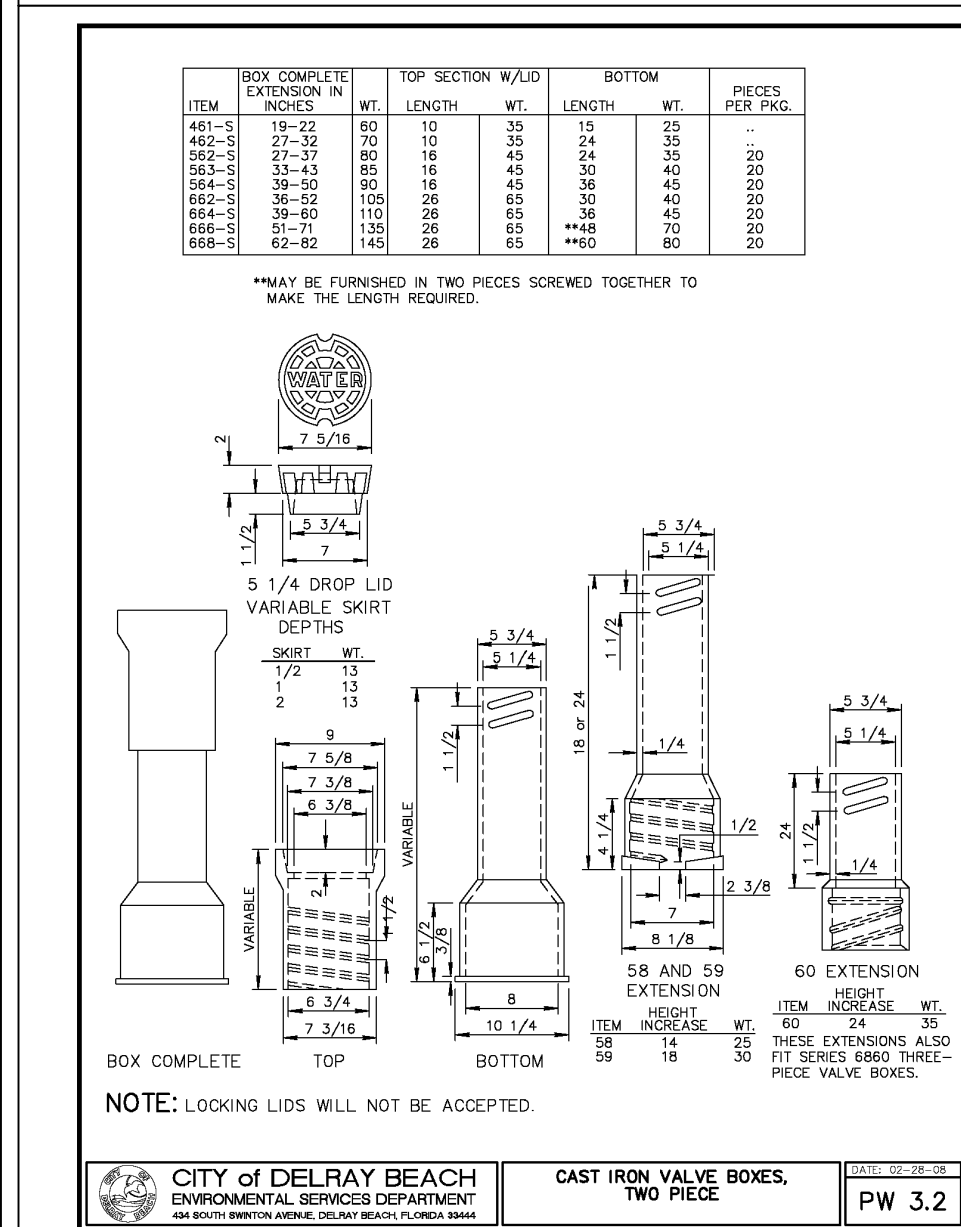
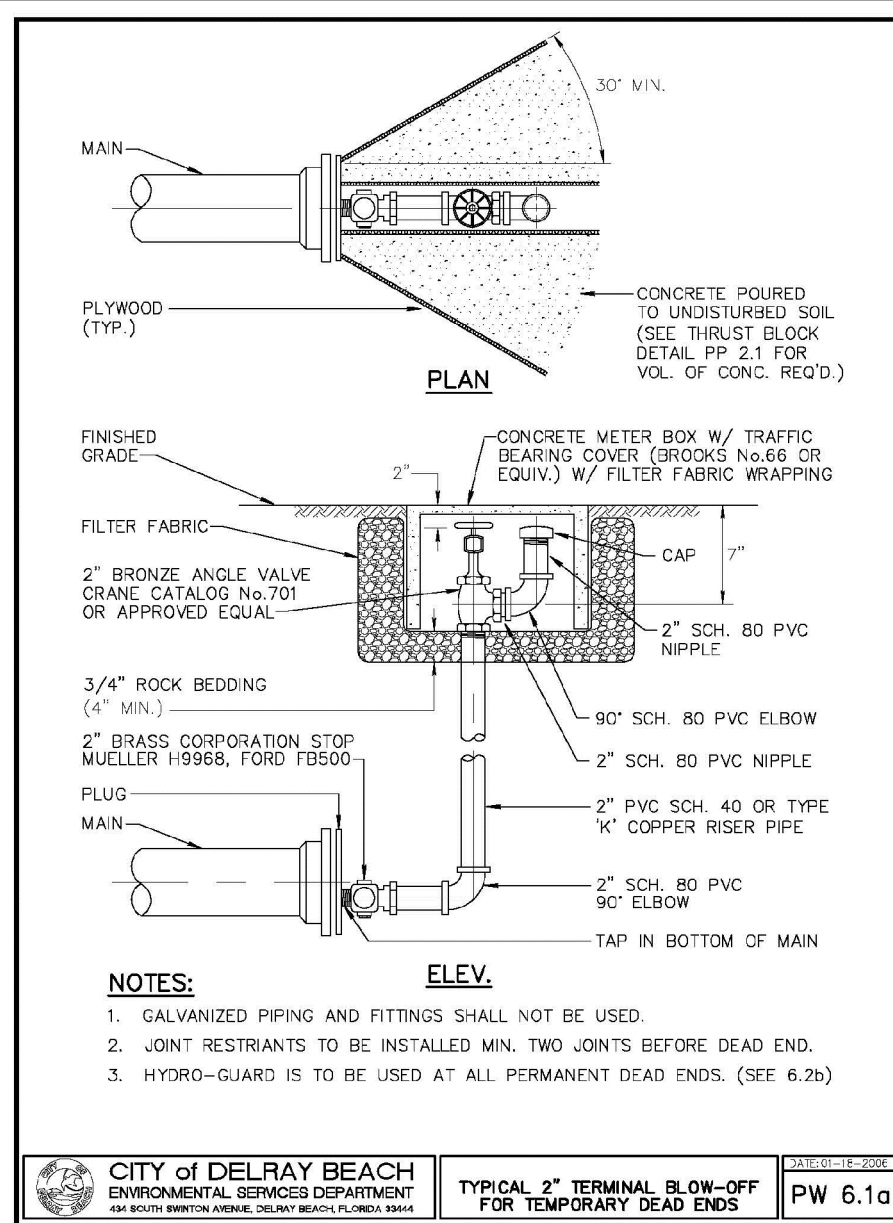
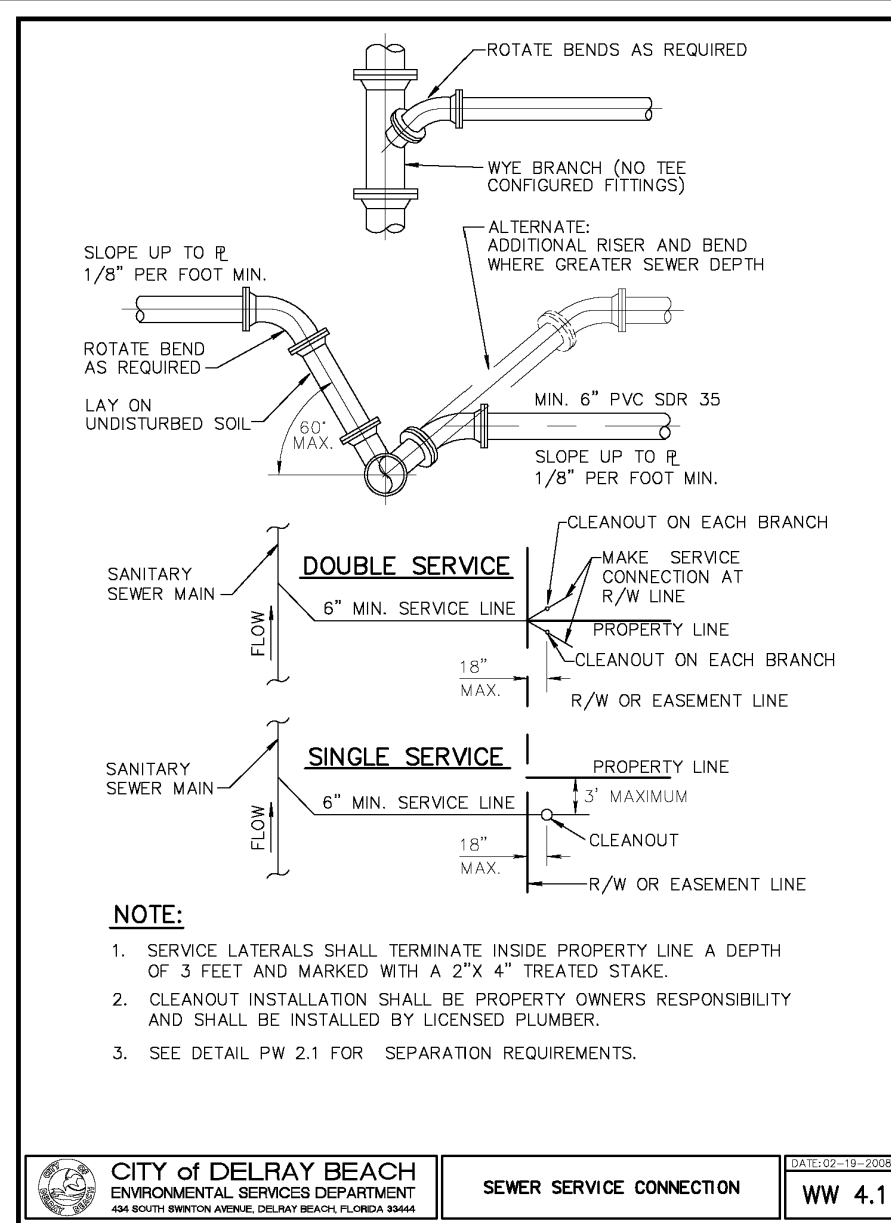
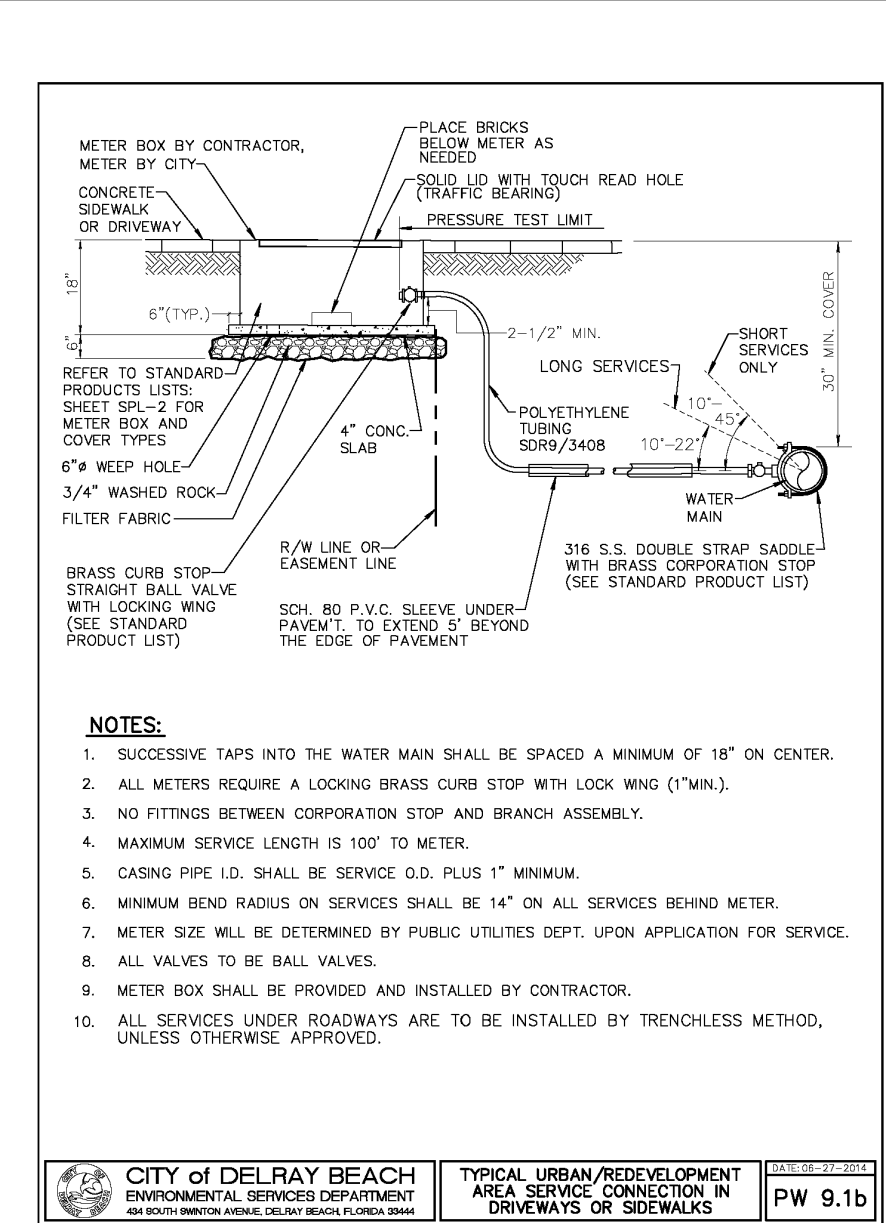
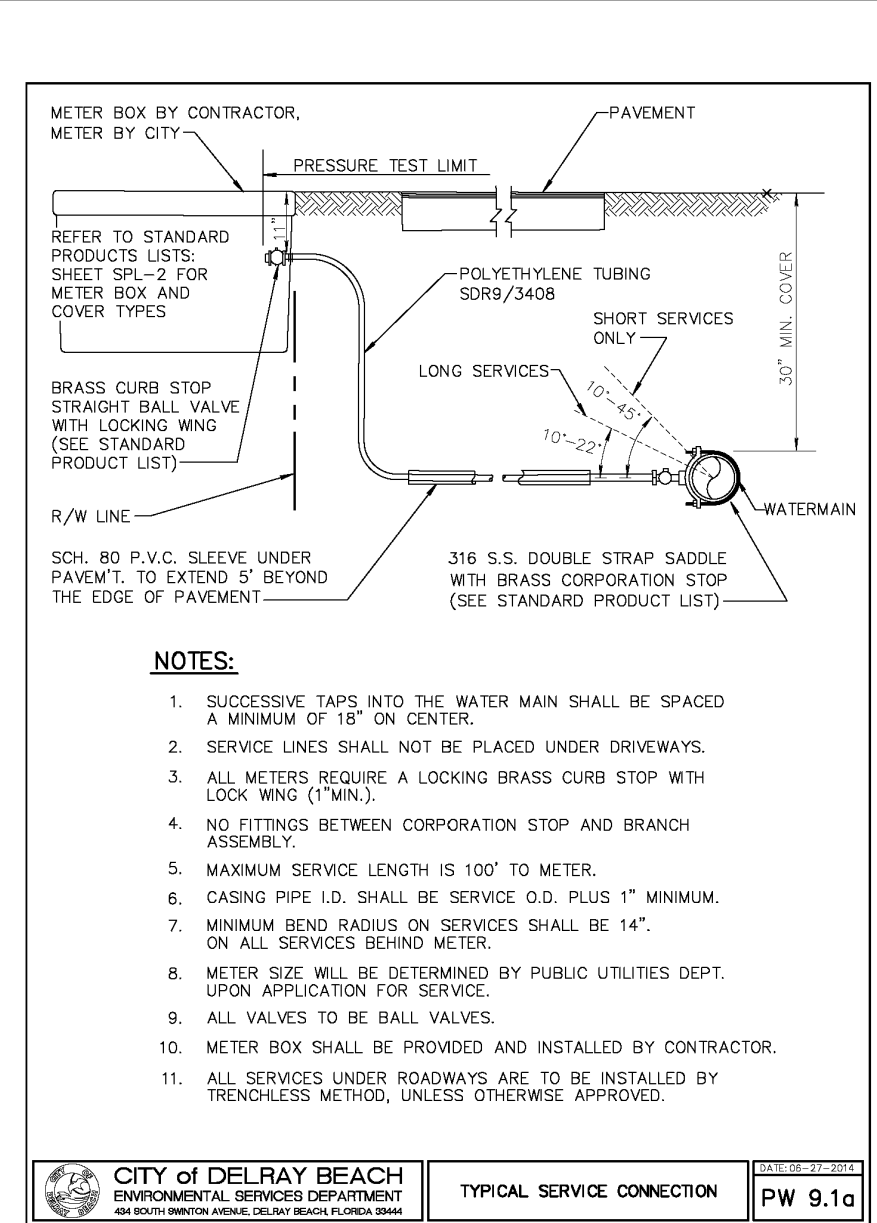
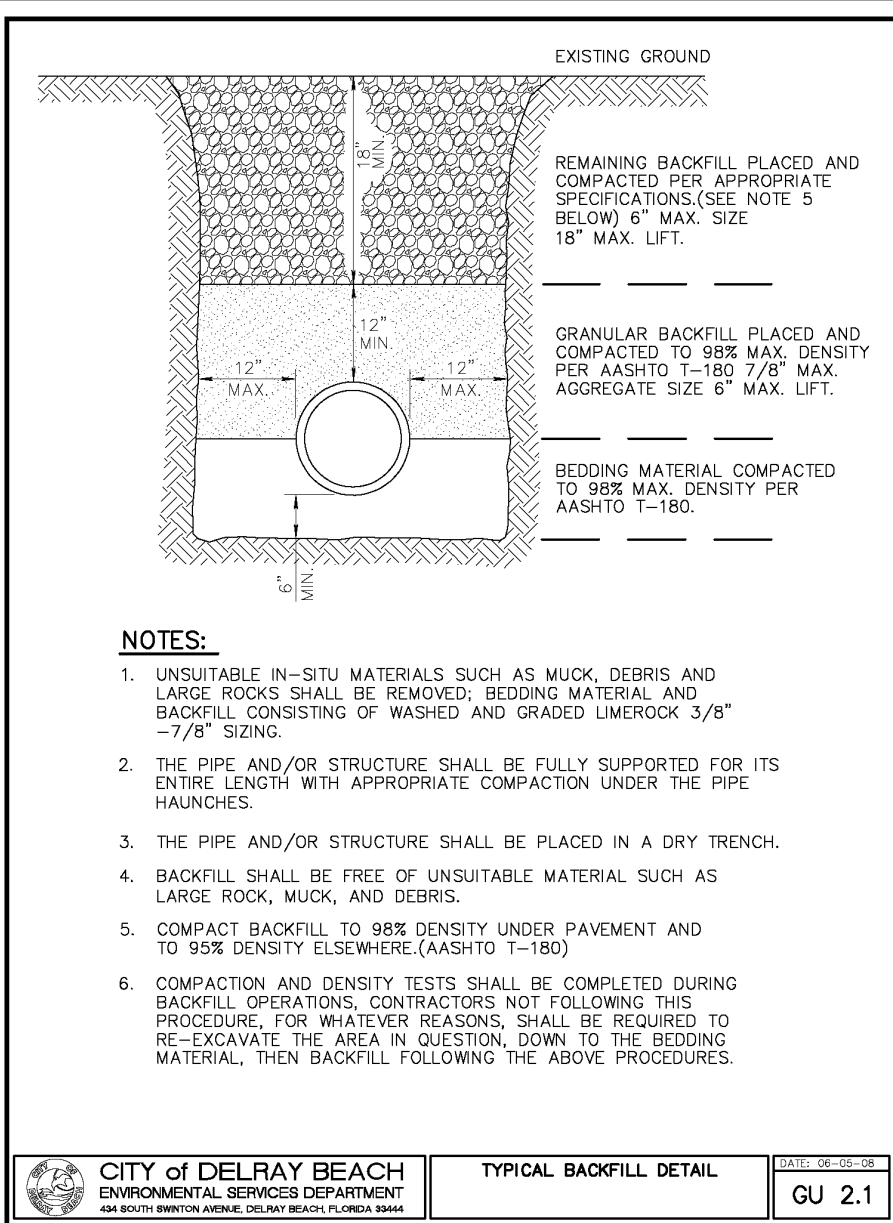
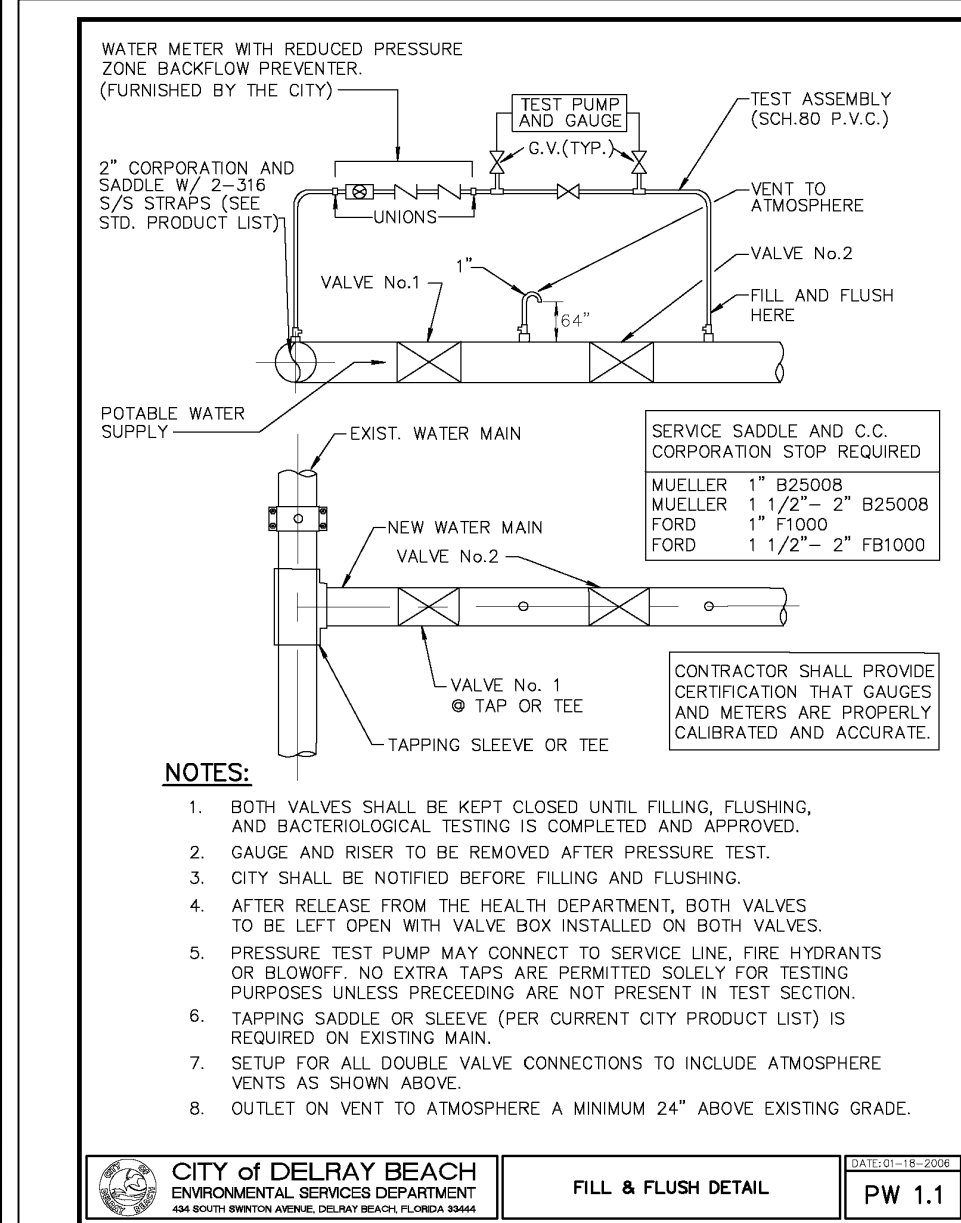
Thomas F. Lubanovic  
Professional Engineer No. 56659  
John A. Grant, Jr., Inc.  
3333 N. Federal Hwy., Ste. 3  
Boca Raton, FL 33431  
Certificate of Authorization No. LB 50











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**1-800-432-4770**  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
UTILITIES NOTIFICATION CENTER

NO.	REVISION	BY	DATE
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**WATER AND SEWER DETAILS**

**TOWNHOMES AT 214 NE 4TH STREET DELRAY BEACH, FL 33444**

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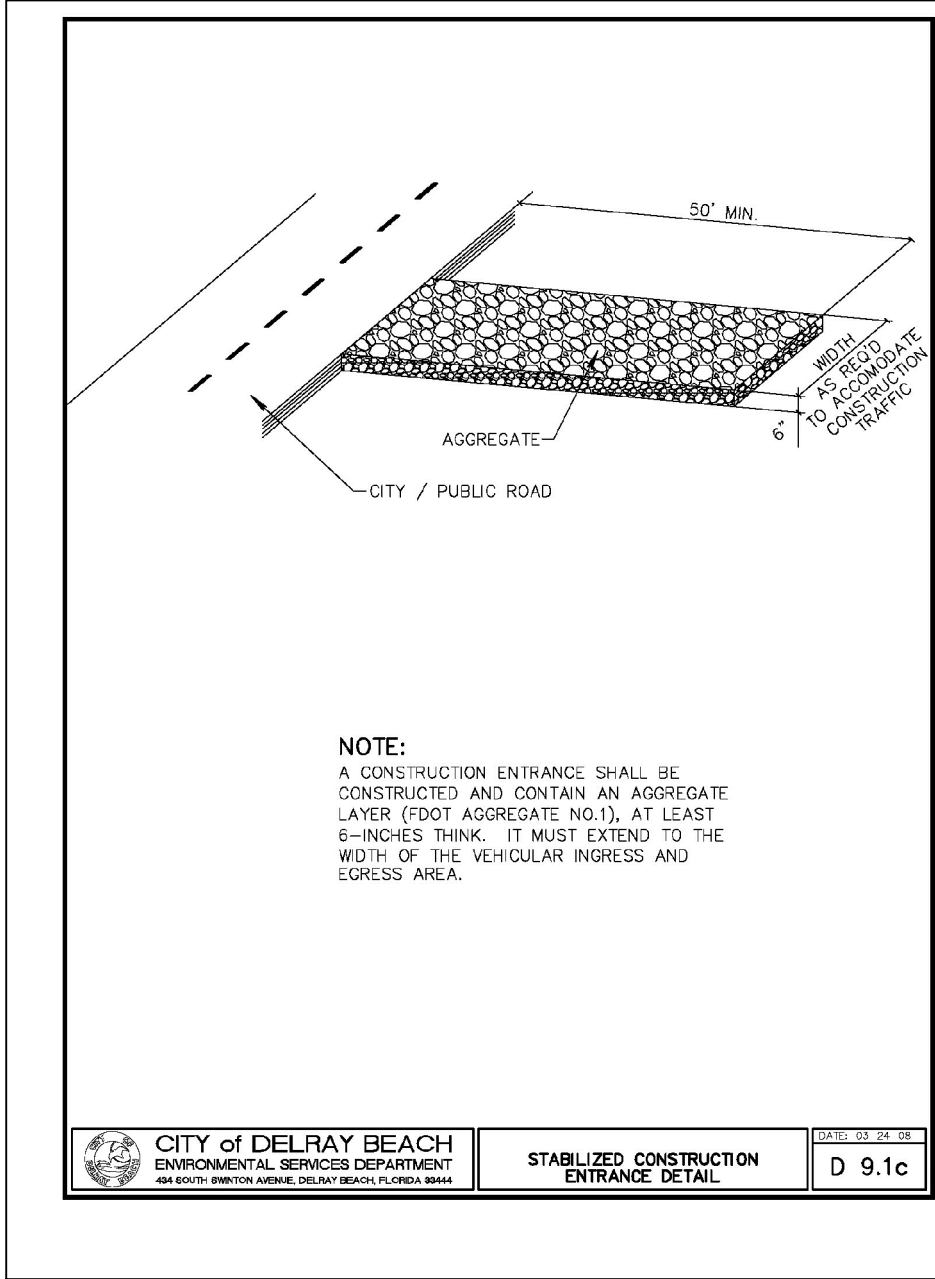
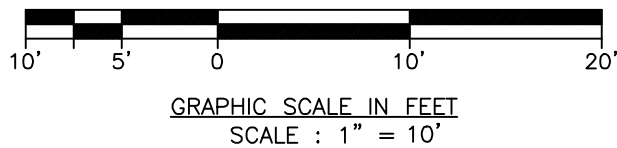
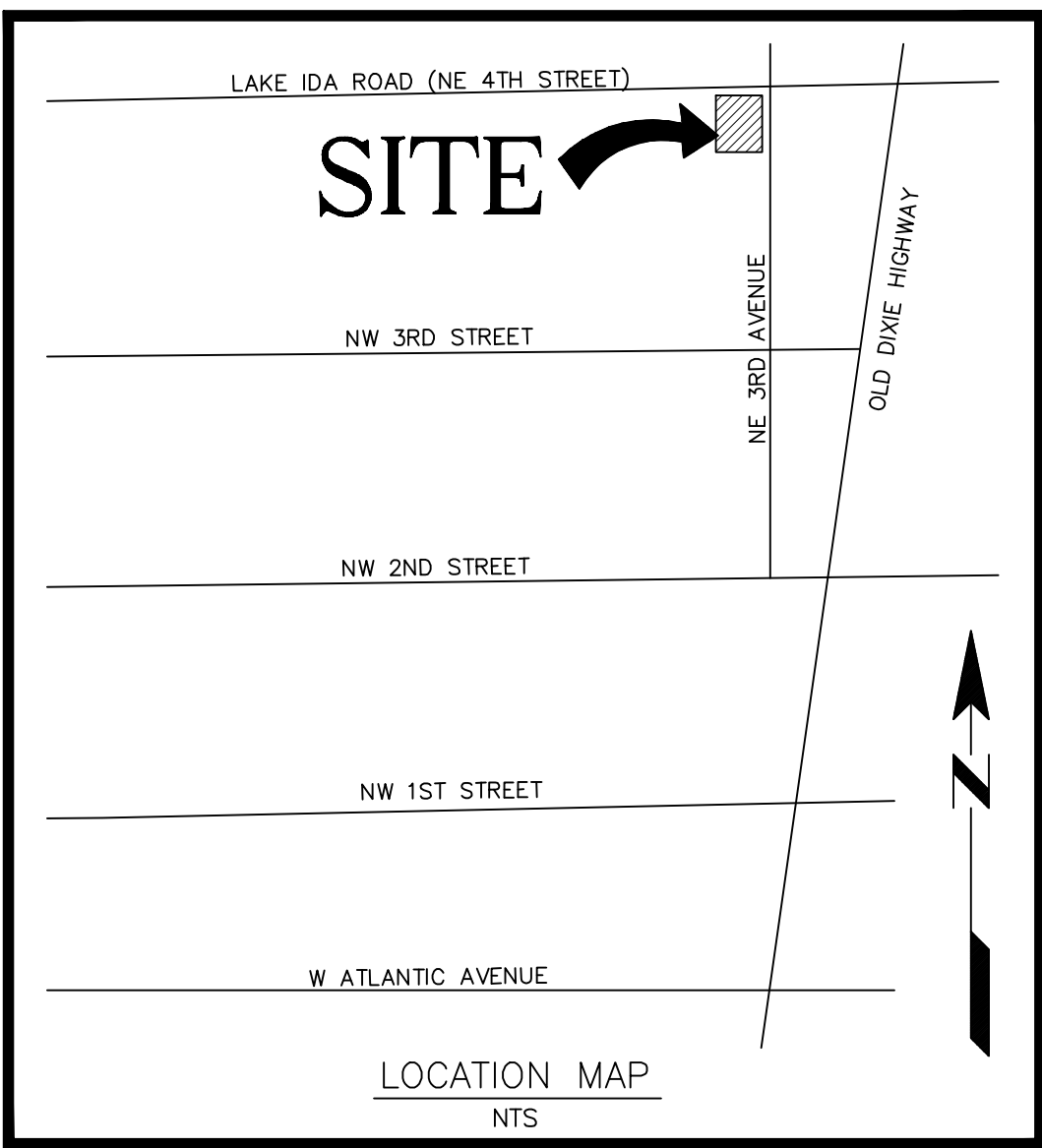
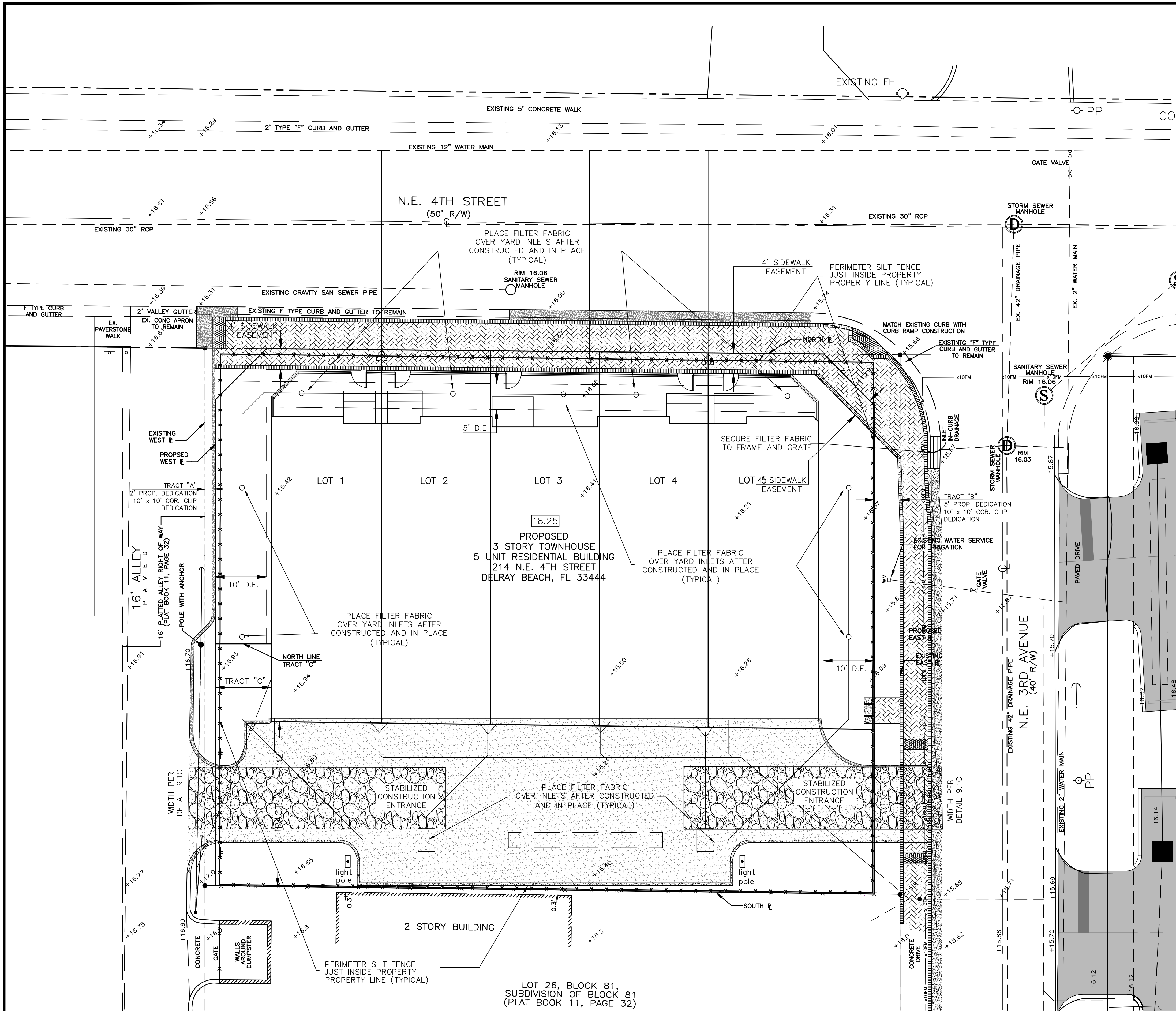
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JOB NO. JG-100-9738 SHEET C4 OF 9

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- GENERAL NOTES:
- CONTRACTOR TO CONTACT SUNSHINE STATE ONE CALL (811) FOR UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - REFER TO SHEET C3 FOR CROSS SECTIONS & DETAILS.
  - ELEVATIONS SHOWN HEREON ARE BASED ON VERTICAL DATUM N.A.V.D. 1988.
  - HOUSE FLOOR ELEVATIONS SHOWN HEREON DENOTE FINISHED SURFACE ELEVATIONS.
  - GARAGE ELEVATIONS SHOWN HEREON DENOTE FINISHED SURFACE ELEVATIONS INSIDE THE GARAGE.
  - THE WATER METER SIZE IS DETERMINED BY THE CITY OF DELRAY BEACH UTILITY DEPARTMENT. SEE SHEET C4, DETAIL PW 9.1a FOR TYPICAL SERVICE CONNECTION.
  - INLET FILTERS SHALL BE INSTALLED ATOP NEWLY INSTALLED YARD DRAINS AS REQUIRED PER DETAIL D 8.1 SHOWN ON SHEET C2. SILT FENCING TO BE INSTALLED AROUND LOT BOUNDARY AS REQUIRED PER DETAILS D 9.1a & D 9.1b SHOWN ON SHEET C4.
  - CONSTRUCT CONCRETE SIDEWALK PER DETAIL RT 5.1 ON SHEET C4.
- STORMWATER POLLUTION PREVENTION PLAN NOTES:
- CONTRACTOR TO SECURE FILTER FABRIC TO EXISTING INLETS AND TO PROPOSED INLETS (YARD DRAINS) ONCE INSTALLED PER DETAIL D 8.1 SHOWN ON SHEET C2.
  - CONTRACTOR TO ADJUST THE SILT FENCE AS REASONABLY NECESSARY TO ACCESS THE SUBJECT PROPERTY.
  - CONTRACTOR TO PLACE STABILIZED CONSTRUCTION ENTRANCE PER DETAILS D9.1c & D 10.1 ON SHEET C4.
- EROSION CONTROL NOTES:
- PROPOSED PAVING IMPROVEMENTS ARE SHOWN ABOVE. REFER TO SHEET 5 FOR SITE DEMOLITION PLAN.
  - CONTRACTOR TO REMOVE EXISTING LANDSCAPING VEGETATION (TREES, SHRUBS & GRASS) AS NEEDED TO CONSTRUCT PAVING MODIFICATIONS SHOWN. REFER TO LANDSCAPE PLANS FOR LANDSCAPING INFORMATION.
  - ALL EXISTING UNDERGROUND UTILITIES TO BE LEFT UNDISTURBED EXCEPT AS NOTED.
  - PERIMETER SILT FENCE SHOWN ABOVE IS ATOP THE PROPERTY LINE. SILT FENCE LOCATIONS MAY CHANGE BASED UPON CONSTRUCTION PHASING AND MAINTENANCE OF TRAFFIC BUT SHALL ALWAYS BE INSTALLED ALONG ALL LIMITS OF ACTIVE CONSTRUCTION AREAS PRIOR TO BEGINNING THE CONSTRUCTION ACTIVITIES.

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3	REV	PROP. LINE & BLDG AT N.E. COR.	AE	2/15/19
2	REVISED	TRACT "C"	AE	NOV 18
1	REVISED	AS PER TAC COMMENTS	AE	SEP 18
NO.	REVISION		BY	DATE

## STORMWATER EROSION CONTROL NOTES & DETAILS

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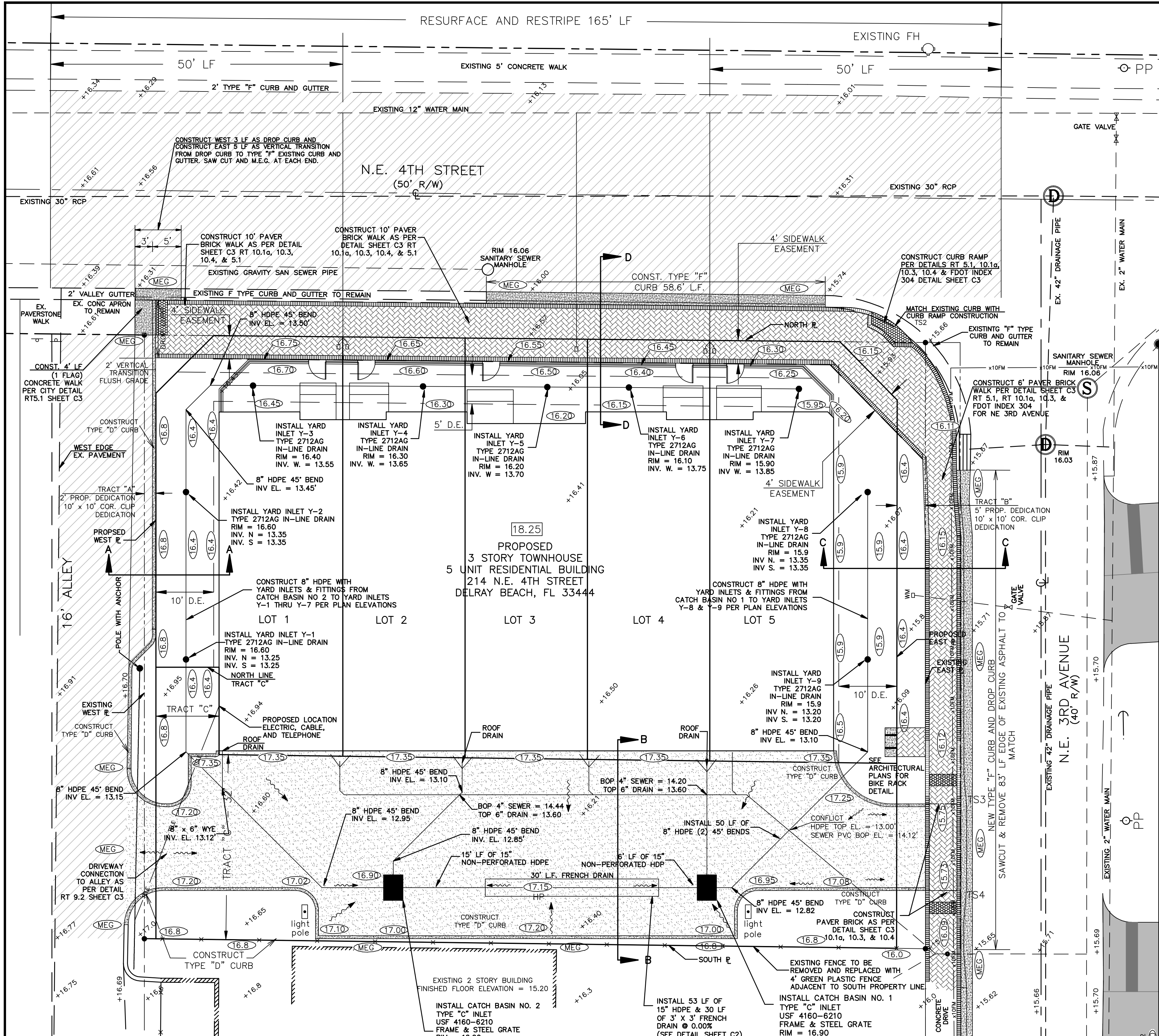
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








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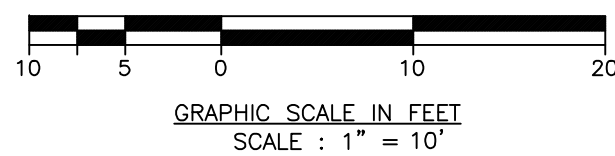
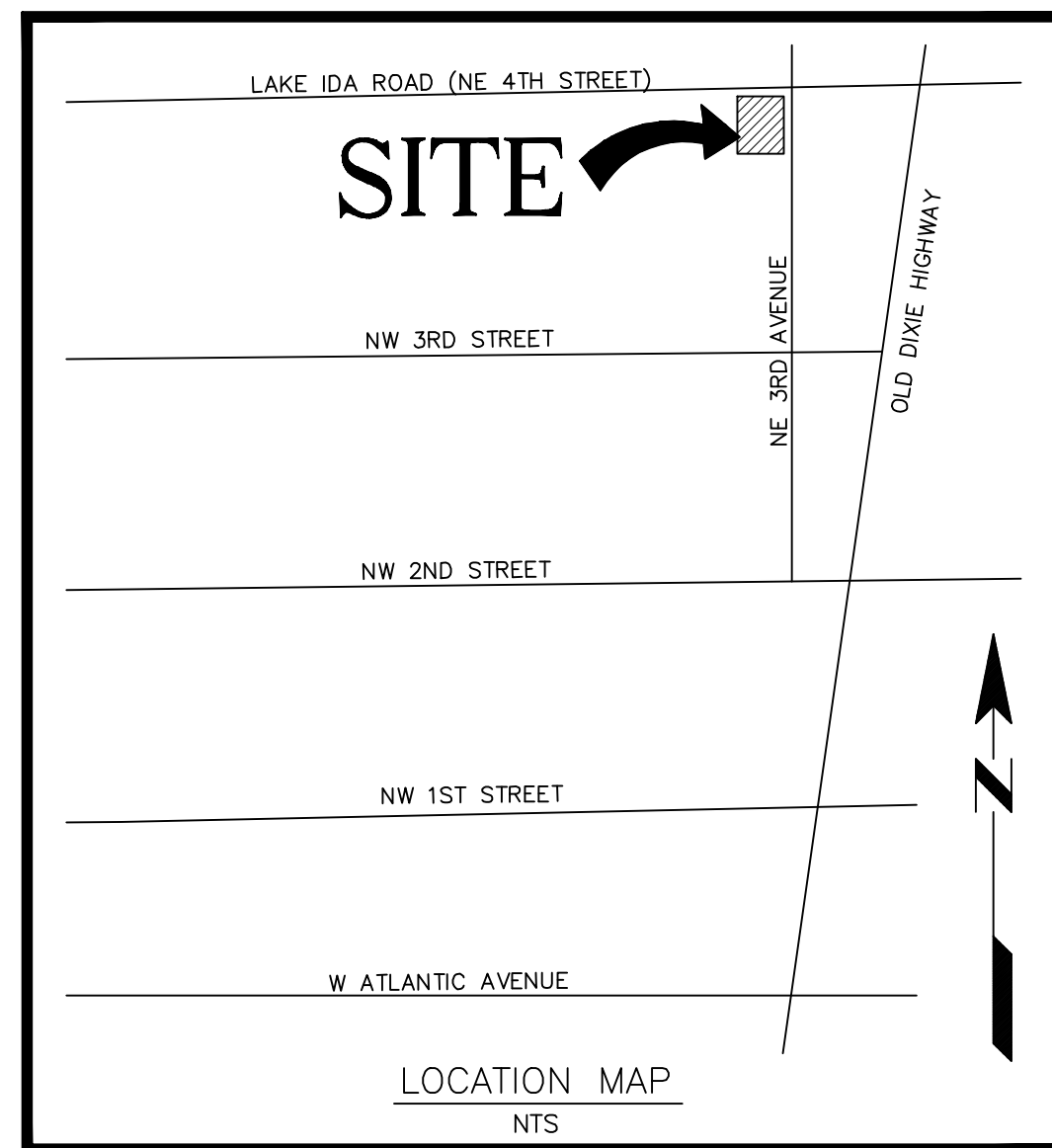
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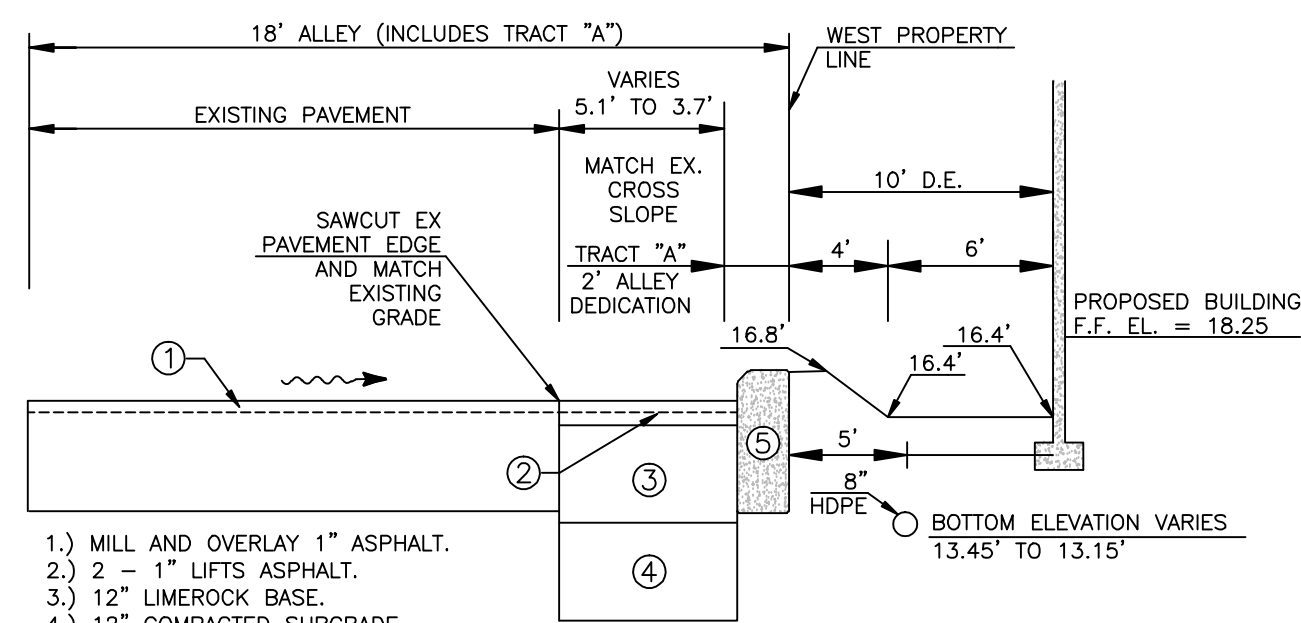
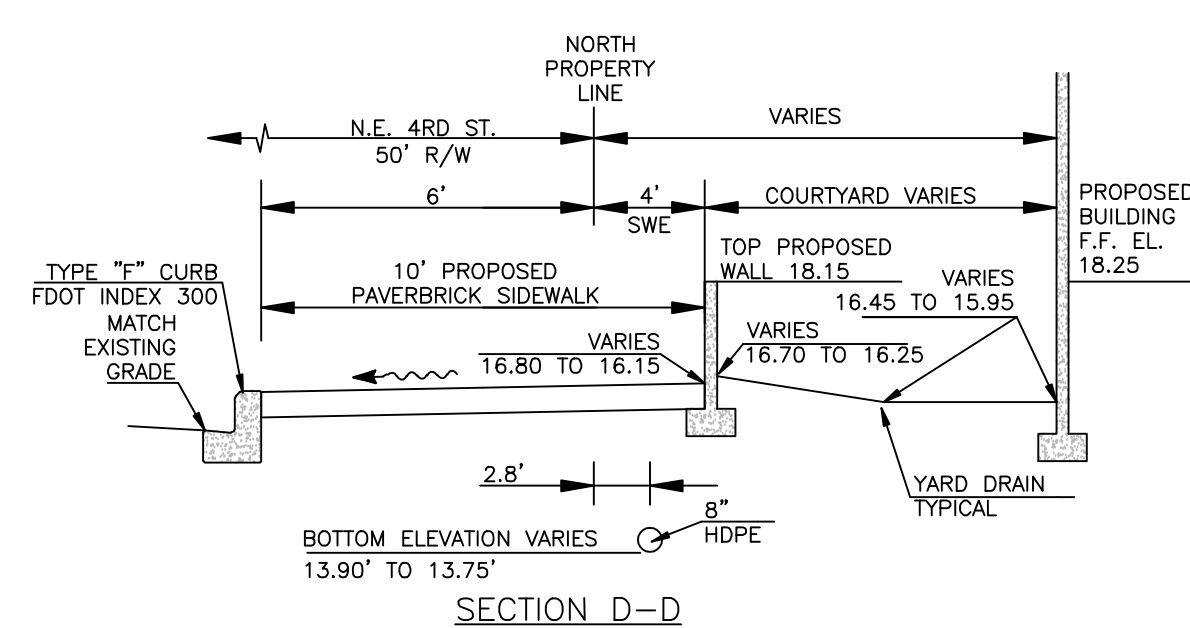


- LEGEND:**
- |   |   |
|---|---|
|  | PROPOSED GRADE  |
| +14.59  | EXISTING ELEVATION  |
|  | DRAINAGE SHEET FLOW DIRECTION ARROW   |
|  | DENOTES NEW ASPHALT PAVING  |
|  | DENOTES PROPOSED PAVER BRICK  |
|  | DENOTES NEW CONCRETE  |
|  | DENOTES MILL, OVERLAY AND RESTRIPIING NE 4TH ST & ALLEY PER PAVING SPECIFICATION ON SHEET C3 & SECTION "A-A" FOR ALLEY. |
| LF  | LINEAR FEET   |
| HP  | HIGH POINT  |
| EXIST   | EXISTING  |
| TOW   | TOP OF WALK<br>PROPOSED FINISHED FLOOR ELEVATION  |
|  | RADIUS  |
| R   | TYPICAL   |
| TYP   | MATCH EXISTING GRADE  |
|  | SANITARY CLEAN OUT  |
| C.O.  | MINIMUM   |
| MIN.  | DUCTILE IRON PIPE   |
| DPZ   | REDUCED PRESSURE ZONE BACKFLOW PREVENTOR  |
| RPZ   | TACTILE SURFACE LOCATION & NUMBER   |
| TS#   | CURB RAMP LOCATION  |
| CR  | DUCTILE IRON PIP  |
| DIP   | CENTER LINE   |
|  | SANITARY SEWER SERVICE  |
| SS  | WATER SERVICE   |
| WS  | DRAINAGE EASEMENT   |
| DE  | SIDEWALK EASEMENT   |
| SWE   |   |

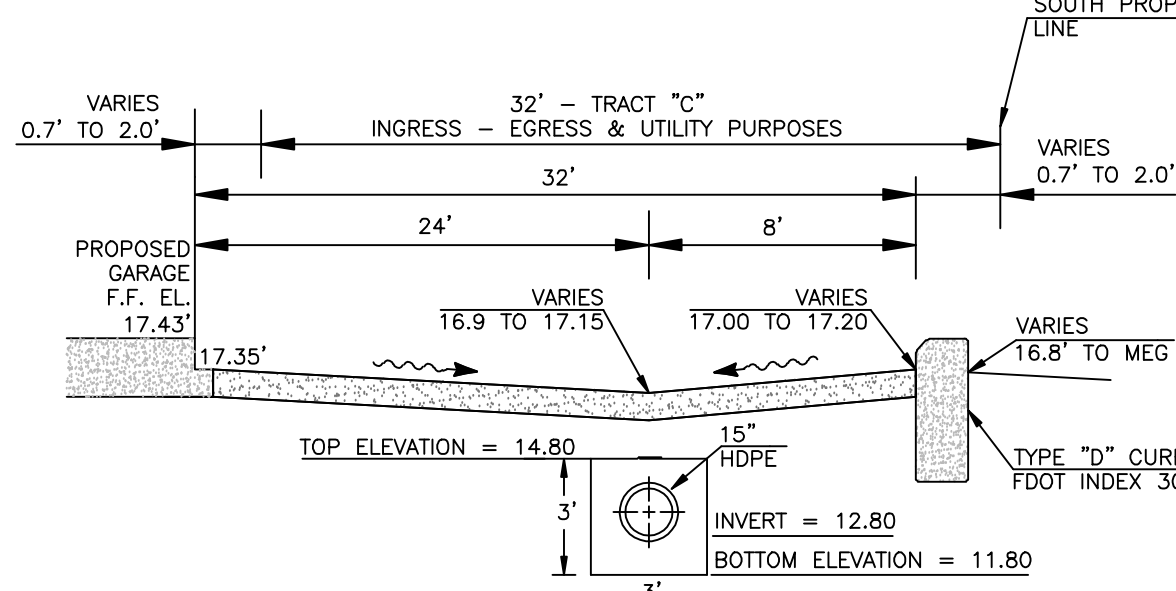


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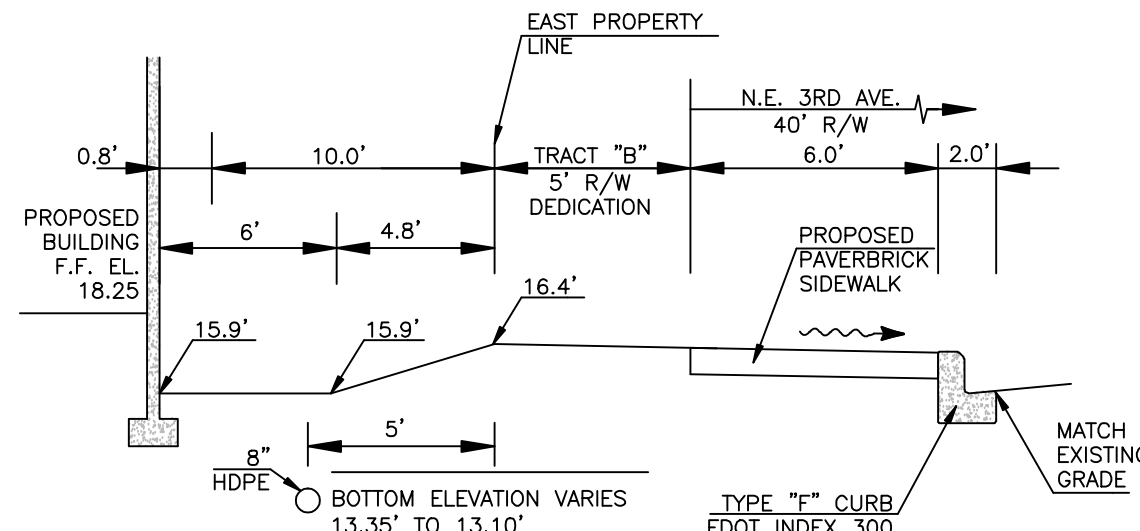
1. CONTRACTOR TO CONTACT SUNSHINE STATE ONE CALL (811) FOR UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONSTRUCT CONCRETE SIDEWALK & CURB RAMPS PER FDOT INDEX 304 AND 310.
3. CONTRACTOR TO REMOVE EXISTING LANDSCAPING VEGETATION (TREES, SHRUBS & GRASS) AS NEEDED TO CONSTRUCT PAVING MODIFICATIONS SHOWN.
4. ALL EXISTING UNDERGROUND UTILITIES TO BE LEFT UNDISTURBED EXCEPT AS NOTED.
5. ALL TYPE "D" CURB TO BE CONSTRUCTED PER FDOT INDEX NO. 300. ANY VALLEY GUTTER DAMAGED DURING CONSTRUCTION TO BE REPLACED PER FDOT INDEX 300; MATCH EXISTING VALLEY GUTTER TO PROVIDE A MINIMUM OF 4 LF OF REPLACEMENT.
6. REFER TO SHEET 2 AND 3 FOR STORMWATER EROSION CONTROL DETAILS, GENERAL NOTES, DRAINAGE DETAILS, PAVING DETAILS AND PAVING SPECIFICATIONS, AND CROSS SECTIONS.
7. REFER TO SHEET 4 FOR APPLICABLE WATER AND SEWER DETAILS.
8. REFER TO SHEET 5 FOR SITE DEMOLITION PLAN.
9. REFER TO SHEET 7 FOR PROPOSED STRIPING AND SIGNAGE.
10. REFER TO SHEET 7 FOR STRIPING AND SIGNAGE INFORMATION. THE PARKING LAYOUT AND STRIPING NEEDED TO FOLLOW CITY OF DELRAY BEACH CURRENT STANDARDS. REFER TO DETAIL RT 4.1 ON SHEET 7 FOR DETAIL PARKING LOT STRIPING INFORMATION.
11. ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.). SUBTRACT 1.55' FROM ELEVATIONS SHOWN TO CONVERT TO NORTH AMERICAN VERTICAL DATUM 1985 (N.A.V.D.).
12. ANY TREES OF SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL COMPLY WITH DELRAY BEACH STANDARD DETAILS LD 1.1 AND LD 1.2. PLEASE REFER TO THE LANDSCAPE PLANS FOR THE MENTIONED DETAILS.
13. NO PROPOSED STRUCTURES SHALL BE INSTALLED WITHIN A HORIZONTAL DISTANCE OF 10-FEET FROM ANY EXISTING OR PROPOSED WATER, SEWER OR DRAINAGE FACILITIES, UNLESS APPROVED BY THE CITY OF DELRAY BEACH CITY ENGINEER.
14. EXISTING ELEVATIONS SHOWN HEREON ARE BASED ON SURVEY BY O'BRIEN, SUTER & O'BRIEN.
15. REFER TO PLUMBING PLANS FOR CONTINUATION OF POTABLE WATER AND SANITARY SEWER SERVICES SERVING BUILDING.
16. THE WATER METER SIZE IS DETERMINED BY THE CITY OF DELRAY BEACH UTILITY DEPARTMENT.
17. ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER, OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS; LD 1.1 & LD 1.2.
18. SEE RECORD PLAN FOR DIMENSIONS OF LOT LINES, EASEMENTS AND TRACTS.
19. SEE SHEET C-8 FOR SIGHT TRIANGLES.



SECTION A-A



SECTION B-B



SECTION C-C

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
UTILITIES NOTIFICATION CENTER

3	REV PLAN & SEC. "A-A" - ALLEY WIDENING N.E. CORNER WALK AND BUILDING	AE	2/15/19
2	REVISED TRACT "C"	AE	NOV 18
1	REVISED AS PER TAC COMMENTS	AE	SEP 18
NO.	REVISION	BY	DATE

## PAVING, GRADING & DRAINAGE MODIFICATION PLAN

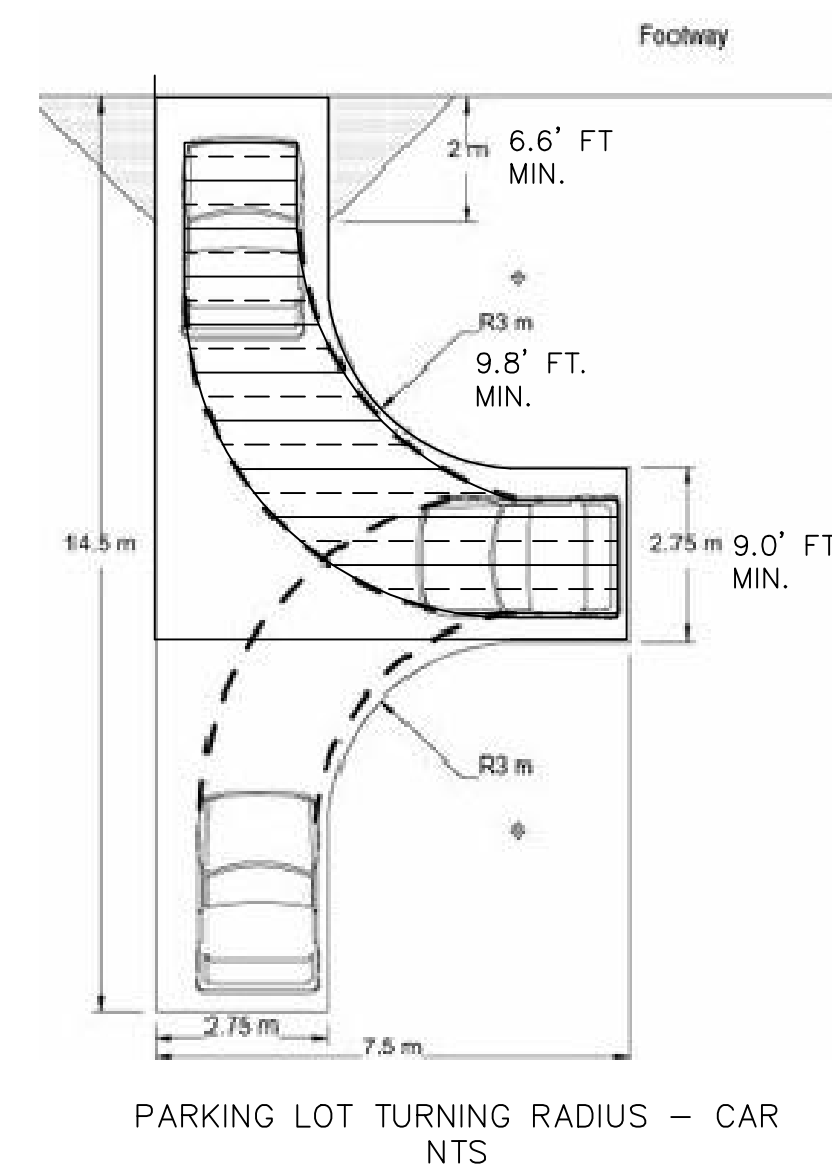
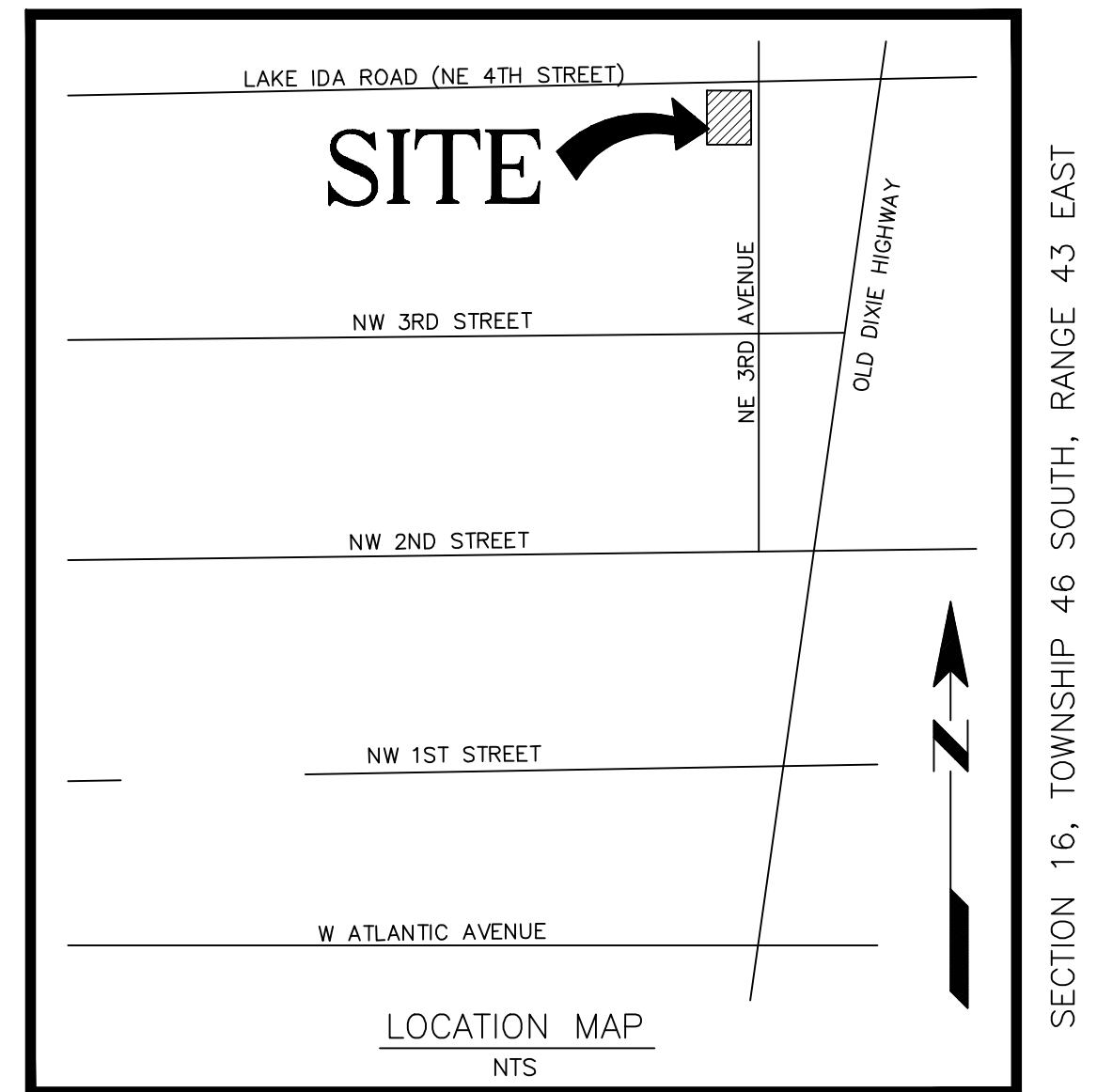
214 NE 4TH STREET  
DELRAY BEACH, FL 33444

**JOHN A. GRANT, JR., INC.**

CONSULTING ENGINEERS  
NORTH FEDERAL HIGHWAY  
A RATON, FLORIDA 33431  
95-3333 FAX NO. 561-395-3315  
USED BUSINESS NO. LB 50

Thomas F. Lubanovic  
Professional Engineer No. 56659  
John A. Grant, Jr., Inc.  
3333 N. Federal Hwy., Ste. 3  
Boca Raton, FL 33431  
Certificate of Authorization No. LB 50

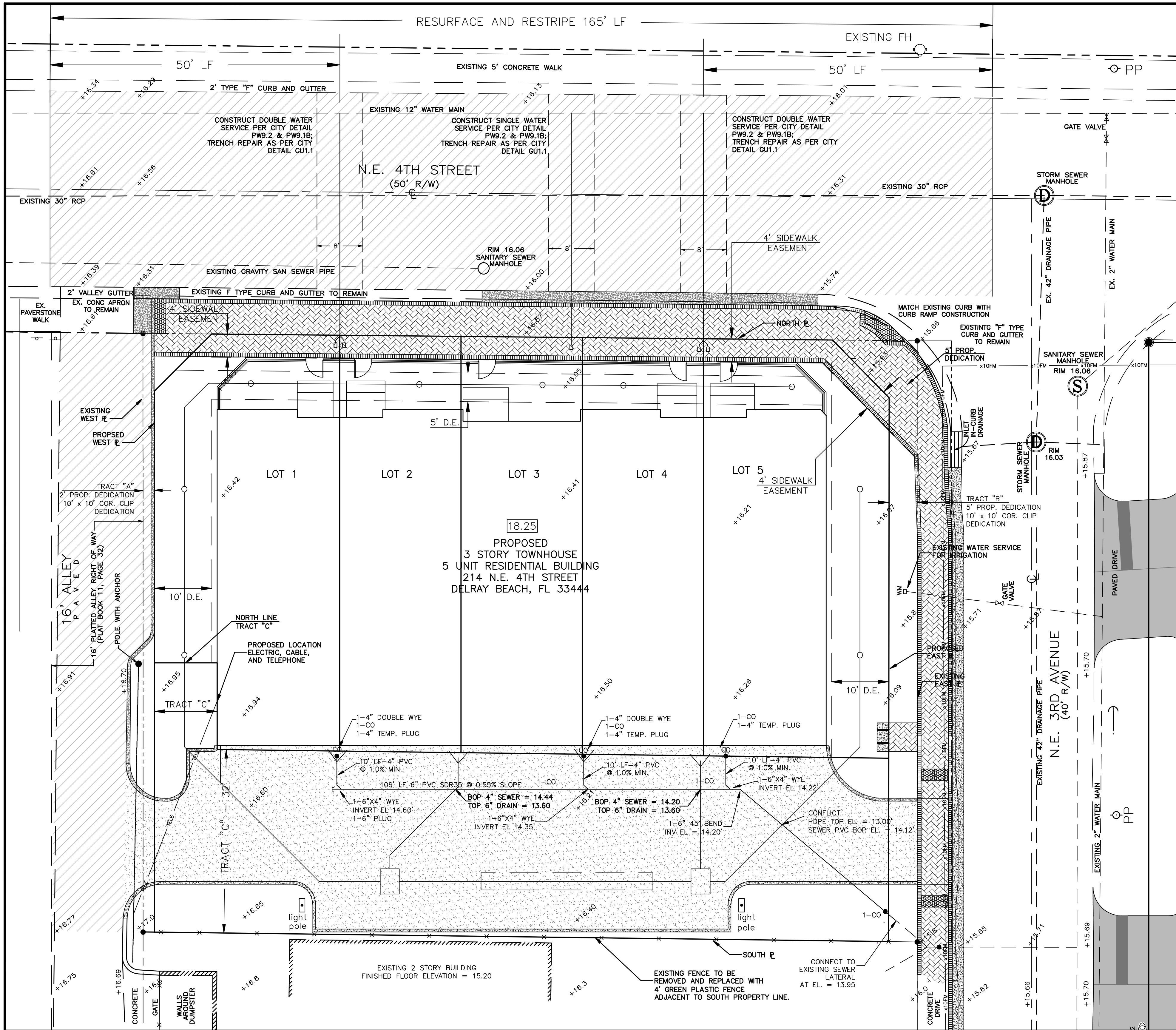




MADE	TFL	DATE	DEC 2017	F.B.	N/A	PG	
CHECKED		DATE		SCALE	1" = 10'		
JOB NO.	JG-100-9738			SHEET	C8	OF	9

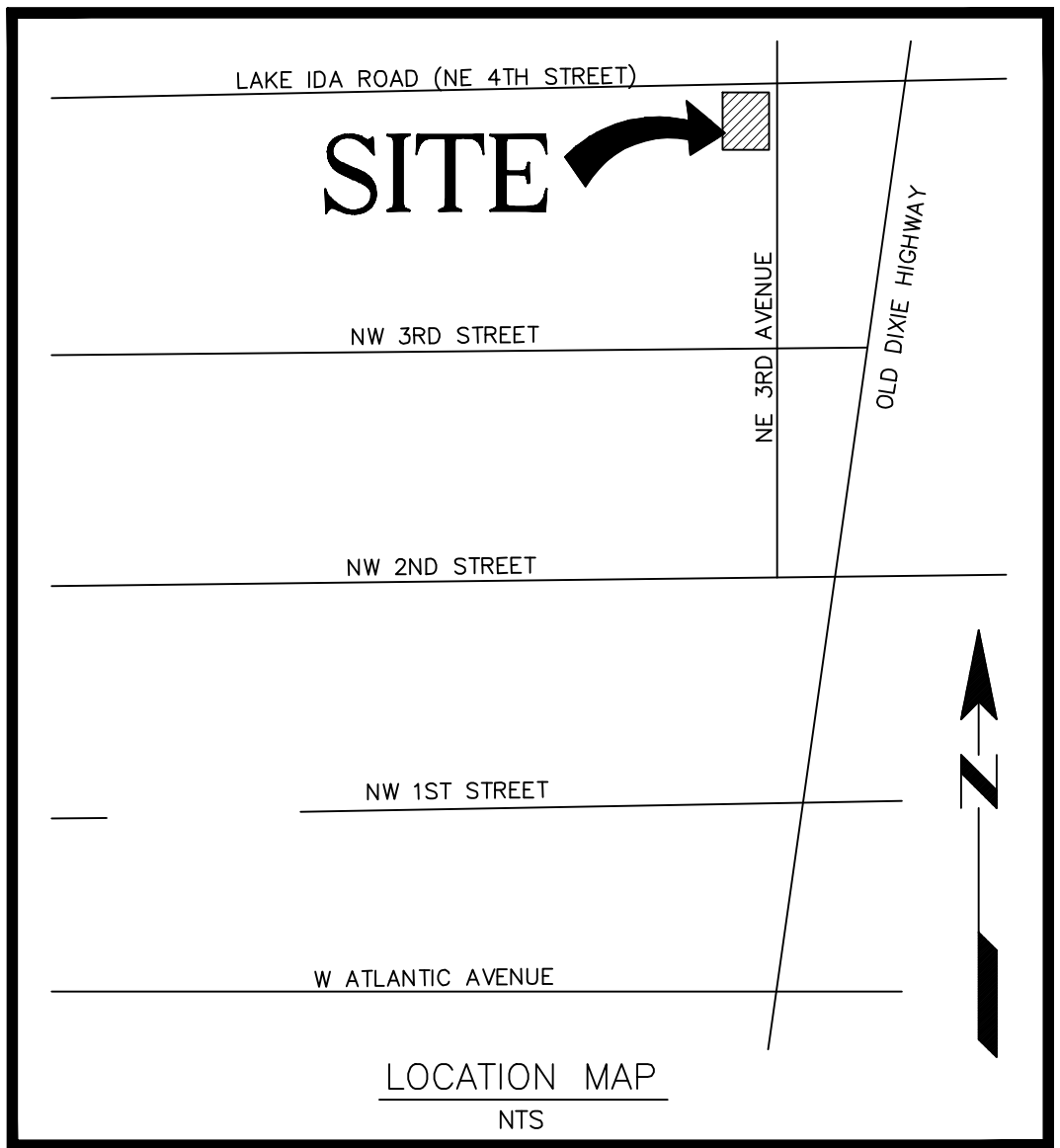
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Sewer			
Use	Units or Square Feet	Est. Demand / Unit (GPD)	GPD
Proposed Use: Townhomes, Residential			
Residential	5	120 GPD x 2.3	1,380 GPD
TOTAL PROPOSED SEWER DEMAND		1,380 GPD	
Existing Use: Commercial, Light			
Commercial	1,790 s.f.	0.10 GPD x S.F.	179 GPD
EXISTING SEWER DEMAND		179 GPD	
PROPOSED SEWER DEMAND		1,380 GPD	
PROPOSED SANITARY SEWER DEMAND CHANGE		1,201 GPD Increase	

Water			
Use	Units or Square Feet	Estimated Demand / Unit	Total Est. Demand (MGD)
Proposed Use: Townhomes, Residential			
Residential	5	382.03 GPD x 2.3	4,393.3
PROPOSED POTABLE WATER DEMAND		4,393.3	
Existing Type Existing Use: Commercial, Light			
Commercial	1,790 s.f.	0.355 GPD x S.F.	635.5 GPD
EXISTING POTABLE WATER DEMAND		635.5 GPD	
PROPOSED POTABLE WATER DEMAND		4,393.3 GPD	
PROPOSED POTABLE WATER DEMAND CHANGE		3,757.8 GPD	



- LEGEND:
- PROPOSED GRADE
  - EXISTING ELEVATION
  - DRAINAGE SHEET FLOW DIRECTION ARROW
  - DENOTES NEW ASPHALT PAVING
  - DENOTES PROPOSED PAVER BRICK
  - DENOTES NEW CONCRETE
  - DENOTES MILL, OVERLAY AND RESTRIPE NE 4TH ST. PER PAVEMENT SPECIFICATION ON SHEET C3
  - LINEAR FEET
  - HIGH POINT
  - EXISTING
  - TOP OF WALK
  - PROPOSED FINISHED FLOOR ELEVATION
  - RADIUS
  - TYPICAL
  - MATCH EXISTING GRADE
  - SANITARY CLEAN OUT
  - MINIMUM
  - DUCTILE IRON PIPE
  - REDUCED PRESSURE ZONE BACKFLOW PREVENTOR
  - TACTILE SURFACE LOCATION & NUMBER
  - CURB RAMP LOCATION
  - DUCTILE IRON PIP
  - CENTER LINE
  - SANITARY SEWER SERVICE
  - WATER SERVICE

- NOTES:
- CONTRACTOR TO CONTACT SUNSHINE STATE ONE CALL (811) FOR UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - CONSTRUCT CONCRETE SIDEWALK & CURB RAMPS PER FDOT INDEX 304 AND 310.
  - CONTRACTOR TO REMOVE EXISTING LANDSCAPING VEGETATION (TREES, SHRUBS & GRASS) AS NEEDED TO CONSTRUCT PAVING MODIFICATIONS SHOWN.
  - ALL EXISTING UNDERGROUND UTILITIES TO BE LEFT UNDISTURBED EXCEPT AS NOTED.
  - ALL TYPE "D" CURB TO BE CONSTRUCTED PER FDOT INDEX NO. 300. ANY VALLEY GUTTER DAMAGED DURING CONSTRUCTION TO BE REPLACED PER FDOT INDEX 300; MATCH EXISTING VALLEY GUTTER PROFILE FOR A MINIMUM OF 4 LF OF REPLACEMENT.
  - REFER TO SHEET 2 AND 3 FOR STORMWATER EROSION CONTROL DETAILS, GENERAL NOTES, DRAINAGE DETAILS, PAVING DETAILS AND PAVING SPECIFICATIONS.
  - REFER TO SHEET 4 FOR APPLICABLE WATER AND SEWER DETAILS.
  - REFER TO SHEET 5 FOR SITE DEMOLITION PLAN.
  - REFER TO SHEET 7 FOR PROPOSED STRIPING AND SIGNAGE.
  - REFER TO SHEET 7 FOR STRIPING AND SIGNAGE INFORMATION. THE PARKING LAYOUT AND STRIPING NEED TO FOLLOW CITY OF DELRAY BEACH CURRENT STANDARDS. REFER TO DETAIL RT 4.1 ON SHEET 7 FOR DETAIL PARKING LOT STRIPING INFORMATION.
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  - EXISTING ELEVATIONS SHOWN HEREON ARE BASED ON SURVEY BY O'BRIEN, SUITER & O'BRIEN, INC.
  - REFER TO PLUMBING PLANS FOR CONTINUATION OF POTABLE WATER AND SANITARY SEWER SERVICES SERVICING BUILDING.
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## WATER AND SEWER PLAN

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