



PRODUCT SPECIFICATION				
CONCRETE		=	4000 PSI AT 28 DAYS	
TOP SURFACE FINISH		=	TYPE 1 CEMENT	
WALL REINFORCING		=	#4 AT 12" C.C.W.E.	
BOTTOM SLAB REINFORCING		=	#4 AT 12" C.C.W.E.	
*GRADE 40, OR FOR EQUIVALENT STEEL DESIGNS, SEE PAGES 8, 9, 7 AND 8-6.				
HOLDING CAPACITY	STRUCTURE WEIGHT	MAXIMUM PIPE SIZES		
6.16 CU. FT./V.F.T. 48.06 GAL./V.F.T.	BOT. SLAB = 1439 LBS. WALL = 1289 LBS./V.F.T.	SHORT SIDE 16" DIA. CWP LONG SIDE 24" CWP, 30" CWP FOR DIMENSION PIPES SEE PAGE 8-6.		
U.S. FOUNDRY FRAME AND GRADE 40 STEEL				
U.S.F. NO.	GRADE TYPE	TRAFFIC RATING	FLOW AREA (SQ. IN.)	
6510	CAST ROLL	LIGHT TRAFFIC	450	
6511	CORR ROLL	HEAVY TRAFFIC	450	
6512	STEEL	NON-TRAFFIC	785	
6513	STEEL	HEAVY TRAFFIC	785	
*THIS GRADE IS TRAFFIC RATED WHEN USED WITH A 4-SIDED SEAT. SEE PAGE 8.				
SEE U.S. FOUNDRY CATALOG FOR OPTIONAL GRADES AND SPECIFICATIONS.				

**Proposed Control Structure**  
2'x3' Riser weir, FDOT Type "C" catch basin

**LEGEND:**  
+ 8.80' - Existing grade  
x 9.00' - Proposed grade

GENERAL:

1. ALL CONSTRUCTION, MATERIAL, INSTALLATION, AND TESTING SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TOGETHER WITH THE COUNTY'S MINIMUM DESIGN STANDARDS AND SPECIFICATIONS AS APPLICABLE, IF F.D.O.T. MATERIAL IS SPECIFIED. IT SHALL IMPLY THAT THEIR CONSTRUCTION PROCEDURES SHALL BE FOLLOWED.
2. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER PROPERTY AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING CONSTRUCTION AND SHALL REPAIR SAID DAMAGES AT HIS EXPENSE.
3. THE ENGINEER WILL HOLD A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF ANY CONSTRUCTION AND INCLUDE A REPRESENTATIVE FROM THE RESPECTIVE ENGINEERING AND UTILITY COMPANIES. THE CONTRACTOR, OWNER, AND OTHER APPLICABLE AGENCIES SHALL BE INVITED.
4. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY; THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN ON THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE "OTHER" UTILITIES, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITY OWNERS TO RESOLVE ANY CONFLICTS AND UTILITY LOCATIONS MUST BE CORRECTED.
5. ALL DEVIATIONS FROM PLANS ARE TO BE APPROVED BY ENGINEER IN WRITING PRIOR TO CONSTRUCTION AND FOR ALL INSPECTIONS AND TESTING.
6. THE ENGINEER MUST BE GIVEN A MINIMUM 48 HOURS NOTICE PRIOR TO START OF CONSTRUCTION AND FOR ALL INSPECTIONS AND TESTING.
7. CONTRACTOR IS RESPONSIBLE TO PREPARE COMPLETE AS-BUILT PLANS WITH INFORMATION RELATIVE TO LOCATIONS AND ELEVATIONS OF VALVES, SERVICES, FITTINGS, LENGTHS OF PIPE, AND MANHOLES, AND THE LIKE SHALL BE ACCURATELY RECORDED AND SUBMITTED TO THE DESIGN ENGINEERING FIRM PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL INFORMATION SHALL BE TAKEN BY A REGISTERED LAND SURVEYOR AND SHOWN ON A SEALED AS-BUILT PLAN ALONG WITH AN AUTOCADD DISK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES DURING THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGES, DISRUPTION OF SERVICE, OR DESTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
9. WALL, REINFORCEMENT AND THICKNESS FOR PRECAST STRUCTURES SHALL BE IN ACCORDANCE WITH ASTM C478. MINIMUM WALL THICKNESS SHALL BE 8" AND MIN 6" BASE EXTENSION OUTSIDE OF WALL.
10. MORTAR USED TO SEAL THE PIPE INTO THE WALLS OF THE PRECAST STRUCTURES WILL BE NON-SHRINK GROUT AND WILL NOT CAUSE LEAKAGE IN OR OUT OF THE STRUCTURES. THE MAXIMUM OPENING THROUGH WALLS FOR PIPES SHALL BE THE MAXIMUM REQUIRED OUTSIDE DIAMETER PLUS 6".
11. ALL MANHOLES SHALL BE SET PIPES TO LINE AND GRADE AND SHALL REST ON A FIRM CAREFULLY GRADED SUBGRADE WHICH SHALL PROVIDE UNIFORM BEARING UNDER BASE.
12. ALL MANHOLES SHALL BE CONCRETE UNLESS OTHERWISE APPROVED. ALL MANHOLES SHALL BE INSULATED WITH INSULATION AND OTIE AND SHALL BE A MINIMUM OF 4' IN DIAMETER.
13. ALL PIPE SHALL BE LAID IN A DRY TRENCH; ALL MUCK OR OTHER UNSTABLE MATERIAL ENCOUNTERED IN TRENCH BOTTOM SHALL BE REMOVED AND BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 100% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99, METHOD "C".
14. SHOP DRAWINGS FOR ALL STRUCTURES AND MATERIALS TO BE USED ON THE PROJECT SHALL BE SUBMITTED TO THE DESIGN ENGINEER AND THE RESPECTIVE ENGINEER AND UTILITY DEPARTMENTS FOR APPROVAL PRIOR TO CONSTRUCTION OR INSTALLATION.
15. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
16. CONTRACTOR TO CONTACT SUNSHINE STATE ONE-CALL OFFICE (1-800-432-4747) AND ALL LOCAL UTILITY COMPANIES FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
17. ALL STRUCTURES AND MATERIALS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE MAINTAINED BY THE CONTRACTOR AND / OR REST AFTER CONSTRUCTION UNDER CERTIFICATION BY A REGISTERED SURVEYOR.
18. CONTRACTOR IS TO PREVENT INTRODUCTION OF DEBRIS OR DIRT INTO EXISTING STORM DRAIN AND / OR SANITARY SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES. ALL LINES AND STRUCTURES SHALL BE CLEANED PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
19. ALL LOCATIONS OF DRAIN AND SANITARY STRUCTURES GOVERN BY JUST PIPE LENGTHS AS REQUIRED.
20. THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE USED AS THE STANDARD FOR THE SIGNAGE AND PAVEMENT MARKING REQUIREMENTS OF THE PROJECT.
21. ALL UNDERGROUND UTILITY MAINS AND STRUCTURES FOR CONSTRUCTION, WATER, SEWER, GAS, IRRIGATION, DRAINAGE, TELEPHONE, POWER, CABLE TV, AND OTHERS MUST BE INSTALLED, INSPECTED, TESTED, AND APPROVED PRIOR TO ANY SUBGRADE COVER.
22. ALL PERMANENT GRAVE AREAS ARE TO BE REMOVED A "X" MARKED AND TO BE COVERED WITH TOPSOIL TREATMENT.
23. ALL CURB AND GUTTER SHALL HAVE A LIMEROCK FOUNDATION OR "PAD" OF AT LEAST FOUR INCHES (4") THICKNESS, COMPACTED TO 98% OF MAXIMUM DENSITY PER AASHTO (T-180).
24. A MINIMUM 10' SEPARATION BETWEEN ALL UTILITIES SHALL BE MAINTAINED.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING APPROPRIATE SAFETY PRECAUTIONS DURING EXCAVATION AND TRENCHING OPERATIONS AS REQUIRED BY THE "TRENCH SAFETY AND SHIELDING" PART OF THE O.S.H.A. "SAFETY AND HEALTH" MANUAL.
26. ALL INSTALLATIONS, MATERIALS, AND WORKMANSHIP IN THE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE PALM BEACH COUNTY "MINIMUM STANDARDS".

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD-VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO ORDERING STRUCTURES OR THE BEGINNING OF CONSTRUCTION.  
2. EXTREME CAUTION SHALL BE EXERCISED DURING DIGGING TO ENSURE SAFE OPERATION AND PROTECTION OF EXISTING INFRASTRUCTURE.  
3. ALL APPROPRIATE UTILITY OWNERS AND LOCAL AUTHORITIES SHALL BE NOTIFIED IN WRITING A MINIMUM OF 72 HOURS IN ADVANCE.  
4. STORM WATER POLLUTION PREVENTION PLAN IS PERFORMANCE BASED. IT MEANS, THAT IF THE CONTRACTOR PROPERLY INSTALLED ALL SWPPP DEVICES AND THEY FAILED TO FUNCTION FOR ANY REASON - OWNER WILL BEAR FULL RESPONSIBILITY TO NOTIFY FDPD AND REPLACE DEVICES WITH WORKING ALTERNATIVE AS SOON AS POSSIBLE.



REVISIONS:

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CLIENT:

**PROJECT:**

**8300 Congress, LLC.**

8300 Congress Avenue,

Boca Raton, FL 33487

**8300 Congress Avenue**

## Site improvements

# ENGINEERING PLAN

**GGB Engineering, Inc.**  
CIVIL & FORENSIC ENGINEERS, LAND PLANNERS,  
CONSTRUCTION MANAGERS

Stirling Road, Suite 201  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-6655

DATE: 03/09/15	SCALE: 1"=20'
DESIGNED BY: G.G.B.	DRAWN BY: B.B.
PROJECT NO. 14-0121	
SHEET 1	OF 2

GARY G. BLOOM, P.E.  
FLA LIC. No. 19832