



## GENERAL NOTES

### GRADING & DRAINAGE

- 1. CLEARING AND GRUBBING:**
18. WORK SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL BUILDINGS, TIMBER, BRUSH, STUMPS, ROOTS, RUBBISH, AND DEBRIS AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND AND THE SURFACE OF EXCAVATED AREAS, AND OF ALL OTHER STRUCTURES AND OBSTRUCTIONS NECESSARY TO BE REMOVED, INCLUDING SEPTIC TANKS, BUILDING FOUNDATIONS, AND OTHERS, AND:
19. ROOTS AND OTHER DEBRIS SHALL BE REMOVED TO A DEPTH OF AT LEAST ONE FOOT BELOW THE GROUND SURFACE. ALL STUMPS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY REMOVED AND THE HOLE FILL TO BE THE SAME OF BY THE METHOD OF:
20. EXISTING TREES TO REMAIN HERE TO SO DIRECTED BY THE ENGINEER, SHALL BE TRIMMED, PROTECTED AND LEFT STANDING.
21. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SENEARS, DRAINS, WATER OR GAS LINES, CONDUITS, POLES, WALLS, POSTS, ETC., ARE TO BE CAREFULLY PROTECTED FROM INJURY AND ARE NOT TO BE DISPLACED.
22. CLEARING AND GRUBBING MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR IN LOCATIONS AND BY METHODS APPROVED BY THE ENGINEER.
- SUBGRADE:**
23. UTILIZATION OF MATERIAL IN SUBGRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.
24. A PROCTOR TEST SHALL BE PERFORMED ON THE PROPOSED SUBGRADE MATERIAL TO DETERMINE THE OPTIMUM MOISTURE CONTENT AND THE MAXIMUM DENSITY OF THE MATERIAL. THE COMPACTION TEST OF THE FINISH SUBGRADE SHALL BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST FOR EVERY 7,000 SQ.FT. OF PORPOSED PAVEMENT AREA TO DETERMINE COMPLIANCE WITH THE DESIGN SPECIFICATIONS OF THE MAXIMUM DENSITY OF THE MATERIAL.
25. STABILIZED SUBGRADE SHALL HAVE A MINIMUM LIMEROCK BEARING RATIO (L) OF 40. THE COMPACTED SUBGRADE SHALL CONFORM TO THE LINES, GRADES AND CROSS-SECTIONS SHOWN ON THE PLANS. ALL ROOTS, STUMPS, OR OTHER OBSTRUCTIONS SHALL BE COMPLETELY REMOVED FROM THE SURFACE SHALL BE COMPLETELY REMOVED FROM THE SUBGRADE. THE FINISHED SURFACE OF THE SUBGRADE SHALL BE STRING-LINED PRIOR TO PLACEMENT OF ROCK BASE TO VERIFY THAT THE SUBGRADE HAS BEEN CONSTRUCTED TO THE PROPOSED LINES, CROSS-SECTIONS, AND ELEVATIONS WITHIN AN ALLOWABLE TOLERANCE OF 1/2" OF THE PROPOSED FINISH SUBGRADE ELEVATIONS.

**PBC ROAD AND BRIDGE STANDARD NOTES:**

1. IF DURING THE PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STRAIN DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY PB COUNTY ROAD DEPT. REQUIRES FULL RESTORATION OF SAME TO ORIGINAL STANDARDS.
2. IF ANY AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' EITHER SIDE (THROUGH/FARE) AND 25' MIN. RESTORATION (NON-THROUGH/FARE).
3. IF ANY ADDITIONAL LANE ARE AFFECTED FOR ANY REASON DURING CONSTRUCTION, PB COUNTY ROAD DEPT. WILL BE REQUIRED TO RESTORE TO LIKE OR BETTER THAN LIKE LANE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANE.
4. IF PB COUNTY SIDEWALK / PAVT / C&G / AND OR ADA FACILITIES ARE AFFECTED PB COUNTY ROAD DEPT. WILL BE REQUIRED TO RESTORE TO LIKE OR BETTER THAN LIKE CONDITION PER / FDOT / PB COUNTY STANDARDS.
5. SIDEWALKS WILL BE RESTORED BY REPLACING; TWO PLAYS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS, NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)

**PBC TRAFFIC STANDARD NOTES:**

1. CONTACT HAROLD REED AT 561 681-4326 BEFORE STARTING CONSTRUCTION PBC-TRAFFIC ITS WILL REMOVE FIBER OPTIC CABLES FROM UNDERGROUND AND OVERHEAD FACILITIES PRIOR CONSTRUCTION. PLEASE PROVIDE 2 WEEKS ADVANCE NOTICE TO REMOVE FIBER OPTIC CABLE.
2. CONTRACTOR SHALL CONTACT PALM BEACH COUNTY TRAFFIC OPERATIONS AT 561-233-3900 (DAYS-8:00AM-6:00PM) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY TRAFFIC SIGNAL.
3. DAMAGES TO LOOPS OR ANY SIGNAL EQUIPMENT CAUSED BY CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.
4. NO EXCAVATION AROUND PBC SIGNAL POLES WITHIN 6 FT. RADIUS FROM CENTER OF POLE. PLEASE SEE PBC SIGNAL TYPICAL PAGE 5-3 (SHEET B OF 23).

## SOLID CONCRETE INTERLOCKING PAVING STONE SPECIFICATIONS

1. DESCRIPTION:  
1.1. GENERAL:  
A. Scope Work:  
1. Furnish and place sand bedding course.  
2. Furnish and install concrete interlocking paving stones in the quality, shape, thickness and a color as specified.  
3. Furnish and install all accessory items as required by the contract.  
B. Related Work:  
1. Furnish and install subgrade per Table 100.6 of the Palm Beach County Land Development Design Standards Manual.  
2. Furnish and install base per Table 100.6 of the Palm Beach County Land Development Design Standards Manual.  
C. Product Handling:  
1. Paving stones shall be delivered and unloaded at jobsite in such a manner that no damage occurs during shipping, handling and storage.  
D. References:  
1. Solid concrete interlocking paving stones shall meet or exceed the requirements in ASTM C-936 Standard Specifications for Solid Concrete Interlocking Paving Units.

## II. MATERIALS:

## 2.1 SOLID CONCRETE INTERLOCKING PAVING STONES

- A. Thickness, Color and Pattern:
  1. Paving stone thickness shall be between 3-1/8" min - 4" max.
  2. All paving stones shall be colored through the full depth of paver and not just the surface.
  3. No multi-colored paving stone pattern shall be used.
- B. Cementitious Materials:
  1. Portland cements shall conform to ASTM C-150.
- C. Aggregates:
  1. Aggregates shall conform to ASTM C-33 for normal weight concrete except that grading requirements shall not necessarily apply.
- D. Other Materials:
  1. Coloring pigments, air entraining agents, integral water repellents, finely ground silica, etc., shall conform to ASTM standards where applicable or shall be previously established as suitable for use in concrete.
- E. Compressive Strength:
  1. At the time of delivery to the work site, the average compressive strength shall not be less than 8,000 psi with no individual unit strength less than 7,200 psi, with testing procedures in accordance with ASTM C-140.
- F. Absorption:
  1. The average absorption shall not be greater than 5% with no individual unit absorption greater than 7%.
- G. Proven Field Performance:
  1. Successful field performance is indicated when paving stones similar in composition, and made with the same manufacturing equipment as those supplied to the purchaser, do not exhibit deterioration after one year.
- H. Visual Inspection:
  1. All paving stones shall be sound and free of defects that would interfere with the proper placement of the paving stone or impair its strength or the appearance of the construction.
  2. Minor cracks incidental to the usual methods of manufacture, or chipping resulting from customary methods of handling in shipment and delivery, shall not be deemed grounds for rejection.
- I. Sampling and Testing:
  1. The purchaser shall be accorded proper facilities to inspect and sample the paving stones at the place of manufacture from lots ready for delivery.
  2. Paving stones will be sampled and tested in accordance with ASTM C-140.
- J. Rejection:
  1. If the shipment fails to conform to the specified requirements, the manufacturer may sort it, and new test paving stones shall be selected at random by the purchaser from the retained lot and tested at the expense of the manufacturer. If the second set of test paving stones fail to conform to the specified requirements, the entire lot shall be rejected.

ASPHALTIC CONCRETE SURFACE COURSE:

2. TACK COAT  
A. PRIOR TO INSTALLATION OF THE OVERLAY, THE SURFACE OF THE EXISTING ASPHALT SHALL BE BROOMED TO REMOVE ALL LOOSE MATERIAL WHICH MIGHT INTERFERE WITH THE ADHESION OF THE EXISTING ASPHALT AND OVERLAY.
3. B. A TACK COAT SHALL BE APPLIED TO THE TOP OF THE CLEAN ASPHALT SURFACE AT A RATE OF 0.10 GALLONS/SQ. FT. IN THE PRESENCE OF THE ENGINEER'S REPRESENTATIVE.
4. 29. PRIME COAT SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD. PRIME AND TACK COAT FOR BASE SHALL CONFORM TO THE REQUIREMENTS OF THE F.D.O.T. SECTION 300-1 THROUGH 300-7 OF F.D.O.T. STANDARDS SPECIFICATIONS.
5. 30. ASPHALTIC CONCRETE SHALL CONFORM TO FLORIDA D.O.T. REQUIREMENTS OF TYPE S-1 AND S-3. CERTIFICATIONS OF THE ASPHALT MIX SHEDS AND THE PLANT OF THE ASPHALT PLANT TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
6. 31. THE TEMPERATURE OF THE ASPHALT SHALL BE AT LEAST 230 DEGREES F. DURING THE LAYING OPERATION.
7. 32. THE THICKNESS OF THE FINISHED SURFACE COURSE SHALL BE CHECKED AT THE JOINTS AND COMPACTED. THE CONSTRUCTED SURFACE COURSE IS WITHIN 1/8" OF THE DESIGN THICKNESS (NO NEGATIVE TOLERANCE WILL BE ACCEPTABLE).
8. 33. THE FINISHED SURFACE OF THE ASPHALT SHALL BE CHECKED WITH A STRIPING MACHINE TO ASSURE THAT THE LINE, GRADE, AND CROSS-SECTION OF THE FINISHED PAVEMENT SECTION IS IN CONFORMANCE WITH THE DESIGN PLANS. THE FINISHED SURFACE SHALL BE OF A SMOOTH TEXTURE AND COMPACTED. THE SURFACE SHALL BE FREE OF PULLED, TORN, OR LOOSENED PORTIONS AND SHALL BE FREE OF SEGREGATION, SAND, STREAKS, SAND SPOTS, OR RIPPLES. ALL AREAS OF THE SURFACE WHICH DOES NOT MEET THE FOREGOING REQUIREMENTS SHALL BE CORRECTED TO THE ENGINEER'S SATISFACTION.
9. 34. ALL REPAIRS TO EXISTING PAVEMENT SHALL RECEIVE SAWCUT EDGE PROTECTION RELATIVE TO THE EXISTING PAVEMENT SURFACE OR WRING LESS THAN FOUR (4) INCHES IN DIAMETER REQUIRING A SCHEDULE 40 PVC CASING PIPE WITH SAND BACKFILLS.
10. 35. ALL PERMANENT CONTROL POINTS AND/OR REFERENCE MARKERS SHOWN ON PLAT SHALL BE RAISED TO FINAL GRADE, IF LOCATED ON PAVEMENT OR PAVEMENT SURFACE. ALL REFERENCE MARKERS SHALL BE LOCATED AND NOTED ON THE PLAT.

## NOTIFICATION, TESTING

36. NOTIFICATION - THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE COUNTY AND UTILITIES 48 HOURS PRIOR TO SCHEDULING FIELD OBSERVATIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO TEST THE COMPLETED WORK.
  37. CALLING - PRIOR TO EXCAVATION
  37. ALL DRAINAGE SYSTEMS SHALL BE PUMPED DOWN TO BELOW 1/3 OF THE DIAMETER OF THE PIPE (FROM THE INVERT) AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTION.
  38. GRADING AND RIM ELEVATIONS ARE BASED ON PROPOSED FINISHED GRADE. ADJUSTMENTS MAY BE NECESSARY DUE TO FIELD CONDITIONS. ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR WHEN THE BASE COURSE IS IN PLACE OR SITE GRADING IS COMPLETE. COST OF ADJUSTING RIMS AND GRATES IS TO BE INCLUDED IN BASE BID.
- SODDING:**
39. THE WORK CONSISTS OF THE ESTABLISHING OF A STAND OF GRASS WITHIN THE AREAS CALLED FOR BY THE FURNISHING AND PLACING OF GRASS SOD AND FERTILIZING, WATERING, AND MAINTAINING SODDED AREAS SUCH AS TO ASSURE A HEALTHY STAND OF GRASS.
  40. THE AREA OVER WHICH THE SOD IS TO BE PLACED SHALL BE PREPARED BY LOOSENING TO SUITABLE DEPTH. THE SOD SHALL BE PLACED ON THE PREPARED SURFACE WITH EDGES IN CLOSE CONTACT AND SHALL BE FIRMLY AND SMOOTHLY EMBEDDED BY LIGHT TAMING WITH APPROPRIATE TOOLS. ON AREAS WHERE THE SOD MAY SLIDE DUE TO HIGH MOISTURE, THE CONTRACTOR MAY DIRECT THAT THE SOD BE PEGGED WITH PEGS DRIVEN THROUGH THE SOD BLOCKS INTO FIRM EARTH AT SUITABLE INTERVALS.

### 2.2 BEDDING COURSE:

- A. The bedding course shall be a well graded, clean, washed sand with 100% passing a 3/8" sieve size and a maximum of 3% passing a No. 200 sieve size. The use of mason sand shall not be approved.
  - B. The bedding course shall be the responsibility of the paving stone installer.
- 2.3 EDGE RESTRAINT:
- A. All edges of the installed paving stones shall be restrained. The type of edge restraint, shall be approved at locations and to details noted on plans.

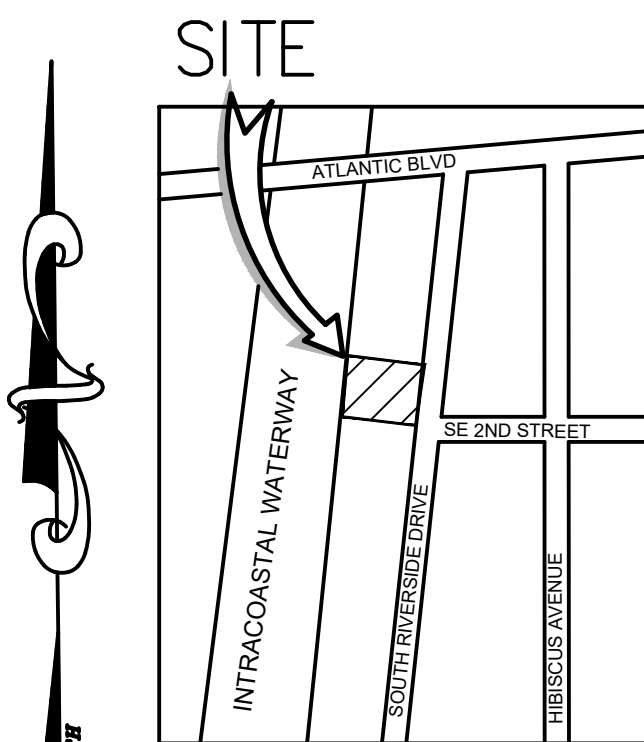
### III. CONSTRUCTION METHODS:

- 3.1. PREPARATION OF THE BASE COURSE:
  - A. A suitable base shall be prepared as specified in Section B.2. of this specification.
  - B. The base course shall be shaped to grade and cross section with allowable tolerance of  $\frac{1}{4}$ ".
- 3.2. CONSTRUCTION OF THE BEDDING COURSE:
  - A. The finished base course shall be approved before the placement of the bedding course.
  - B. The sand bedding course shall be spread evenly over the area to receive the paving stones and the screeded level to produce a 1" thick bedding course.
  - C. The final elevation of paving stones should be nominally  $\frac{1}{4}$ " to  $\frac{3}{8}$ " higher than the adjacent curb, gutter, etc., to allow for free drainage from chamfers on paving stone edges.
  - D. The bedding course shall not be disturbed, once screeded and leveled to the desired elevation.

### 3.3 INSTALLATION OF PAVING STONE:

- A. The paving stones shall be placed as shown on the drawings.
  - B. The paving stones shall be placed in such a manner that the desired pattern is maintained and that no intentional space is left between the stones for maximum interlock.
  - C. String lines should be used to hold all patterns true.
  - D. The space at the edge of the paving stone surface shall be filled with standard edge stone or with stones cut to fit. Cutting of concrete paving stone shall be accomplished to leave a clean edge to the traffic surface using a double-headed breaker or a masonry chisel. Minor pitting shall be allowed to result with a paving stone less than 1/3 of original dimension.
  - E. Paving stones shall be vibrated into the bedding course using a plate vibrator capable of 3000 to 5000 pounds compaction force and with the face clean.
  - F. After vibration, clean, sharp sand containing at least 30% of 1/8" particles shall be spread over the paving stone surface, allowed to dry and vibrated into the joints with additional plate vibrator passes and brooms so as to fill the joints.
  - G. Surplus material shall then be swept from the surface or left on the surface during construction to insure complete filling of joints during initial use.
  - H. Upon completion of work covered in this section, the Contractor shall clean up all work areas by removing all debris, surplus material and equipment from the site.
1. Paver brick shall conform with Palm Beach County Land Development Design Standards with the following exceptions:
    - A) Under II Material 2.1 # A.1, Paving stone thickness shall be 3 1/8" (min.) to 4" (max.)
    - b) Under II Material 2.1 # A.3, The coloring shall be throughout the entire brick with the white and yellow conforming with F.D.O.T. Standard Specifications for Road and Bridge Construction (latest edition) section 710-4.7
  2. Glass spheres to meet the requirements of sections 871-1 and 871-1 with retroreflectivity to be not less than 300 minicandies.
  3. When header curb is used to outline a crosswalk the curb shall be white concrete with glass beads in the white concrete.
  4. The brick shall be pre-approved per project before installation by the Palm Beach County Traffic Engineering Division.

**SITE**  
117 S RIVERSIDE DRIVE



LOCATION MAP  
(NOT TO SCALE)

REV PER CITY COMMENTS	09/08/25	JJB	
REV PER CITY COMMENTS	07/25/25	JJB	
REVISIONS	DATE	BY	
FILE NAME: 1118ENG.dwg			

**FELD & WHEELER, INC.**  
CIVIL ENGINEERING



**RIVERSIDE TOWNHOMES  
117 S RIVERSIDE DRIVE  
GENERAL NOTES PLAN  
POMPANO BEACH, FLORIDA**

DATE	03/18/25
DRAWN BY	JJB
F.B./ PG.	----
SCALE	NTS

MATTHEW V. KAHN  
PROFESSIONAL ENGINEER  
LICENSE NO. 82227  
STATE OF FLORIDA  
- FOR THE FIRM -  
DATE

JOB # 11181
SHT.NO. PD-1
OF 13 SHEETS