



## PAVING, GRADING & DRAINAGE

- 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 TO BE REMOVED, INCLUDING SEPTIC TANKS, BUILDING FOUNDATIONS, AND FENCES.
  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 DISPOSED OF BY THE CONTRACTOR.
  20. EXISTING TREES TO REMAIN WHERE SO DIRECTED BY THE ENGINEER, SHALL BE TRIMMED, PROTECTED AND LEFT STANDING.
  21. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWERS, FENCES, UTILITY POLES, BRIDGES, 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.

23. UTILIZATION OF MATERIAL IN SUBGRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.
24. THE CONTRACTOR SHALL TEST THE FINISHED SURFACE OF THE SUBGRADE MATERIAL TO DETERMINE THE OPTIMUM MOISTURE CONTENT AND MAXIMUM DENSITY OF THE MATERIAL. IN-PLACE DENSITY TESTS OF THE FINISH SUBGRADE SHALL BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST FOR EVERY 1000 SQ. YD. OF FINISHED SURFACE AREA TO DETERMINE COMPLIANCE WITH THE DESIGN SPECIFICATIONS OF 100% OF MAX. DENSITY PER AASHTO T-99 TESTING METHODS.
25. STRENGTH OF THE FINISHED SUBGRADE SHALL BE NOT LESS THAN 15% RATIO (L OF 40) OF THE COMPACTED SUBGRADE SHALL CONFORM TO THE LINES, GRADATIONS AND CROSS-SECTIONS SHOWN ON THE PLANS. ALL ROOTS, STUMPS, OR OBJECTIONABLE MATERIAL PRESENT ON, UNDER, OR PROTRUDING FROM THE SURFACE OF THE SUBGRADE SHALL BE REMOVED PRIOR TO THE FINISHING OF 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, GRADATIONS AND ELEVATIONS WITHIN AN ALLOWABLE TOLERANCE OF 1/2" OF THE PROPOSED FINISH SUBGRADE ELEVATIONS.

1. IF DURING THE PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN OR OTHER DRAINAGE FACILITY IS AFFECTED BY THE PROPOSED CONSTRUCTION, THE DRAINAGE FACILITY SHALL BE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY DRAIN STANDARDS.
2. IF ANY AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION, (THOROUGHFARE) AND 25' MIN. RESTORATION (NOT-THOROUGHFARE),  
3. IF ANY ADDITIONAL LANE ARE AFFECTED FOR ANY REASON DURING CONSTRUCTION, PB COUNTY DRAINAGE STANDARDS SHALL BE MAINTAINED TO LIKE OR BETTER THEN LIKE CONDITION AND TO ADDITIONAL DIMENSIONS AS THE ADJACENT LANES.
4. IF PB COUNTY SIDEWALK / PATHWAY / C&G / AND OR ADA FACILITIES ARE AFFECTED PB COUNTY DRAINAGE STANDARDS SHALL BE MAINTAINED TO LIKE OR BETTER THEN LIKE CONDITION PER / FOOTWAY / PB COUNTY STANDARDS.
5. SIDEWALKS WILL BE RESTORED BY REPLACING TWO PLACES IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS, NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)

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. PLEASE SEE PBC SIGNAL PALM BEACH COUNTY TRAFFIC OPERATIONS AT 561-233-3900 (FORTHY-EIGHT(48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT.
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 T-5.3 (SHEET 8 OF 23).

26. LIMEROCK COMPOSITION – THE FOLLOWING TESTS ARE REQUIRED ON THE LIMEROCK MATERIAL:
  - a. CHEMICAL COMPOSITION TEST TO DETERMINE THAT MATERIAL HAS A MINIMUM PERCENT CARBONATES OF 60%.
  - b. LIMEROCK BEARING RATIO TEST TO DETERMINE THAT MATERIAL CAN ACHIEVE AN LBR OF 100.
  - c. SIEVE ANALYSIS TO INSURE THAT MATERIAL CAN BE CRUSHED TO 1/2" OF THE MATERIAL SHALL PASS A 3/4" SIEVE AND MATERIAL SHALL BE GRADED UNIFORMLY DOWN TO DUST. THE FINE MATERIAL SHALL BE CRUSHED ENTIRELY DOWN TO DUST OF FRACTURE. ALL CRUSHING OR BREAKING-UP WHICH MIGHT BE NECESSARY IN ORDER TO MEET SUCH REQUIREMENTS SHALL BE DONE BEFORE THE MATERIAL IS PLACED ON THE ROAD.
26. A PROCTOR TEST SHALL BE PERFORMED ON THE PROPOSED LIMEROCK MATERIAL TO DETERMINE THE MAXIMUM DENSITY OF THE MATERIAL. IN-PLACE DENSITY TESTS SHALL BE TAKEN AT A FREQUENCY OF AT LEAST ONE TEST PER 10,000 SQUARE FEET OF PROPOSED PAVEMENT TO DETERMINE COMPLIANCE WITH THE DESIGN SPECIFICATIONS OF 98% OF MAX. DENSITY PER AASHTO T-180 TESTING METHODS.
27. THE COMPACTED BASE SHALL CONFORM TO THE LINES, GRADES, AND CURB CREATION. THE PROPOSED BASE SHALL BE LAYED ON THE BASE SURFACE SHALL BE STRINGLINED OR CHECKED WITH A TEMPLATE TO VERIFY CONFORMANCE WITH THE PLAN GRADIES WITHIN AN ALLOWABLE TOLERANCE OF 1/4" OF THE PROPOSED BASE ELEVATIONS. THE TOP OF CURB SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD.

3. A. TACK TO INSTANTATION 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 ASPHALT MIXTURE AND OVERLAY.
- 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.
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 SECTION 300-1 THROUGH 300-7 OF F.D.O.T. STANDARDS SPECIFICATIONS.
30. ASPHALTIC CONCRETE SHALL CONFORM TO FLORIDA D.O.T. REQUIREMENTS OF TYPE S-1 AND S-3. CERTIFICATIONS OF THE ASPHALT MIX SHALL BE SUBMITTED TO THE PLANT TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
31. THE TEMPERATURE OF THE ASPHALT SHALL BE AT LEAST 230 DEGREES F. DURING THE LAYING OPERATION.
32. THE THICKNESS OF THE FINISHED SURFACE COURSE SHALL BE CHECKED CONFORM TO THE REQUIREMENTS OF THE CONSTRUCTED SURFACE COURSE IS WITHIN 1/8" OF THE DESIGN THICKNESS (NO NEGATIVE TOLERANCE WILL BE ACCEPTABLE).
33. THE FINISHED SURFACE OF THE ASPHALT SHALL BE CHECKED WITH A STRAIGHT EDGE TO INSURE THAT THE LINE, GRADE, AND CROSS-SECTION OF THE FINISHED PAVED SECTION IS IN CONFORMANCE WITH THE DESIGN PLANS. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE AND ALL COMPLETES SHALL BE FREE OF NO 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.
34. ALL REPAIRS TO EXISTING PAVED SURFACE SHALL RECEIVE SAWCUT EDGE PRIOR TO RELAYING. REPAIRS SHALL BE TO THE FULL DEPTH OR WRING LESS THAN FOUR (4) INCHES IN DIAMETER REQUIRES A SCHEDULE 40 PVC CASING PIPE WITH SAND BACKFILLS.
35. ALL PERMANENT CONTROL POINTS AND/OR REFERENCE MARKERS SHOWN ON PLAT SHALL BE RAISED TO FINAL GRADE, IF LOCATED ON GRADE OR PAVEMENT OR CONSTRUCTION OF THE REFERENCE MARKERS SHALL BE LOCATED AND NOTED ON THE PLAT.

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 AND TO UNCOVER, EXPOSE AND RE-EXCAVATE.

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. GRATE AND RIM ELEVATION ARE BASED ON PROPOSED FINISHED GRADE. ADJUSTMENTS TO THE GRATE AND RIM DUE TO FIELD CONDITIONS, ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR WHEN THE BASE COURSE IS IN PLACE. SITE GRADING IS COMPLETE. COST OF ADJUSTING RIMS AND GRATES IS TO BE INCLUDED IN BASE BID.

9. WORK CONSISTS OF THE ESTABLISHING OF A STAND OF GRASS WITHIN  
THE AREAS CALLED FOR BY THE FURNISHING AND PLACING OF GRASS  
SODS AND FERTILIZING, WATERING, AND MAINTAINING SODDED AREAS  
10. SO AS TO ASSURE A HEALTHY STAND OF GRASS.  
11. THE AREA OVER WHICH THE SOD IS TO BE PLACED SHALL BE  
SCARIFIED OR LOOSENED 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 TAMPING  
WITH APPROPRIATE TOOLS. ON AREAS WHERE THE SOD MAY SLIDE DUE  
TO SLOPE, THE SODS SHALL BE PROPERLY ANCHORED TO THE SOD BY  
12. BEING WITH PEGS DRIVEN THROUGH THE SOD BLOCKS INTO FIRM  
EARTH AT SUITABLE INTERVALS.

1. Furnish and place sand bedding course.
2. Furnish and install concrete interlocking paving stones to 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.

2. All paving stones shall be colored through the full depth of paver and not just the surface.
3. A multi-colored paving stone pattern shall be used.

B. Cementitious Materials:

1. Portland cements shall conform to ASTM C-150.

C. Aggregates:

- D. **Concrete** except that grading requirements shall not necessarily apply.
- E. **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.
- F. **Compressive Strength:**
  - 1. The time of exposure 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.
- G. **Absorption:**
  - 1. The average absorption shall not be greater than 5% with no individual unit absorption greater than 7%.
- H. **Proven Field Performance**
  - 1. Satisfying 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.

1. Interfere with the proper placement of the paving stone or impact the strength or permanence 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.

**Sampling and Testing:**

1. Each 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.

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 at the expense of the manufacturer. If the second set of test stones fail to conform to the specified requirements, the entire lot shall be rejected.

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.

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  $\frac{1}{4}$ ".

- 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" thickness when the paving stones have been placed and vibrated.
- C. The final elevation of paving stones should be nominally  $\frac{3}{4}"$  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.

- B. The paving stones shall be placed as shown on the drawings.
- C. The paving stones shall be laid so that the bedding course desired pattern is maintained and that no intentional space is left between the stones for maximum interlock.
- C. String lines should be used to determine true.
- D. The gaps 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.
- E. Traffic surface shall be finished with a brooder or a motor saw. Whenever possible, no cut should result with a paving stone less than 1/3 of original dimension.
- F. Paving stones shall be laid in the bedding course using a plate vibrator capable of 3000 to 5000 pounds compression force with the surface clean and the joints open.
- F. After vibration, clean, sharp sand containing at least 30% of 1/8" particles shall be placed in the stone surface. The sand shall be dry and vibrated into the joints with additional plate vibrator passes and brushing so as to completely fill the joints.
- G. Surface material shall be placed in the bedding course 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

- 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 971-1 and 971-1.4 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.

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**CAULFIELD & WHEELER, INC.**  
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POMPANO BEACH TOWNHOMES  
3214 SE 1TH STREET  
GENERAL NOTES PLAN  
POMPANO BEACH, FLORIDA, 33061

DATE	05/08/26
DRAWN BY	DJP
F.B./ PG.	----
SCALE	NTS

MATTHEW V. KAHN PROFESSIONAL ENGINEER LICENSE NO. 82227 STATE OF FLORIDA - FOR THE FIRM -	DATE
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JOB # 11900
SHT.NO. C-3
OF 14 SHEETS