September 22, 2014

Kia Hernandez Planning director Palmcorp Development Group 4904 SW 72 Ave Miami, FL., 33155 305-446-7990

Re: 1011(5) Lisbon, Lots 13, 14 & 15, Coral Gables, FL - Live Oak's Work Plan

Dear Ms. Hernandez,

Based upon our meeting and inspection at the aforementioned property on September 11, 2014 and suggestions from the **City of Coral Gables**, including comments from Brook Dannemiller, we would like to include additional items in our work plan. This includes *Attachment A*, the location of the proposed phased root pruning and the tree protection fencing which delineates the Tree Protection Zone per the **City of Coral Gables**, **Sec. 82-32**. **Tree protection/relocation standards**. We are also including *Attachment B*, which is a colored sketch of the tree protection of Lots 13 and 14 and how it relates to the Live Oaks on Lot 15.

PRE-CONSTRUCTION LOT 15

- 1. Pruning, it is recommended that crown cleaning of the three trees be performed that removes any dead limbs 1" or greater. Likewise, the removal of the vines that are growing throughout the canopy should be removed. Crown raising should be performed on the West side of the tree, over Lisbon Street to provide a minimum of 14' clearance for emergency and construction traffic. Crown reduction on the East side of the trees directly over the new construction should be done, removing limbs no greater than 4" in diameter. No greater than 20% of living leaves should be removed from the three trees entire canopy during this task. Lastly, an aerial inspection should be performed by the climbing arborist to identify any potential decay or wounds in the canopy not observed from the ground. Pruning shall meet or exceed, ANSI A300 (Part 1) 2008 Pruning.
- 2. Removal of palm number 6, Alexander palm and tree number 7, Royal Poinciana, shall be removed by a certified arborist and cut flush to the ground. The roots should not be removed. Care must be taken not to damage the adjacent Live Oaks during the removal of these two species.
- 3. Stake proposed building of footprint include grade elevations and outside edge of proposed footers, to be performed by Land Surveyor.

- 4. Installation of remaining portion of tree protection fencing shown in blue, see Attachment A and on Attachment B, and per City of Coral Gables, Sec. 82-32. Tree protection/relocation standards. The fencing should include the emergency contact telephone number of the Consulting Arborist in the event the fencing requires temporary modifications to permit limited access. The fencing shall not be moved or relocated without consulting with either the Landscape Architect or the Consulting Arborist.
 - a) The tree protection fencing shall extend from the existing chain link fencing extending along Lisbon Street within Eastern edge of the sidewalk. The additional tree protection fencing can be a combination of fixed and removable chain link with sand bags to accommodate any conflicts with the existing root area. Thus not interfering with any additional roots of the trees to be preserved.
 - b) The tree protection fencing will extend along Lisbon Street North onto Lots 13 and 14 extending to 20 feet of the north property boundary of Lot 13. Please see *Attachment B* for layout.
- 5. Apply 2 to 3 inch layer of mulch over entire Tree Protection Zone.
- 6. Install temporary above ground irrigation system within the Tree Protection Zone to provide supplemental water two times per week until the permanent irrigation system is operational.
- 7. Root pruning of east side of trees along proposed building footer only, see Attachment A, this area is indicated in green. Utilizing hand tools. Any roots encountered shall be pruned with a sharp pruning saw. The soil shall be replaced and watered extensively to remove any air pockets. No machinery shall be utilized for trenching and all work supervised by Consulting Arborist and City Arborist.

DURING CONSTRUCTION LOT 15

- 1. No trenching, digging or installations of utilities are permitted within the tree protection fencing.
- 2. Installation of irrigation system within the tree protection fencing shall be permitted to use hand tools only, no trenching equipment is permitted, roots up to 2 inches in diameter may be pruned with a clean, sharp pruning saw. Any roots larger than 2 inches must be preserved and the system rerouted to accommodate the root(s).
- 3. Pruning, crown reduction of limb immediately in conflict with new construction to be performed after second floor is built and the exterior walls are under construction for this portion of the project. Location of final pruning cut to be made at a codominant stem approximately 12 feet above the ground. Pruning is to meet or exceed ANSI A300 (Part 1) 2008 Pruning. Please see three photographs with captions below.



East portion of Tree #9. Location of the white pole indicates façade of new home. The pole measures 17 feet, the new wall to the home is 20 feet tall. This portion of the canopy will need to be removed. The pruning shall be completed per ANSI A-300 pruning standards to the next nearest lateral limb which will be shown in the next photograph.



Location of final pruning cut on this portion of the limb on Tree #9 indicated by white pole. This codominant limb is attached at a lower point to another large limb to the west of these two limbs seen in this photograph. Additional arrows indicate portion of tree to remain.



Closer view of tree #9 and the codominant limb to be pruned. This represents approximately 25% of tree #9 canopy. Pruning to be completed in two pruning cycles per ANSI A300 (Part 1) - 2008 Pruning. Limb on the right as well as large trunk to the right of image (not seen here) are to be left untouched.

- 4. Verify that the walkway pavers to the front entry are placed on sand and hand compacted.
- 5. Root prune west portion of root system for drain field and septic installation, shown as pink on Attachment A. To perform this task it is recommended to utilize an air spade to remove the existing soil and prune the roots with a sharp saw. No machinery shall be utilized and all work shall be supervised by the Consulting Arborist and the City Arborist. This work is to be performed prior to installation of septic system, near the conclusion of the construction project.

Please see the following photographs below showing the root pruning area.

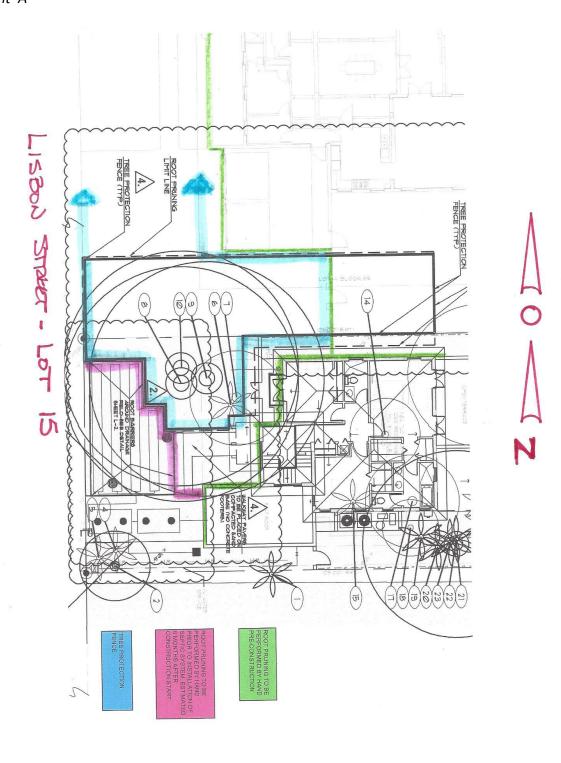


This surface root from tree #8, shown above in the two photographs, is approximately 8 inches in diameter. It will need to be pruned since it is within the proposed drain field. The stake indicates the end of this section of drain field. The pruning is proposed to occur at the green painted line. The larger root in the foreground is to be preserved. The photographs also show two different areas of damage on the root proposed to be pruned. We found decay within these two cavities. We did not observe any disease resulting from these old wounds.

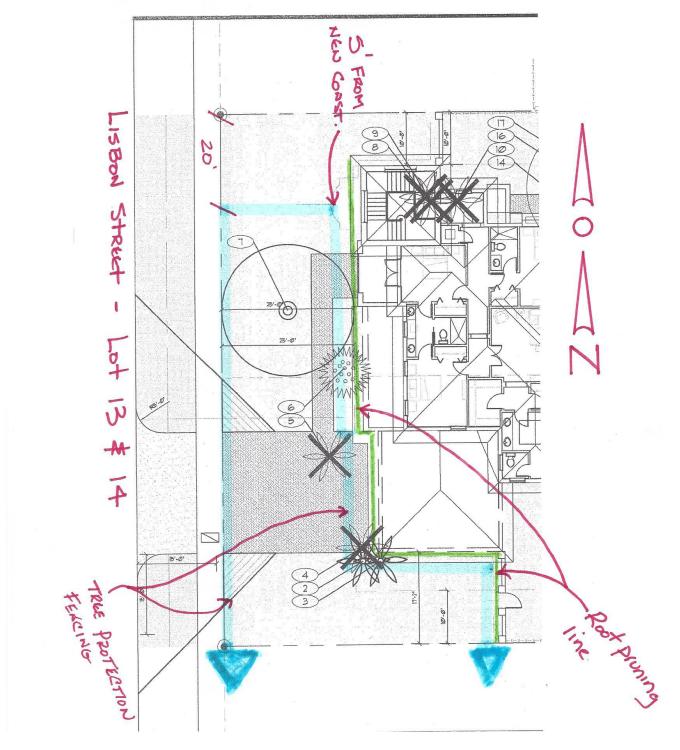


This surface root is to be preserved. We found it to be approximately 12 inches in diameter. Likewise, we found old damage to the top of the root. We did observe reaction wood forming along the top of the wound. This indicates that the tree is responding properly to the wound.

Attachment A



Attachment B



LOTS 13 & 14

PRE-CONSTRUCTION LOTS 13 & 14

- 1. Install tree protection fencing that attaches to tree protection fencing on Lot 15 to extend along Lisbon Street North to up to 20 feet of the North property boundary, then East towards future construction to 5 feet from proposed constructed area, then extending South towards Lot 15 then East along new construction then South attaching to Lot 15 tree protection fencing indicated in blue on *Attachment B* above.
- 2. Root prune along the new construction indicated in green on *Attachment B*. This root pruning shall be performed by hand with hand shovels and any roots encountered pruned with a sharp clean saw.

DURING CONSTRUCTION LOTS 13 & 14

- 1. No trenching, digging or installations of utilities are permitted within the tree protection fencing.
- 2. Installation of irrigation system within the tree protection fencing shall be permitted to use hand tools only, no trenching equipment is permitted, roots up to 2 inches in diameter may be pruned with a clean, sharp pruning saw. Any roots larger than 2 inches must be preserved and the system rerouted to accommodate the root(s).
- 3. Walkway pavers will be placed on sand and hand compacted.
- 4. We are coordinating with the City to waive the requirement for footers along the edge of the paver driveway and that the driveway pavers will be set on a gravel or sand base to the minimal depth allowed by the City.

MONITORING

Monitoring shall include weekly site visits to review and document:

- 1. The trees health condition.
- 2. The temporary irrigation system is functioning adequately.
- 3. The tree protection fencing is in place and that no encroachments within the Tree Protection Zone have occurred.
- 4. Dialogue with the site superintendent and operators at the project site, to ensure that everyone working at the property understands the importance of the trees and need for their cooperation in the success of the preservation.

Jeremy T. Chancey

ISA Certified Arborist, FL-0762A
ISA Tree Risk Assessment Qualified
LIAF Certified Landscape Inspector