MANHATTAN BEACH

Live Oak Park (aka: Scout House) Construction Impact Report (Italian Stone Pine)

SUBMITTED TO:

ERNEST AREA Urban Forester City of Manhattan Beach

PREPARED BY:

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BACKGROUND AND ASSIGNMENT

West Coast Arborists, Inc., (WCA) was contacted by Mr. Ernest Area of the City of Manhattan Beach to provide arborist services for one Italian Stone Pine (*Pinus pinea*) located at Live Oak Park. Following the approval of the proforma for arborist services, I visited the site on the morning of March 30, 2022 to collect relevant information per the scope of work. The scope of work for the requested arborist services is as follows:

- Prepare one construction impact arborist report for one Italian Stone Pine, identified in the city tree inventory as Live Oak Park, Park-20. Detail the tree's current condition and provide recommendations based on proposed construction plans.
 - O Perform a general health and condition assessment of the tree. The level of assessment used for this project involved a visual assessment only of the individual tree from a ground-based, walk-by perspective. This process was used to identify any obvious defects or special conditions.
- Provide an evaluation of the tree at the proposed construction site for suitability for retention considering the proposed construction.
 - Indicate methods and maintenance practices to preserve and maintain the tree if possible.
 - o Identify the existing root systems, if possible, that should be avoided if the subject tree is to remain in place.

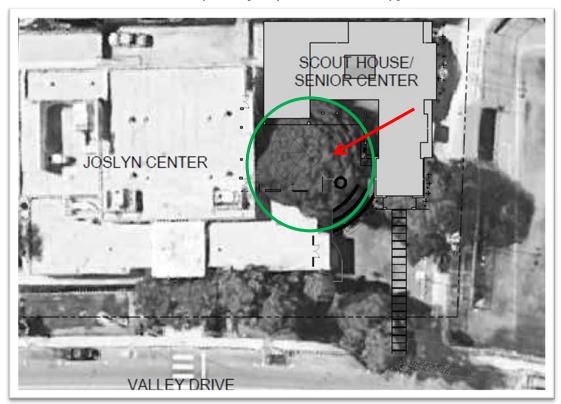
The assignment, being a visual assessment of the subject tree, was limited to that which could be observed from the ground. Only exposed or easily exposed parts above ground level were inspected. Subsurface soil conditions and tree parts below ground were not disturbed or observed.

The purpose of this report is to provide as complete and unbiased an opinion as possible with regard to the health, condition, and maintenance recommendations of the inspected tree. The content of this report is intended to be used by the city of Manhattan Beach staff and its contractors that have jurisdiction and are responsible for the maintenance of the tree.

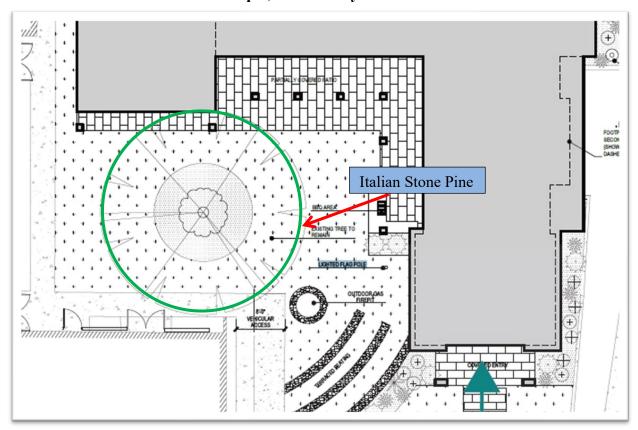
Site Map 1. Showing the location of the assessed tree.



Site Map 2 (below). Provided by the client, showing the location of the pine tree with respect to planned construction. Based on this image, it appears that the roofline of the proposed 2-story building will partially impact the tree canopy.



Site map 3, Provided by the client.



This site plan shows there will be minimal encroachment into the tree's root protection zone, with minimal to moderate encroachment into the canopy.

SUMMARY: Site usage for the area around the subject tree includes a mulched area within the dripline that includes a picnic table, and pedestrian walkways leading to the Scout House and the Joslyn Community Center. Currently, the one-story building to the west of the fig tree, identified as the "Scout House," is planned for demolition, with a two-story building being constructed in its place. A portion of the new building is expected to partially interfere with the crown of the pine and possibly with a portion of the root zone, however, construction impacts can be lessened via mitigation efforts.

OBSERVATIONS:

- The subject tree has a trunk diameter of 39-inches, with a height of 50-feet and a canopy spread of 65-feet (east to west) and 65-feet (north to south). Canopy spread was measured by a standard 5-foot pace.
- The tree displays a healthy canopy with no signs of stress. Plant health, structure, and form are all good and consistent with species characteristics. See Appendix B: Health and Condition Components.

- This tree is growing in the courtyard between the Joslyn Community Center building and the Scout House and is surrounded by a large, mulched area.
- There is one large limb growing over the community building that appears to be in contact with the roofline.
- There is one large lateral over the Scout House that will require removal should the construction of the proposed two-story building be approved.
- Based on the current size dimensions of the mulched area within the dripline of the pine, most of the root protection zone can be maintained.
- Due to site configuration, access is fairly limited for medium and large-sized construction equipment. Therefore, access to the site will occur mostly via the lawn area to the south as well as the alleyway to the north.
 - O This level of activity will result in low impact on this pine tree, as long as heavy equipment remains outside an established root protection zone.

CONCLUSIONS: Based on overall plant health and proposed construction plans, it is believed that the Italian Stone Pine is a good candidate for site retention. The expected level of root loss is low, while canopy encroachment issues can be mitigated via pruning. Implement the following maintenance and protection measures:

- Remove the large lateral limb that is hanging over the eastern roofline of the community building, as shown in Image 2, This can be done prior to the start of construction activities.
- Begin to cut back the large western lateral that is over the current Scout House building, as shown in Image 3. With the expectation that the proposed plans will be approved, it will be less stressful for the tree if pruning is slowly implemented prior to any construction.
- Establish a Tree Protection Zone (TPZ). Based on overall plant size and trunk diameter, an ideal protective barrier would be installed at the dripline. However, due to the current canopy configuration, consider using the planter as the TPZ, see Image 4. The mulched area within the dripline is already protecting most of the critical root zone. Refer to Appendix C, for specifics on where to place protective fencing. Maintain the established TPZ during all stages of demolition and construction.
- Crown clean: In addition to removal of the two limbs as discussed above, prune to remove
 any dead, diseased, detached, and broken branches that may be present. By removing such
 material prior to construction, it will be easier to monitor for any new developments of
 dead or damaged material.
- Monitor during and after construction on a regular basis. Watch for signs of stress, such as small twig and branch dieback, leaf discoloration and loss, and general decline in tree health and/or vigor.

All pruning should be done in a manner consistent with ISA Best Management Practices, ANSI A300 Part 1: Tree, Shrub, and Other Woody Plant Maintenance, Standard Practices, Pruning, 3rd Edition.

APPENDIX A -PHOTOS-





Image 1. Showing the subject Italian Stone pine. Note there is already a nice mulched area established within a good portion of the dripline.



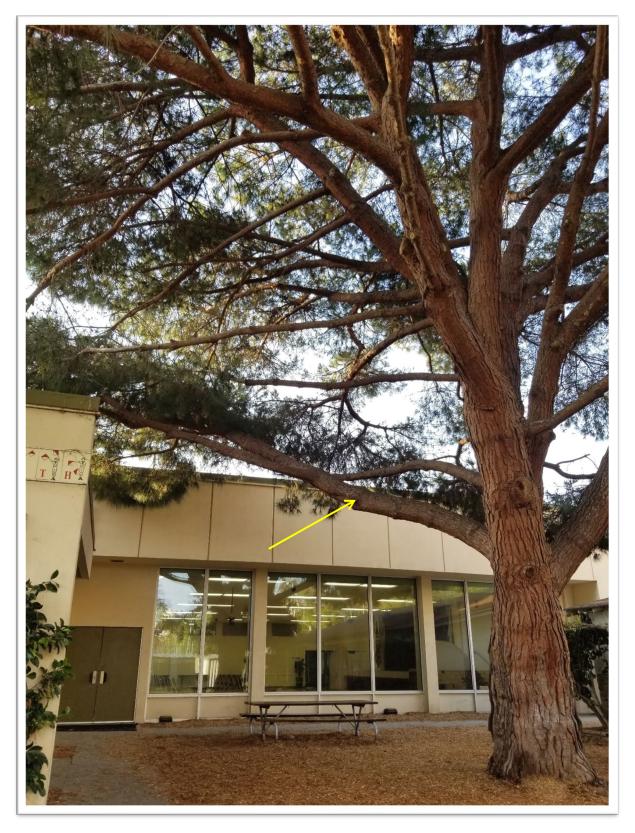


Image 2. Showing the subject tree as seen looking south. Note the limb hanging low over the eastern portion of the community building. Per onsite discussions with city staff, it is recommended that this branch be removed prior to the start of construction activities.



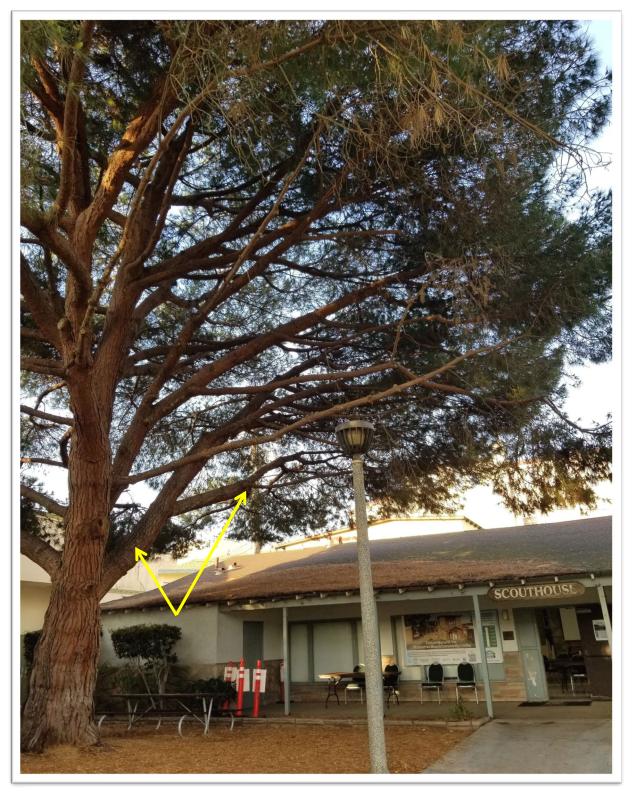


Image 3.Showing the tree looking southwest. Construction of the proposed two-story building will require the removal of this large lateral. It is recommended that piecing back the limb begin prior to construction. Begin by removing the lower, smaller portion first, then proceed to remove portions of the remaining branch as needed. Full removal may end up not being necessary.





Image 4. Showing the proposed tree protect zone, which should utilize as much of the existing mulch-filled growth space as possible. This area already encompasses the critical root zone. Install protective fencing and restrict the use of construction equipment. Refer to Appendix C for specifications.

APPENDIX B -Health & Condition Components-



	Health & Condition components			
Rating category	Health	Structure	Form	Percent rating
Excellent	High vigor and nearly perfect health with little or no twig dieback, discoloration, or defoliation.	Nearly ideal and free of defects.	Nearly ideal for the species. Generally symmetric. Consistent with the intended use.	81% to 100%
Good	Vigor is normal for the species. No significant damage due to diseases or pests. Any twig dieback, defoliation, or discoloration is minor.	Well-developed structure. Defects, if present, are minor and can be corrected.	Minor asymmetries and/or deviations from species norm. Mostly consistent with the intended use. Function and aesthetics are not compromised.	61% to 80%
Fair	Reduced vigor. Damage due to insects or diseases may be significant and associated with defoliation but is not likely to be fatal. Twig dieback, defoliation, discoloration, and/or dead branches may comprise up to 50% of the crown.	A single defect of a significant nature or multiple moderate defects. Defects are not practical to correct or would require multiple treatments over several years.	Major asymmetries and/or deviations from species norm or intended use. Function or aesthetics are compromised.	41% to 60%
Poor	Unhealthy and declining in appearance. Poor vigor. Low foliage density and poor foliage color are present. Potentially fatal pest infestation. Extensive twig and/or branch dieback.	A single serious defect or multiple significant defects. Recent change in tree orientation. Observed structural problems cannot be corrected. Failure may occur at any time.	Largely asymmetric and/or abnormal. Detracts from intended use and/or aesthetics to a significant degree.	21% to 40%
Very Poor	Poor vigor. Appears to be dying and in the last stages of life. Little live foliage.	Single or multiple severe defects. Failure is probable or imminent.	Visually unappealing. Provides little or no function in the landscape.	6% to 20%
Dead				0% to 5%

This table is taken from the Guide For Plant Appraisal, 10th Edition

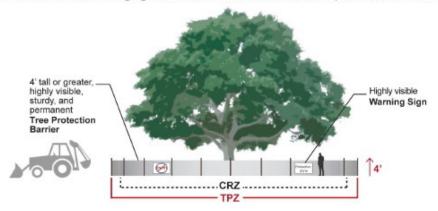
APPENDIX C

-General Construction Protection Guidelines-

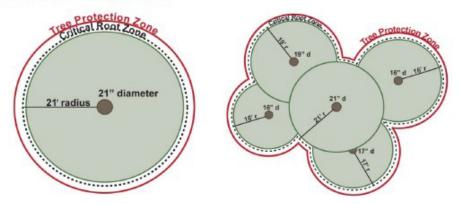
To ensure the best survival rate of any tree(s) being retained, it is recommended that the following guidelines be implemented:

• Identify a tree protection zone (TPZ) for the tree; provide adequate space around the protected tree from the beginning of the project to its completion. This generally involves outlining the dripline of the tree and installing fencing around that tree. *No construction activity should be allowed within this area, including storage, dumping of excess material, etc.* See the example below:

<u>Tree protection barrier</u> encloses the Tree Protection Zone and is at least 4' tall, highly visible, sturdy, permanent and has warning signs on or near it for the duration of any construction activities.



<u>Tree Protection Zone</u> (TPZ) is an area where construction activities are prohibited or restricted to prevent injury to preserved trees, especially during pre-construction and construction, and includes the Critical Root Zone and/or beyond.



- Before any grading, appropriately root prune tree(s) at the edge of any excavation.
- Always maintain the natural grade around the tree(s).
- Avoid open trenching in the root area. If necessary, this activity should be restricted to only one side of the tree and at an appropriate distance, as discussed below in the root pruning guidelines provided below.

- Consider minimum height requirements of construction equipment and prune any branches accordingly. Consider doing this prior to the start of any demolition or construction to lessen stress on the individual tree.
- Provide supplemental irrigation in similar volumes and seasonal distribution as would normally occur.
- Wood chips generated during the clearing of onsite vegetation should be used as mulch under retained trees. This will reduce loss of soil moisture, protect against compaction, and moderate soil temperatures.
- Tree(s) should be monitored during and after construction on a regular basis. Watch for signs of stress, such as small twig and branch dieback, leaf discoloration and loss, and general decline in tree health and/or vigor.

The following sections of *ANSI A300 (Part 8)-2013 Root Management* should be used with regards to the level of acceptable root loss and/or cutting that may be necessary:

- 84.1.2 The extent and method of root pruning or cutting shall be based on the objectives, species, tolerance, environmental factors, timing, age, health, lean, and structural condition of the tree(s).
- 84.2.5 Where root removal is unavoidable, selective pruning shall be the preferred method.
- 84.3.1 The size and/or location of roots to be pruned shall be specified.
- 84.4.4 The trunk and buttress roots shall not be damaged beyond the scope of work.
- 84.5.3 Minimum distance from the trunk for root cutting should be adjusted according to trunk diameter, species tolerance to root loss, tree age, health, and site condition.
- 84.5.4 Root cutting distances from the trunk shall be adjusted for disease management, root location tree species and condition, and site and soil conditions.

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ASSUMPTIONS AND LIMITING CONDITIONS

- 1. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the Consultant can neither guarantee nor be responsible for the accuracy of information provided by others. Standard of Care has been met with regards to this project within reasonable and normal conditions.
- The Consultant will not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
- 3. Loss or alteration of any part of this report invalidates the entire report.
- 4. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed without the prior written consent of the Consultant.
- 5. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a stipulated result, a specified value, the occurrence of a subsequent event, nor upon any finding to be reported.
- 6. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, or coring unless otherwise stated. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree(s) or property in question may not arise in the future.
- 7. Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. It is highly recommended that you follow the arborist's recommendations; however, you may choose to accept or disregard the recommendations and/or seek additional advice.
- 8. Arborists cannot detect every condition that could lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for a specific period of time.
- 9. Any recommendations and/or performed treatments (including, but not limited to, pruning or removal) of trees may involve considerations beyond the scope of the arborist's services, such as property boundaries, property ownership, site lines, disputes between neighbors, and any other related issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist can then be expected to consider and reasonably rely on the completeness and accuracy of the information provided.
- 10. The author has no personal interest or bias with respect to the subject matter of this report or the parties involved. He/she has inspected the subject tree(s) and to the best of their knowledge and belief, all statements and information presented in the report are true and correct.
- 11. Unless otherwise stated, trees were examined using the tree risk assessment criteria detailed by the International Society of Arboriculture's publications *Best Management Practices Tree Risk Assessment* and the *Tree Risk Assessment Manual* and *A Photographic Guide to the Evaluation of Hazard Trees (Matheny & Clark)*.

Certificate of Performance

Premises: Live Oak Park (aka: Scout House), Manhattan Beach, CA. RE: Italian Stone Pine

I, Rebecca Mejia, certify that to the best of my knowledge and belief:

- 1. To the best of my knowledge, the statements of fact contained in this report are true and correct.
- 2. I have personally inspected the tree(s), and property referenced in this report and have stated my findings accurately.
- 3. I have no current or prospective interest in the tree(s) or the property that is/are the subject of this report, and I have no personal interest or bias with respect to the parties involved.
- 4. The analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices and standards.
- 5. No one provided significant professional assistance to me, except were may be noted within the report.
- 6. My compensation is not contingent upon the reporting of conclusions that favor the cause of my client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing with the International Society of Arboriculture, an ISA Certified Arborist, and an ISA Qualified Tree Risk Assessor. I hold a Bachelor of Science degree in Forestry and Natural Resources Management, with a minor in Urban Forestry. I have been a Certified Arborist since 1996 and in the practice of arboriculture for over 26 years.

Signed:

Rebecca Mejia

Rebecca Mejia ISA Certified Arborist # WE-2355A ISA Qualified Tree Risk Assessor Consulting Arborist, West Coast Arborists, Inc.

Date: April 14, 2022