A G E N D A

CITY OF SEASIDE
BOARD OF ARCHITECTURAL REVIEW

REGULAR MEETING
COUNCIL CHAMBER
440 Harcourt Avenue
Wednesday, June 20, 2018
5:30 PM

PLEASE TURN OFF YOUR CELL PHONES UPON ENTERING THE MEETING

1. CALL TO ORDER

2. ROLL CALL - ESTABLISHMENT OF QUORUM

BOARD OF ARCHITECTURAL REVIEW

Toby Keller	Chair
Mitsugu Mori	Board Member
Kathleen Ventimiglia	Board Member
Bani Khalsa	Board Member
Keith Mitchell	Board Member

3. REVIEW OF AGENDA

If there are any items that arose after the 72-hour posting deadline, this is the point in the meeting where a vote may be taken to add the item to the agenda. (A 2/3-majority vote is required).

4. PUBLIC COMMENT

Members of the public wishing to address the Board of Architectural Review on matters within the jurisdiction of the City of Seaside, but not on this agenda, may do so during the Public Comment period for up to three minutes. Public Comments on specific agenda items are heard under that item. For the public record, please state your name.

5. APPROVAL OF MINUTES

A. APPROVAL OF MINUTES FROM THE APRIL 18, 2018 REGULAR MEETING.

6. BUSINESS ITEMS

A. BOARD OF ARCHITECTURAL REVIEW APPLICATION FOR THE APPROVAL OF A TREE REMOVAL AND REPLACEMENT PLAN AND RE-VEGETATION PLAN FOR THE PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT AND PRODUCT WATER CONVEYANCE FACILITIES. AN ENVIRONMENTAL IMPACT REPORT HAS BEEN PREPARED FOR THE PROJECT.

PURPOSE & RECOMMENDATION: In accordance with the Mitigation and Monitoring Reporting Program, Board of Architectural Review approval is required for a tree replacement plan and re-vegetation plan for the RUWAP project biotic disturbances within the City of Seaside.

7. REPORTS FROM BOARD MEMBERS

8. REPORTS FROM STAFF

9. ADJOURNMENT

Next Regularly Scheduled Meeting:
July 4, 2018
Seaside City Hall
5:30 PM

The City of Seaside is committed to providing accessible facilities and accommodating people with disabilities in all of its services programs and activities. If special considerations are needed by any person to fully participate in this meeting, they are asked to contact the City Clerk at 899-6707 no fewer than two business days prior to the meeting to allow reasonable arrangements. The City Council chamber is equipped with a portable microphone and assisted listening devices are available at all meetings.

City Council Meetings that are held in the City Council Chambers are broadcast live to all Seaside residents on Comcast Channel 25 and U-verse Channel 99. Meetings are also available through live streaming at:
http://cvp.telvue.com/player?id=T01629&video=52314&noplaylistskin=1&width=400&height=300
Videos of past meetings are available on demand through the City's website: http://www.ci.seaside.ca.us

Agenda-related writings or documents provided during public meetings are available for public inspection during the meeting or from the office of the City Clerk. This agenda is posted in compliance with California Government Code Section 54954.2(a) or Section 54956.

CITY OF SEASIDE

REGULAR MEETING

BOARD OF ARCHITECTURAL REVIEW

COUNCIL CHAMBER
Wednesday, April 18, 2018
5:30 PM

1. CALL TO ORDER

The meeting was called to order at 5:53 p.m.

BOARD OF ARCHITECTURAL REVIEW

2. ROLL CALL - ESTABLISHMENT OF QUORUM

Present: Keller, Ventimiglia, Khalsa
Absent: Mori, Mitchell

3. REVIEW OF AGENDA

No changes were requested.

4. PUBLIC COMMENT

There were no comments from the public.

5. APPROVAL OF MINUTES

A. APPROVAL OF MINUTES FROM THE APRIL 4, 2018 REGULAR MEETING.

On motion by Board Member Kathleen Ventimiglia and seconded by Board Member Bani Khalsa and passed by the following vote the Board of Architectural Review approved April 4, 2018 regular meeting minutes.

RESULT:	**Approved**
AYES:	Kathleen Ventimiglia, Toby Keller, Bani Khalsa
NOES:	None
ABSENT:	Mitsugu Mori, Keith Mitchell

6. BUSINESS ITEMS

A. BOARD OF ARCHITECTURAL REVIEW No. BAR-18-04: ALEX AND LINDSAY CABANILLA, APPLICANT AND PROPERTY OWNER, ARE REQUESTING DESIGN REVIEW APPROVAL TO ALLOW FOR A TWO STORY ADDITION ONTO AN EXISTING ONE-STORY SINGLE FAMILY DWELLING LOCATED AT 1345 GREEN COURT IN THE RS-8 (S9NGLE FAMILY RESIDENTIAL) ZONING DISTRICT. THE PROJECT IS CATEGORICALLY EXEMPT CLASS 1, SECTION 15301(A) OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

Staff report presented by Senior Planner, Rick Medina. Mr. Medina went over presentation

for the project requesting design approval to allow for a two story addition onto an existing one-story single family dwelling located at 1345 Green Court in the RS-8 (Single Family Residential) Zoning District. Presentation included Location Map, Street Views, Site Plan, Floor Plan, Elevations; staff recommended approval. Board asked questions to staff and they were answered by Mr. Medina. Chair Keller asked applicant to step forward. Property owner, Lindsay Cabanilla answered questions from the Board. Chair Keller opened public comment, seeing none, public comment was closed. There was discussion amongst the Board. Board asked applicant to step forward once again and asked applicant questions; questions were answered by applicant.

On motion by Board Member Kathleen Ventimiglia and seconded by Board Member Bani Khalsa and passed by the following vote the Board of Architectural Review Approved project with modification of the door not having a sidelight and the wings curbing on the eastside of the house to be eliminated underneath the window to the right side of the door.

RESULT:	**Approved**
AYES:	Kathleen Ventimiglia, Toby Keller, Bani Khalsa
NOES:	None
ABSENT:	Mitsugu Mori, Keith Mitchell

Appeal may be submitted in writing within 7 calendar days accompanied by the required fees to the Planning Commission.

B. SEASIDE RESORT DEVELOPMENT: CITY OF SEASIDE, PROPERTY OWNER, AND SEASIDE RESORT LLC, ARE REQUESTING DESIGN REVIEW APPROVAL FOR AN TO THE HOTEL PHASE 1 COMPONENT OF THE SEASIDE RESORT DEVELOPMENT. IN ACCORDANCE WITH SECTION 15164 OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES, AN ADDENDUM TO THE SEASIDE RESORT ENVIRONMENTAL IMPACT REPORT HAS BEEN PREPARED FOR THE PROJECT.

Staff report presented by Senior Planner, Rick Medina. Mr. Medina mentioned that this item was before the Board last April or May and that there is a revision to the design to the hotel phase 1 component of the Seaside Resort Development. Initially the project had 4 buildings, 3 buildings with keys and the 4th building would be the hospitality, exercise room, and they have now modified the plans were they would have 3 buildings and they will incorporate the hospitality intake section would be the first floor of the middle building. Mr. Medina went over presentation. Presentation included Location Map, Site Plan, Elevations Building 2, Elevations Buildings 1 and 3; staff recommended approval of revised design as a minor modification to the approved plans. There was questions by the Board for staff that were answered by Mr. Medina. Chair asked applicant to step forward to make any additional comments and speak on revisions. Mr. Fitzgerald answered questions from the Board. Board had no further questions for applicant. Chair Keller open public comment, seeing none, Chair Keller closed public comment.

On motion by Board Member Bani Khalsa and seconded by Board Member Kathleen Ventimiglia and passed by the following vote the Board of Architectural Review Approved project as presented.

RESULT:	**Approved**
AYES:	Kathleen Ventimiglia, Toby Keller, Bani Khalsa

NOES:	None
ABSENT:	Mitsugu Mori, Keith Mitchell

Appeal may be submitted in writing within 7 calendar days accompanied by the required fees to the Planning Commission.

7. REPORTS FROM BOARD MEMBERS

None.

8. REPORTS FROM STAFF

Open house on Broadway Office, bike event information will be emailed out to Board.

9. ADJOURNMENT

On motion, the meeting was adjourned at 6:30 p.m.

Respectfully submitted,

_____ _____

Rosa Salcedo, Board Clerk **Toby Keller, Chair**

CITY OF SEASIDE
STAFF REPORT

Item No.: 6.A.

TO: Board of Architectural Review

BY: Rick Medina, Senior Planner

DATE: June 20, 2018

SUBJECT: **BOARD OF ARCHITECTURAL REVIEW APPLICATION FOR THE APPROVAL OF A TREE REMOVAL AND REPLACEMENT PLAN AND RE-VEGETATION PLAN FOR THE PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT AND PRODUCT WATER CONVEYANCE FACILITIES. AN ENVIRONMENTAL IMPACT REPORT HAS BEEN PREPARED FOR THE PROJECT.**

PURPOSE & RECOMMENDATION

In accordance with the Mitigation and Monitoring Reporting Program, Board of Architectural Review approval is required for a tree replacement plan and re-vegetation plan for the RUWAP project biotic disturbances within the City of Seaside. Staff recommends approval of a tree replacement plan in accordance with the conditions of approval provided as Attachment 1 to the staff report.

BACKGROUND

The requested tree removal and tree replacement and re-vegetation is being undertaken by Marina Coast Water District for an area within the City oif Seaside located on the former Fort Ord. Regional Location Map is provided as Attachment 2. The work is occurring to install a water pipeline for the Product Water Conveyance Facilities (PWCF) project. This project is also shared by the Regional Urban Water Augmentation (RUWAP) and the Pure Water Monterey Groundwater Replenishment Project (PWM/GWR). A series of Environmental documents and addendums have been certified for these improvements.

Construction of the PWCF is a linear project with sections of the project occurring within the City of Marina, the City of Seaside, as well as in unincorporated areas of Monterey County, including within the former Fort Ord, within the California State University Monterey Bay (CSUMB) Campus, and Armstrong Ranch.

The MMRP and permit conditions require pre-construction surveys for several species including:

- Special-status plant species
- Special-status bat species
- Monterey dusky-footed woodrat (MDFW, Neotoma macrotis luciana)
- Avian nests
- Burrowing owl (BUOW, Athene cunicularia)
- American badger (Taxidea taxus) dens
- California legless lizard (CLL, Anniella pulchra)

Provided as Attachment 3 is a Pre-construction survey that was prepared by Denise Duffy and Associates as required by the Mitigation Monitoring and Reporting Program (MMRP) requirements and permit conditions for the purpose to identify special-status plant species and habitat for station A16+00 to A48+00 of the PWCF (Attachment 4). Attachment 4 identifies the approximate proposed alignment and the approximate limits of construction in which the surveys were conducted and approximate location of tree removal. The pre-construction survey provides the methods that were used during the surveys for identification of plant species, trees and habitat and provides the results of the survey efforts conducted on April 27, May 18, and May 30, 2018. An Arborist Report is provided as Exhibit A to the pre-construction survey.

The pipeline location and easement for this project as noted on Attachment 4 has been established by the RUWAP approvals and is not subject to any modification. The analysis of the pre-construction survey is to demonstrate the least intrusive means to existing plants, trees and habitat during project implementation.

STAFF ANALYSIS

Activities performed by DD&A staff to remain in compliance with the MMRP include:

1. Conduct Employee Education Program for any new construction personnel (4.4-R8, BT-1a)
2. Monitoring of the implementation of Best Management Practices (Bt-1a)
3. Monitoring the installation of environmentally sensitive area exclusion fence installation (BT-1b, 4.4-R11)
4. Monitoring the inspection of construction equipment mobilizing to the site to reduce the potential of spreading noxious weeds (BT-1c)
5. Monitor soil salvage effort for special-status annual plant species (BT-4)
6. Monitoring and relocation, if necessary, of special-status wildlife species (BT-1d, BT-1h, BT-1i)
7. Monitoring the installation of vegetation protection measures (4.4-R9, BT-1a - specific BMPs presented below)

The following BMPs will be implemented to reduce impacts to trees that are not proposed for removal:

- Trees located adjacent to the construction area shall be protected from damage by

construction equipment by the use of temporary fencing in combination with wrapping of trunks with protective materials where ever there may be construction present.

- Fencing shall consist of chain link, heavy duty snowdrift or plastic mesh, hay bales, or field fence. Portions of existing fencing may also be used.
- Fencing is not to be attached to the tree but free standing and self-supporting so as not to damage trees. Fencing shall be rigidly supported both vertically and horizontally and shall stand a minimum of height of six feet above grade.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials is not be allowed adjacent to trees on the property especially within fencedareas.
- Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees.
- Fenced areas and the trunk protection materials shall remain in place during the entire construction period.
- Pruning shall be conducted to avoid unnecessary injuries to the tree. General principals of pruning include placing cuts immediately beyond the branch collar, making clean cuts by scoring the underside of the branch first, and for live oak, avoiding the period from February through May. General principals of pruning include:
- All trees will be pre-assessed on how the tree will be pruned from the top down.
- Tree trimmers will favor branches with strong, U-shaped angles of attachment and where possible remove branches with weak, V-shaped angles of attachment and/or included bark.
- Lateral branches will be evenly spaced on the main stem of young trees and areas of fine pruning.
- Branches that rub or cross another branch will be removed where possible.
- Lateral branches will be no more than one-half to three-quarters of the diameter of the stem to discourage the development of co-dominant stems where feasible.
- In most cases trimmers will not remove more than one-quarter of the living crown of a tree at one time.
- Live branches on at least two-thirds of a tree's total height will be maintained wherever possible.
- All basal sprouts and vigorous epicormic sprouts will be removed where feasible.
- Crown reduction pruning is used only when absolutely necessary. Pruning cuts will be at a lateral branch that is at least one-third the diameter of the stem to be removed wherever possible.
- When it is necessary to remove more than half of the foliage from a branch it may be necessary remove the entire branch.
- If trees along/near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action. If the tree is determined to have declined to a point of eminent death, the tree will be considered as a removal and will require mitigation.

MCWD, DD&A, and MWH Constructors have reviewed construction means and methods to reduce the potential for tree removal. More specific survey work is being conducted in the field

to confirm approach; focused on the alignment from Marshall School through approximately the first 900-1200 feet. Proposed methods that would be implemented to reduce the number of trees that are currently planned for removal in this area include:

- Revised construction means and methods; including reduction in size of equipment (i.e., reduced impacts from the excavator boom movement)
- Reduction of construction footprint/width in areas where trees are located to reduce impacts from soil compaction and root damage from trenching and potential tree canopy damage

These revised construction means, and methods are recommended and endorsed by MCWD; it is estimated this would reduce tree removal to less than ten (10) trees, within the area identified above (the first 900-1200 feet from Marshall School), representing about a 50% retention of the trees formerly considered for removal.

The above means and methods are proposed to be employed in the stations above this area; however, additional survey work will be conducted to more accurately determine the feasibility of the revised construction means and methods on the remaining alignment. All BMPs and MMRP requirements will continue to be employed. Additional reports will follow as construction is set to start along other sections of the PWCF.

CONCLUSION

Based on the report prepared by Denise Duffy and Associates, City staff finds that the applicant will be in substantial compliance toward minimizing any impacts on special-status plants, trees and habitat and will include a replacement of all trees removed on a one for one basis in compliance with Section 8.54.070 and protection of trees in compliance with Section 8.54.080 of the Seaside Municipal Code.

ENVIRONMENTAL REVIEW

The RUWAP pipeline alignment has been covered in multiple certified environmental documents, they are summarized below:

- Regional Urban Water Augmentation Project (RUWAP) Environmental Impact Report (EIR), noted above
- Addendum No. 1 to the RUWAP EIR, dated October 2006;
- Addendum No. 2 to the RUWAP EIR, dated February 2007;
- RUWAP EA/Finding of No Significant Impact (FONSI), dated November 2009;
- Pure Water Monterey Groundwater Replenishment Project EIR, dated October 2015
- State Revolving Fund (SRF) Approved Environmental Package, dated November 2015;
- Addendum No. 3 to the RUWAP EIR, dated March 2016 (link below); and
- Record of Environmental Consideration for Real Property Outgrants to Construct and Operate Infrastructure in Support of Regional Water Projects on the Presidio of Monterey and the Ord Military Community, dated December 2016

- Addendum 3 to the Pure Water Monterey Project (PWM) /GWR EIR (October 2017)

Additionally, the pipeline is a shared component of the Pure Water Monterey Project (PWM) and RUWAP. Here is a link to the Final EIR for the Pure Water Monterey Groundwater Replenishment Project. This site also includes links to Addendum 3 to the PWM Project EIR addressing the shared pipeline.

http://purewatermonterey.org

Attached is a link to Addendum 3 to the RUWAP also addressing shared pipeline use between PWM and RUWAP.

http://www.mcwd.org/docs/agenda_minutes/2016-04-18_board/Item%209-C%20%20FINAL%20PUBLIC%20REVIEW%20RUWAP%20Shared%20Pipeline%20Addendum_%20No3_March%2020%20(2).pdf

ATTACHMENTS

1. Attachment 1 - RUWAP Conditions of Approval
2. Attachment 2 Regional Map docx
3. Attachment 3 - PWCF Pre-Con Survey Results -Sta A1600_A4800_1
4. Attachment 4 - Pipeline Location and Tree Removal Map

Conditions of Approval
RUWAP Tree Removal and Replacement
June 20, 2018

Project Specific:

Planning:

1. Except as modified by required conditions of approval, plans submitted for a building permit shall substantially conform to the Pre-Construction Survey dated June 15,2018.

Standard:

1. Board of Architectural Review approval shall be valid for a period of one (1) year from the date of approval of this project in accordance with S.M.C.S. 17.64.080. Project approval will become null and void if a building permit is not exercised within one (1) year from date of approval.

2. Proposed changes to the approved application(s) must receive approval from the Board of Architectural Review, unless approved by the Director as outlined in Seaside Zoning Code Section 17.64.090.C.

3. The applicant agrees as a condition and in consideration of the approval of this discretionary permit that it will defend, indemnify and hold harmless the City of Seaside or its agents, officers and employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void or annul this approval. The applicant will reimburse the City for any court costs and attorney's fees, which the City may be required by a court to pay as a result of such action. City may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his obligations under this condition. The City shall promptly notify the applicant of any such claim, action, or proceeding, and the City shall cooperate fully in the defense thereof.

4. Any proposed future development shall comply with the requirements of the Fire, Health, Planning, Code Enforcement, Building and Public Works Departments.

5. The project shall be responsible for all applicable local and/or regional development and/or impact fees including, but not limited to, sewer, water, and traffic fees, which shall be paid prior to building permit issuance.

6. Any work within the public right-of-way must conform to current engineering standards and shall require an encroachment permit from the Public Works Department.

7. All storm water runoff shall be contained and disposed of on site and the storm water retention system shall be reviewed and approved by the Public Works Department.

8. The proposed project shall comply with the applicable requirements of the Marina Coast Water District for the installation of new water fixtures and landscape irrigation equipment.

9. Water conservation fixtures shall be provided in the proposed project.

BOARD OF ARCHITECTURAL REVIEW APPLICATION RUWAP

This permit is hereby accepted upon the express terms and conditions hereof, and shall have no force or effect unless and until agreed to, in writing, by the applicant and property owner(s).

The undersigned hereby acknowledge the approved terms and conditions and agree to fully conform to, and comply with, said terms and conditions within the time frames approved by the City of Seaside Board of Architectural Review.

_____ _____

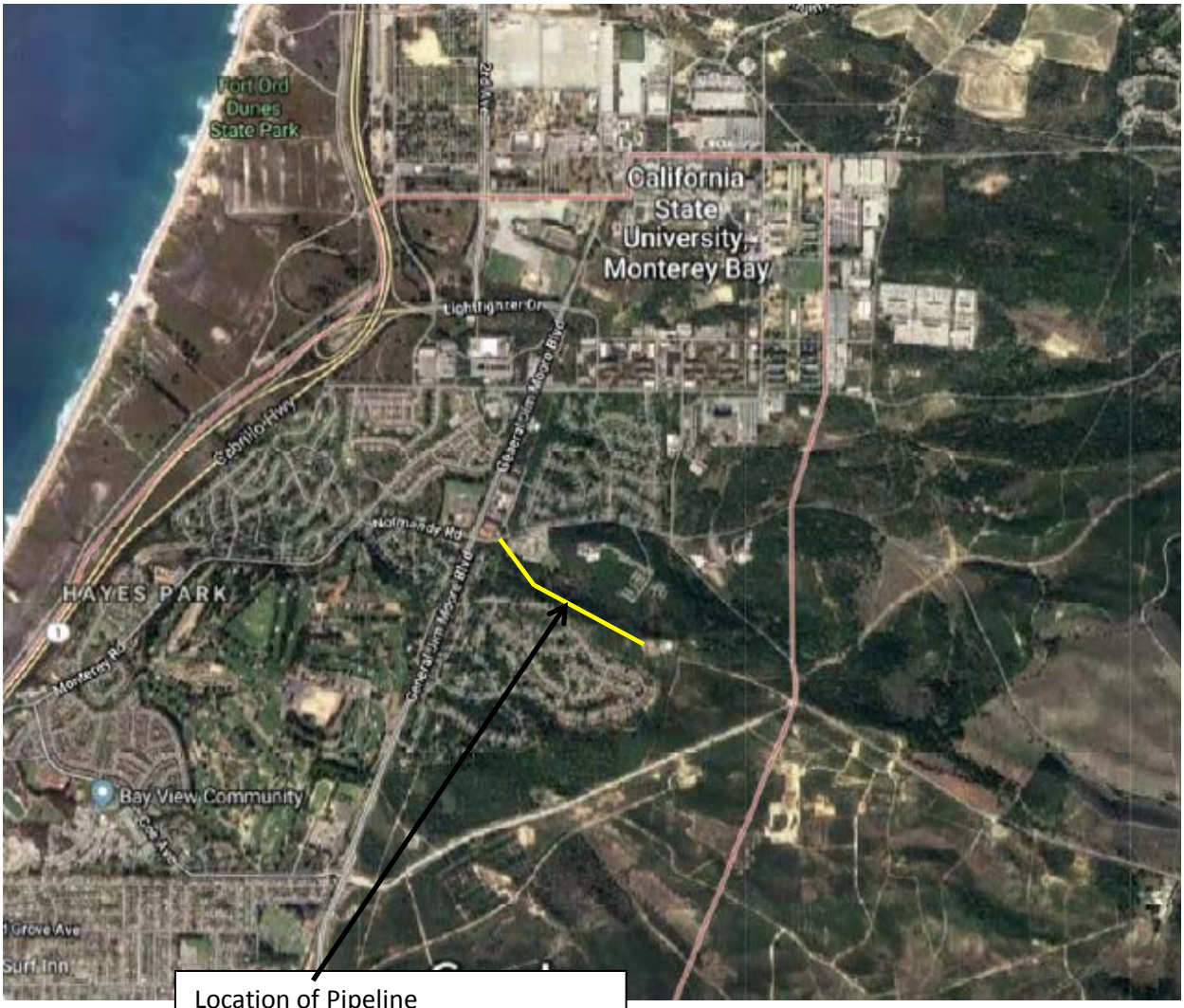
Applicant's Signature Date

_____ _____

Property Owner's Signature Date

Attachment 2

Regional Location Map



Location of Pipeline

Adjacent uses:

Marshall school to the North

Military Housing to the south

Marina Coast Well site to the east

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

June 15, 2018

Mike Wegley
Marina Coast Water District
11 Reservation Road, Marina, CA 93933-2099

Subject: Results of Pre-Construction Surveys for Station A16+00 to A48+00 of the Product Water Conveyance Facilities

Mr. Wegley,

Denise Duffy & Associates, Inc. (DD&A) conducted pre-construction surveys for the Product Water Conveyance Facilities (PWCF) shared by the Regional Urban Water Augmentation Project (RUWAP) and the Pure Water Monterey Groundwater Replenishment Project (PWM/GWR) as required by the Mitigation, Monitoring, and Reporting Plan (MMRP) requirements and permit conditions. Construction of the PWCF is a linear project with sections of the project occurring within the City of Marina, the City of Seaside, as well as in unincorporated areas of Monterey County, including within the former Fort Ord, within the California State University Monterey Bay (CSUMB) Campus, and Armstrong Ranch.

The MMRP and permit conditions require pre-construction surveys for several species including:

- Special-status plant species
- Special-status bat species
- Monterey dusky-footed woodrat (MDFW, *Neotoma macrotis luciana*)
- Avian nests
- Burrowing owl (BUOW, *Athene cunicularia*)
- American badger (*Taxidea taxus*) dens
- California legless lizard (CLL, *Anniella pulchra*)

The purpose of this document is to identify the methods that were used during the surveys and provide the results of the survey efforts conducted on April 27, May 18, and May 30, 2018 for station A16+00 to A48+00 of the PWCF (Figure 1). Figure 1 identifies the approximate proposed alignment and the approximate limits of construction in which the surveys were conducted.

Pre-Construction Survey Methodology

As construction of the PWCF is a linear project, sections of the project will be surveyed at different times, per the construction schedule. Additional pre-construction surveys will be conducted for segments of the PWCF as the project progresses. Through review of existing environmental documentation and pre-assessment of station A16+00 to A48+00 (Figure 1), DD&A determined that avian nesting species habitat, MDFW habitat, CLL habitat, and habitat for several special-status plant species is present within and adjacent to the PWCF. Pre-assessment of the survey area adjacent to the alignment determined that there was not suitable habitat for special-status bat species (lack of roosting habitat within 100 feet of proposed alignment), American badger (no burrows of sufficient depth and diameter to support this species), and BUOW (lack of grassland habitat with burrows of sufficient depth and diameter to support this species adjacent to the proposed alignment). Survey methodology for the species with potential habitat within and/or adjacent to the proposed alignment is presented below.

Special-Status Plant Species

Surveys for special-status plant species were conducted within the limits of construction, within 30 days prior to project construction, in accordance with Mitigation Measure (MM) 4.4-R1 identified in the MMRP. As the timing of the special-status plant surveys are dependent on the timing of construction rather than the blooming periods of the species, data from previous special-status plant surveys was also reviewed.

Monterey Dusky-Footed Woodrat

Pre-construction surveys for MDFW nests were conducted within 100 feet of the limits of construction (including all suitable habitat proposed for construction, ground disturbance, or staging) no more than three (3) days prior to construction, in accordance with MM BT-1i. DD&A Environmental Scientists walked the survey area and visually identified MDFW nests. Nests within the survey area were flagged for avoidance.

Avian Nesting

Prior to the start of construction activities, DD&A conducted pre-construction surveys within suitable nesting habitat from station A16+00 to A48+00, including a buffer of at least 50 feet from the proposed alignment. DD&A determined this was a suitable buffer based on the avian species with the potential to nest at the site and the existing ambient environment. Surveys for avian nesting species were conducted in the early morning hours. Surveys began one (1) hour before sunrise and continued until two (2) hours after sunrise (three (3) hours total). The surveys were conducted by actively searching and passively assessing (commonly referred to as "birding by ear") all trees and all appropriate habitats within the survey area. Nikon 8 X 42 binoculars and a Viper HD 20-60x85 spotting scope were used to search for birds and/or nests. Upon arrival to the site, the environmental scientists surveyed by slowly walking the survey area to visually scan for nesting birds. Surveyors also visually scanned for nesting habitat, and/or nesting behavior. Particular attention and survey effort was provided for any sounds or behavior suggesting the presence of a nearby nest (i.e., nestlings/fledglings begging for food, nest arrival calls by adults, territorial/alarm calls, food bearing adults, territoriality, etc.).

California Legless Lizard

Pre-construction surveys for CLL were conducted within suitable habitat located within the limits of construction in accordance with MM BT-1d, as identified in the MMRP, and the *California Legless Lizard & Coast Horned Lizard Capture, Storage, and Relocation Plan* (2017) prepared by DD&A for the Product Water Conveyance Facilities.

In accordance with MM BT-1d, pre-construction surveys for CLL followed a method called "high-grading-methodology", which includes surveying habitat where CLL are most likely to be seen and captured during early morning, high soil moisture, and overcast skies. The intensity of a continued search was adjusted based on the results of the first survey effort in the best habitat. A "three pass method" was used to locate and remove as many CLL as possible. The method includes a first pass to locate as many CLL as possible, and, if necessary (depending on the results of the first pass), a second pass and a third pass, each pass ideally locating fewer lizards than before. Vegetation was removed by hand, as necessary, to facilitate hand raking and search efforts for CLL in the soil under brush. If CLL were found during the first pass, an overnight period of no soil disturbance was observed before the second pass, and the same requirement was implemented after the second pass if CLL were found again. If no lizards were found during the second pass, a third pass was not required. In instances where no CLL were found during the first pass, a second pass was made immediately following the first pass. If no CLL were found on the second pass, no third pass was made. Installation of a barrier to prevent movement of CLL into adjacent property, in accordance with the three-pass method, was implemented if CLL were found at the limits of construction (project boundaries) and sufficient soft sand and vegetative cover were present to suspect presence of additional lizards in the immediate vicinity on the adjacent property.

Results

Special-Status Plant Species
A review of the historical data for this section of the proposed alignment shows no known populations of special-status plant species within or adjacent to the proposed alignment from station A16+00 to A48+00 (Figure 2). Surveys prior to the onset of construction were conducted April 27, May 18, and May 30, 2018. During the survey effort three polygons of Monterey spineflower (*Chorizanthe pungens* var. *pungens*) were observed at stations A28+05, A28+25, and from approximately station A40+00 to A40+97. DD&A marked the extents of each polygon with orange ground-marking paint.

Monterey Dusky-Footed Woodrat
A survey for MDFW nests from station A16+00 to A48+00 of the proposed project alignment was conducted on April 27, May 18, and May 30, 2018. MDFW nests were observed and flagged for avoidance during the survey. Numerous MDFW nests were found within or adjacent to the proposed alignment (Figure 3). Due to the density of the vegetation and difficulty of determining the boundary of construction impacts in the field the final count of MDFW (avoided and dismantled) will be documented during vegetation removal.

Avian Nesting
A survey for nesting birds from station A16+00 to A48+00 of the proposed project alignment was conducted on April 27, May 18 and May 30, 2018. No active avian nests were observed.

California Legless Lizard
DD&A performed CLL surveys were conducted on May 30, 2018. Following the "high grading-methodology", described above, all suitable habitat from station A16+00 to A48+00 was surveyed. No CLL were observed during the survey effort.

Tree Removal
Mountain Cascade Incorporated (MCI), the project contractor, contracted with Kurt Fouts, International Society of Arborist, Certified Arborist, to prepare an arborist report for station A16+00 to A48+00 of the proposed project alignment (Attachment A).

The arborist report determined that a total of three hundred sixty-four (364) trees will be affected by the pipeline installation (Figure 4). Two hundred forty-six (246) are under U.S. Army jurisdiction. One hundred eighteen (118), are under City of Seaside jurisdiction. Prior to implementation of the avoidance measures described above, the Arborist Report has estimated that three hundred eleven (311) trees are recommended for removal, (235 U.S. Army & 76 City of Seaside). Nearly all the trees recommended for removal are coast live oak (*Quercus agrifolia*). Five (5) Monterey pines (*Pinus radiata*), are also recommended for removal. The remaining 53 trees, (42 City of Seaside & 11 U.S. Army), can be retained and receive clearance pruning to prevent canopy damage from construction equipment.

Conclusion

Pre-Construction
DD&A conducted pre-construction surveys in accordance with the MMRP for the PWCF from station A16+00 to A48+00, on the dates identified above. Mitigation measures exist for several of the natural resources that were observed during the survey effort. Described below are the mitigation measures that should are applicable to this section of the PWCF, for the project to remain in compliance with all relevant environmental documentation.

PWM/GWR MM BT-4
Special-status plant species are known within the proposed alignment. Following vegetation clearing and pipeline installation all temporarily disturbed areas where special-status plant species are known to occur should be restored in accordance with the project-specific Salvage Plan, as required by MM BT-4. Specifically, Monterey spineflower populations have been marked in the field by DD&A, approximately 5-6 inches of topsoil from these polygons should be removed and stored adjacent to the proposed alignment for replacement following pipeline installation.

PWM/GWR MM BT-1k/RUWAP MM 4.4-R5/R6
No active avian nests were identified during the pre-construction survey effort. If construction/vegetation removal initiates within two weeks of the last survey date (May 30) no additional mitigation is necessary to remain in compliance with MM BT-1k. If construction/vegetation removal has not been initiated within two weeks of the survey date, additional surveys may be required.

PWM/GWR MM BT-1d/ RUWAP MM 4.4-R19
No CLL were observed during the May 30, 2018 survey effort. In accordance with MM BT-1d, DD&A will perform monitoring for CLL, during vegetation removal. After vegetation has been removed, DD&A biological monitors will search the exposed area for CLL. If CLL are found during construction monitoring, the protocols for salvage and relocation identified in the *California Legless Lizard & Coast Horned Lizard Capture, Storage, and Relocation Plan* (DD&A, 2017) shall be followed.

PWM/GWR MM BT-1i
Numerous MDFW nests were found within or adjacent to the proposed alignment. DD&A biological monitors will be on-site during vegetation removal to assist the project contractor with avoidance of MDFW nests. In the event that MDFW nests cannot be avoided, these resources will be dismantled by DD&A biological monitors prior to vegetation removal in accordance with MM BT-1i. MDFW nests (avoided and dismantled) will be documented during vegetation removal.

RUWAP MM 4.4-R7
Prior to tree removal and pruning the project proponent will comply with all necessary tree removal permit requirements from the relevant municipality (City of Seaside and U.S. Army). The project proponent will document total number of trees removed during the construction process and prepare a replanting plan in accordance with MM 4.4-R7. This plan shall include a list of appropriate species, planting specification, monitoring procedure, success criteria, and contingency plan if success criteria are not met.

Construction Phase Monitoring
DD&A has been contracted with Marina Coast Water District (MCWD) to ensure environmental compliance throughout the PWCF pipeline installation. For this portion of the alignment DD&A, working directly with MCWD, MWH Constructors (project construction manager), and MCI (project contractor), will monitor the following applicable biological resource mitigation measures:

- PWM/GWR MM
  - MM BT-1a
  - MM BT-1b
  - MM BT-1c
  - MM BT-1d
  - MM BT-1h
  - MM BT-4
- RUWAP MM
  - MM 4.4-R4
  - MM 4.4-R8
  - MM 4.4-R9
  - MM 4.4-R11
  - MM 4.4-R12
  - MM 4.4-R13
  - MM 4.4-R19
  - MM 4.4-R22

DD&A staff will be onsite to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered, in accordance with MM BT-1b. Activities performed by DD&A staff to remain in compliance with the MMRP include:

1. Conduct Employee Education Program for any new construction personnel (4.4-R8, BT-1a)
2. Monitoring of the implementation of Best Management Practices (Bt-1a)
3. Monitoring the installation of environmentally sensitive area exclusion fence installation (BT-1b, 4.4-R11)
4. Monitoring the inspection of construction equipment mobilizing to the site to reduce the potential of spreading noxious weeds (BT-1c)
5. Monitor soil salvage effort for special-status annual plant species (BT-4)
6. Monitoring and relocation, if necessary, of special-status wildlife species (BT-1d, BT-1h, BT-1i)
7. Monitoring the installation of vegetation protection measures (4.4-R9, BT-1a - specific BMPs presented below)

The following BMPs will be implemented to reduce impacts to trees that are not proposed for removal:

- Trees located adjacent to the construction area shall be protected from damage by construction equipment by the use of temporary fencing in combination with wrapping of trunks with protective materials where ever there may be construction present.
- Fencing shall consist of chain link, heavy duty snowdrift or plastic mesh, hay bales, or field fence. Portions of existing fencing may also be used.
- Fencing is not to be attached to the tree but free standing and self-supporting so as not to damage trees. Fencing shall be rigidly supported both vertically and horizontally and shall stand a minimum of height of six feet above grade.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials is not be allowed adjacent to trees on the property especially within fenced areas.
- Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees.
- Fenced areas and the trunk protection materials shall remain in place during the entire construction period.
- Pruning shall be conducted to avoid unnecessary injuries to the tree. General principals of pruning include placing cuts immediately beyond the branch collar, making clean cuts by scoring the underside of the branch first, and for live oak, avoiding the period from February through May. General principals of pruning include:
    - All trees will be pre-assessed on how the tree will be pruned from the top down.
    - Tree trimmers will favor branches with strong, U-shaped angles of attachment and where possible remove branches with weak, V-shaped angles of attachment and/or included bark.
    - Lateral branches will be evenly spaced on the main stem of young trees and areas of fine pruning.
    - Branches that rub or cross another branch will be removed where possible.
    - Lateral branches will be no more than one-half to three-quarters of the diameter of the stem to discourage the development of co-dominant stems where feasible.
    - In most cases trimmers will not remove more than one-quarter of the living

crown of a tree at one time.
    - Live branches on at least two-thirds of a tree's total height will be maintained wherever possible.
    - All basal sprouts and vigorous epicormic sprouts will be removed where feasible.
    - Crown reduction pruning is used only when absolutely necessary. Pruning cuts will be at a lateral branch that is at least one-third the diameter of the stem to be removed wherever possible.
    - When it is necessary to remove more than half of the foliage from a branch it may be necessary remove the entire branch.
- If trees along/near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action. If the tree is determined to have declined to a point of eminent death, the tree will be considered as a removal and will require mitigation.

MCWD, DD&A, and MWH Constructors have reviewed construction means and methods to reduce the potential for tree removal. More specific survey work is being conducted in the field to confirm approach; focused on the alignment from Marshall School through approximately the first 900-1200 feet. Proposed methods that would be implemented to reduce the number of trees that are currently planned for removal in this area include:

- Revised construction means and methods; including reduction in size of equipment (i.e., reduced impacts from the excavator boom movement)
- Reduction of construction footprint/width in areas where trees are located to reduce impacts from soil compaction and root damage from trenching and potential tree canopy damage

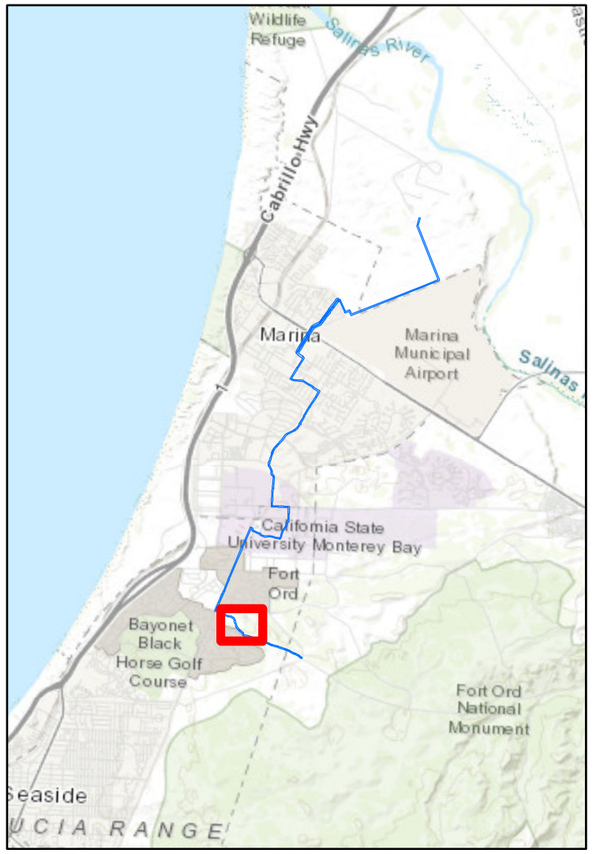
These revised construction means, and methods are recommended and endorsed by MCWD; it is estimated this would reduce tree removal to less than ten (10) trees, within the area identified above (the first 900-1200 feet from Marshall School), representing about a 50% retention of the trees formerly considered for removal.

The above means and methods are proposed to be employed in the stations above this area; however, additional survey work will be conducted to more accurately determine the feasibility of the revised construction means and methods on the remaining alignment. All BMPs and MMRP requirements will continue to be employed.

Additional reports will follow as construction is set to start along other sections of the PWCF. Thank you for contracting DD&A to compete these environmental services. Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Matthew Johnson
Senior Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.



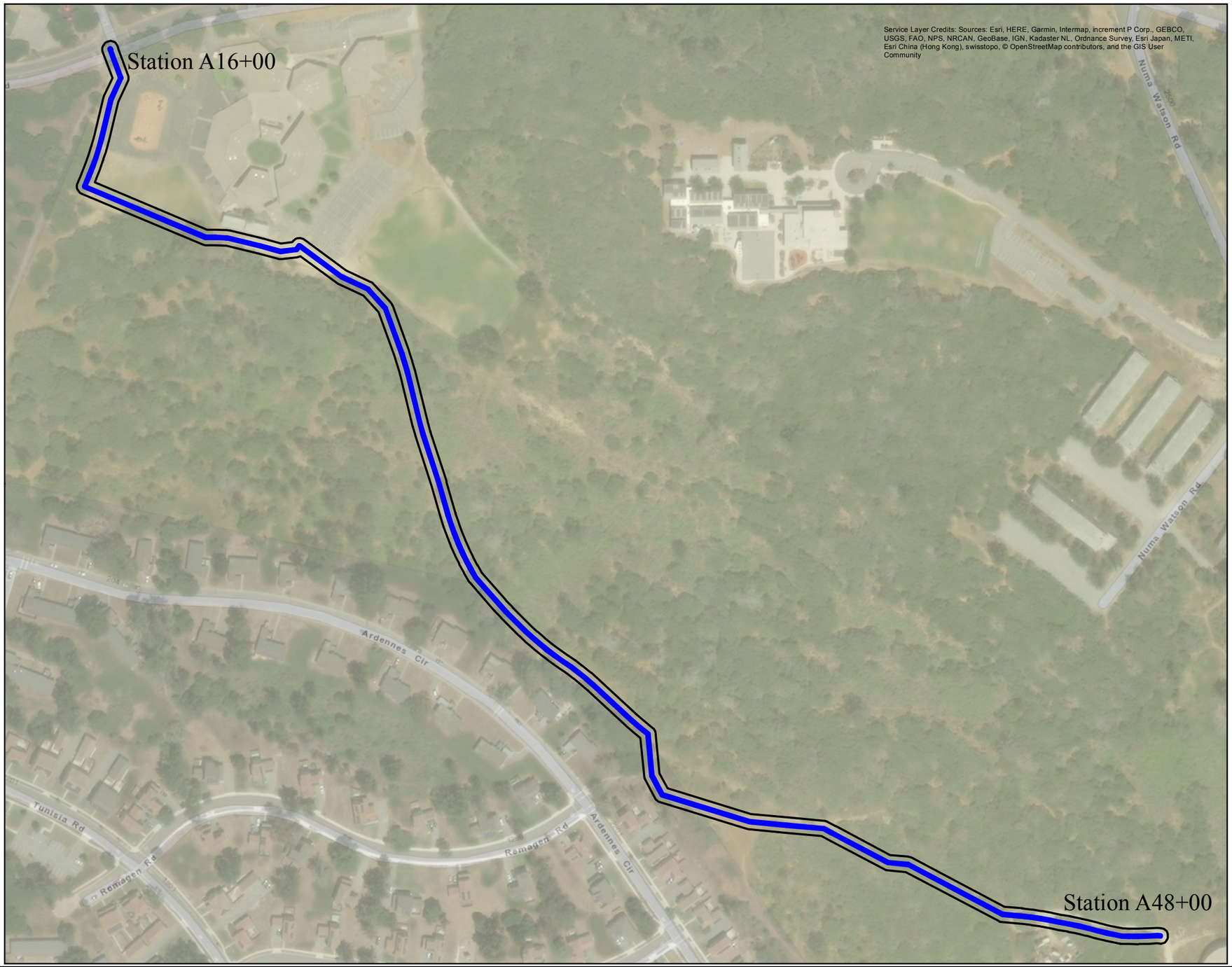
Centerline Station A16+00-

Approximate Limits of Construction

N

0 25 50 100
Meters

0 100 200 400
Feet



Approximate Proposed Alignment and Limits of Construction

Date: 5/29/2018
Scale: 1 in = 220 feet
Project: 2017-42

Monterey | San Jose
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Environmental Consultants Resource Planners
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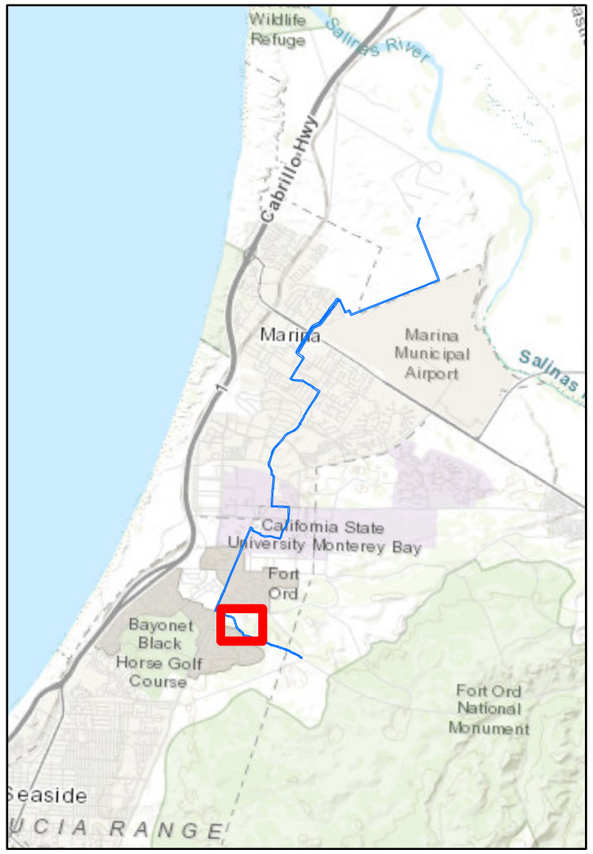
Monterey, CA 93940
(831) 373-4341

Figure
1

F:\GIS\GIS_Projects\2017-42 MCWD RUWAP\Maps\STAA16_48\Figure 1 Survey Area Sta A16-48.mxd



Centerline Station A16+00-

Approximate Limits of Construction

N

0 25 50 100
Meters

0 100 200 400
Feet

Special-Status Plant Species Locations

Date: 5/30/2018
Scale: 1 in = 220 feet
Project: 2017-42

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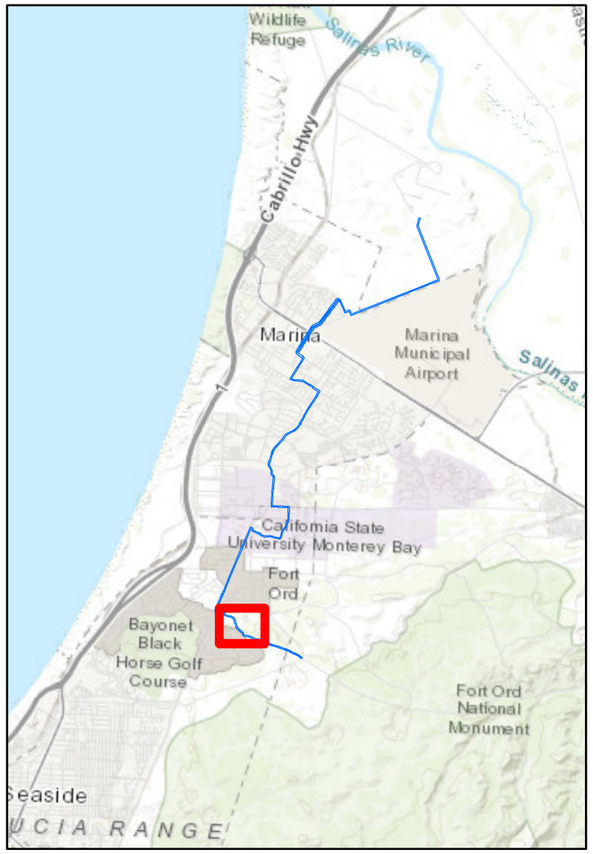
Monterey, CA 93940
(831) 373-4341

Figure
2

F:\GIS\GIS_Projects\2017-42 MCWD RUWAP\Maps\STAA16_48\Figure 2 Special-Status Plants.mxd



Centerline Station A16+00-

Approximate Limits of Construction

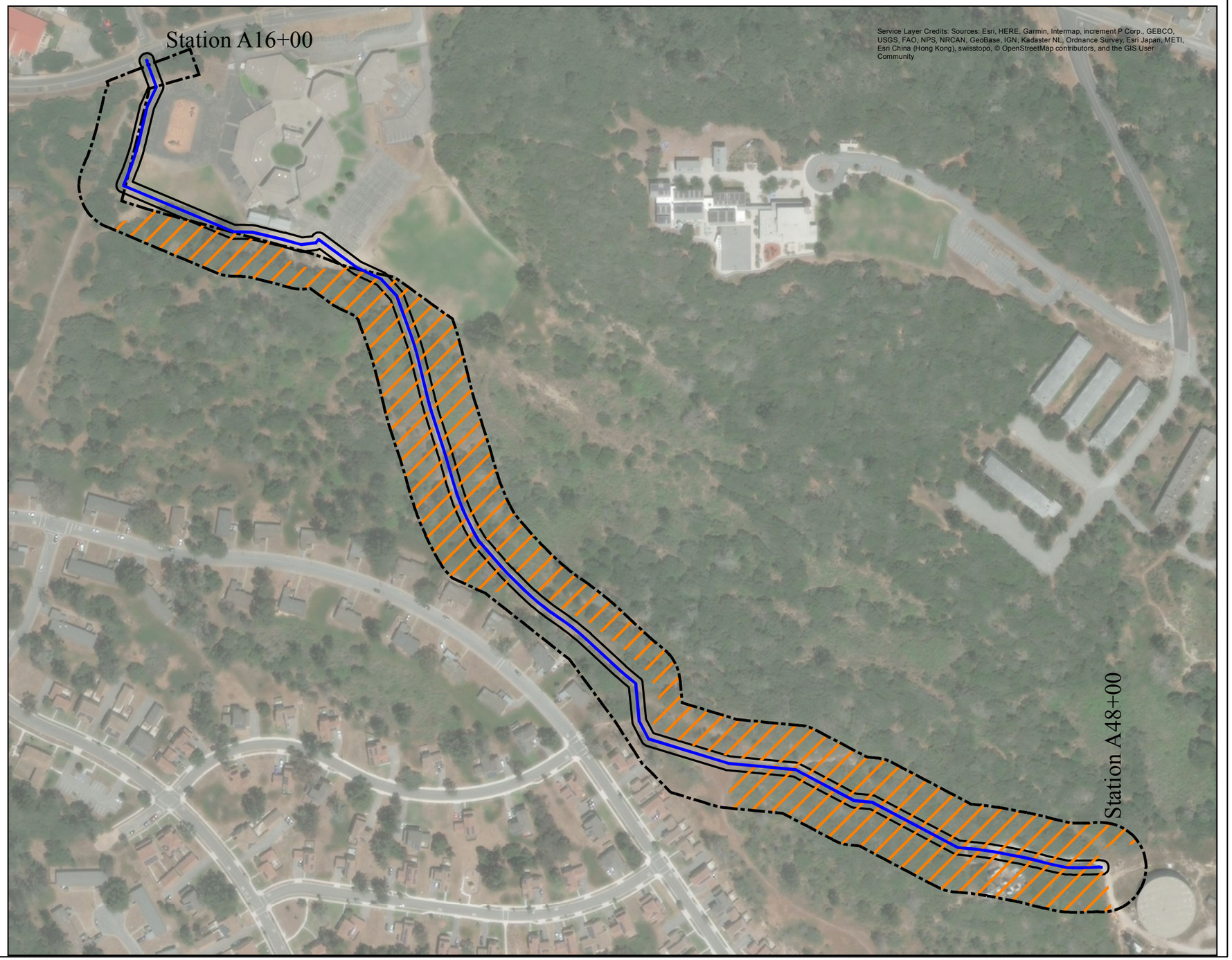
MDFW Nest Survey

MDFW Nests

N

0 25 50 100
Meters

0 125 250 500
Feet



Montery Dusky-Footed Woodrat Survey Area and Results

Date: 5/31/2018

Scale: 1 in = 240 feet

Project: 2017-42

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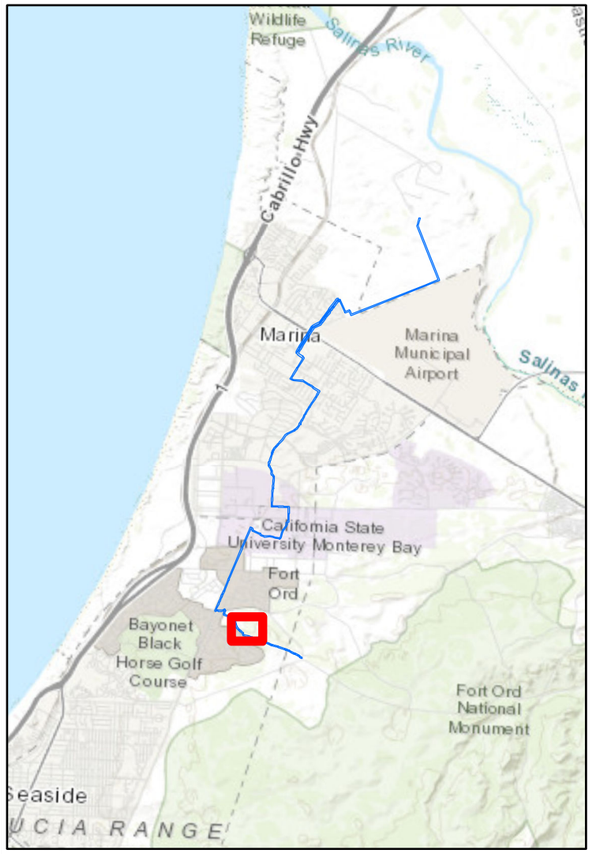
Figure
3

F:\GIS\GIS_Projects\2017-42 MCWD RUWAP\Maps\STAA16_48\Figure 3 MDFW Nest Locations.mxd

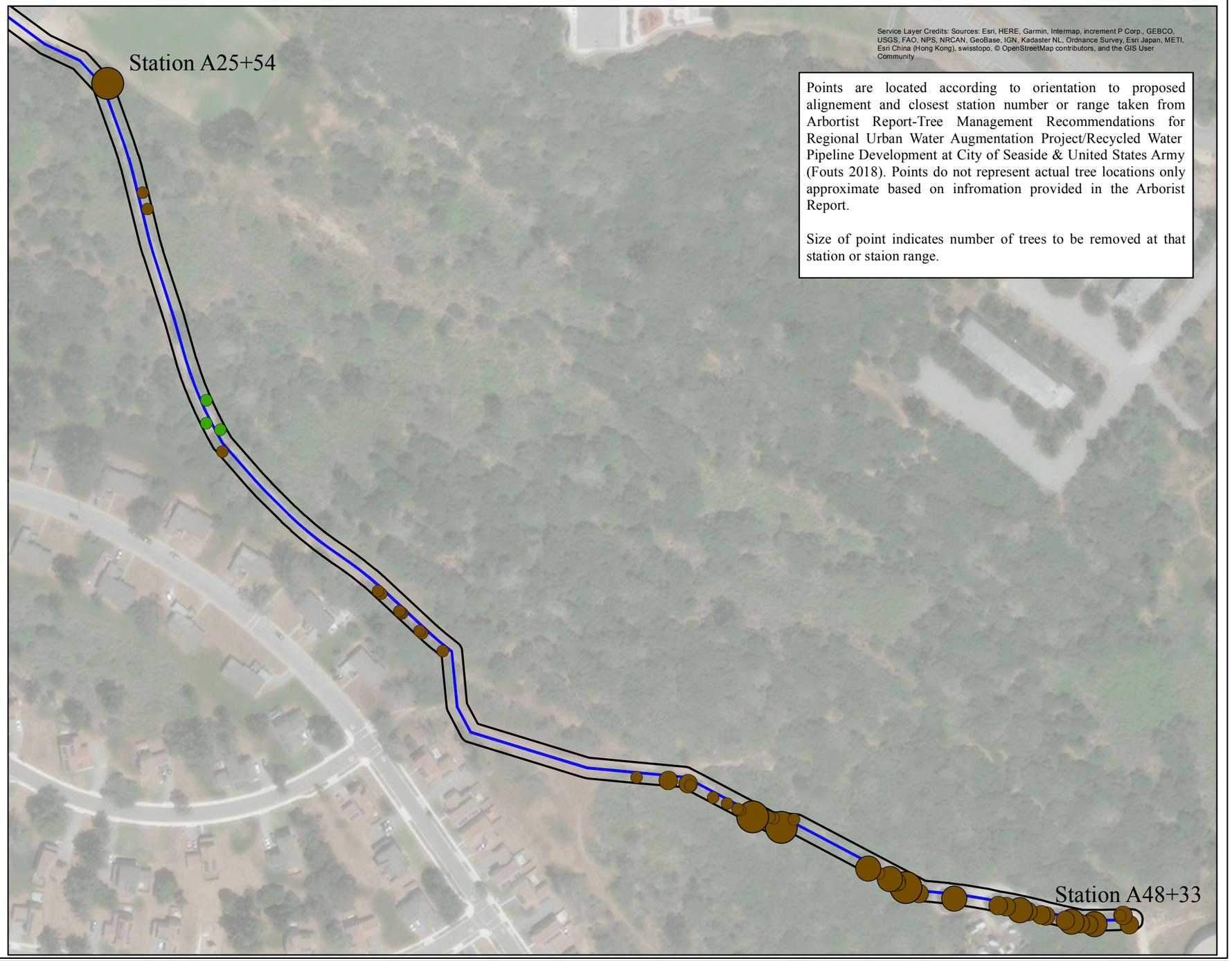


Pinus radiata *Quercus agrifolia*

1 - 3	1 - 3
4 - 9	4 - 9
10 - 17	10 - 17
18 - 31	18 - 31

N

0 25 50 100
Meters
0 75 150 300
Feet



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Points are located according to orientation to proposed alignement and closest station number or range taken from Arbortist Report-Tree Management Recommendations for Regional Urban Water Augmentation Project/Recycled Water Pipeline Development at City of Seaside & United States Army (Fouts 2018). Points do not represent actual tree locations only approximate based on infromation provided in the Arborist Report.

Size of point indicates number of trees to be removed at that station or staion range.

Trees Recommended For Removal From Station A16+00 to A48+00

Date: 6/6/2018
Scale: 1 in = 160 feet
Project: 2017-42

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Figure
4

F:\GIS\GIS_Projects\2017-42 MCWD RUWAP\Maps\STAA16_48\Figure 4 Tree Removal Locations.mxd

Attachment A – Arborist Report

ARBORIST REPORT-

Tree Management Recommendations for:

Regional Urban Water Augmentation Project/ Recycled Water Pipeline Development at:

City of Seaside & United States Army

Prepared for:
Mr. Travis Headen
PO Box 5050
Livermore, CA 94551

May 30, 2018

Prepared By:
Kurt Fouts
ISA – Certified Arborist WE-0681A

Kurt Fouts
Arborist Consultant

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Table of Contents

SUMMARY

The project involves the installation of a 24" recycled water pipeline along a utility easement that includes both City of Seaside and United States Army jurisdictions. To install the pipeline, the removal or pruning of protected trees will be required. The City of Seaside Municipal Code designates trees with a height of 10 feet or greater, or a trunk circumference of 20" or greater (6.36 inches diameter) measured at 2 feet above grade, as "protected" trees. No information was available at the time of this report as to the protected status of trees under United States Army jurisdiction.

Three hundred sixty-four (364) trees that will be affected by the pipeline installation were assessed. Two hundred forty-six (246) are under U.S. Army jurisdiction. One hundred eighteen (118), are under City of Seaside jurisdiction. Three hundred eleven (311) trees are recommended for removal, (235 U.S. Army & 76 City of Seaside). Nearly all the trees recommended for removal are coast live oak (*Quercus agrifolia*). Five Monterey pines (*Pinus radiata*), are also recommended for removal. The remaining 53 trees, (42 City of Seaside & 11 U.S. Army), can be retained and receive clearance pruning to prevent canopy damage from construction equipment.

Most of the trees inspected were in fair condition. Some were in good or poor condition. Most of the trees requiring removal are because they cannot be clearance pruned without significant damage to the tree. Some trees are recommended for removal due to excessive root loss, as a result of the pipe line trenching activities, too close to tree trunk.

The pipeline project meets City of Seaside criteria for removal of protected trees and replacement trees may be required, planted at a one to one ratio for each tree removed.

Background

Mountain Cascade is the contractor responsible for installing the recycled water pipeline. The contractor, Mountain Cascade, has requested my services, to inspect the trees on this site and the impacts that may affect them. Further, to provide a report with my findings, including recommendations to assist them on the best methods to manage the trees potentially impacted by the pipe line project.

Assignment

- Provide an arborist report that includes an assessment of the trees within the project area. The assessment is to include the jurisdiction, approximate location, species, size, condition and disposition.
- Provide disposition and management recommendations for trees influenced by the project.

To complete this assignment, the following services were performed:

- **Site Review:** Locations of the proposed pipeline installation with reviewed on site with Mr. Travis Headen, Project Manager for Mountain Cascade Inc. and Mr. Brian Jensen, Sr. Construction Manager for MWH Constructors. Field decisions for pipe installation locations during the site review were made to minimize tree impacts.

- **Construction Impact Assessment:** Determine management of individual trees, based on the anticipated construction impacts. Provide recommendations for pruning or removal of affected trees.

- **Tree Location Recording:** Record location of individual trees based on existing engineer "station" stakes, placed in 100-foot increments. *Trees are designated as north or south of footpath access, beginning at station 44 + 33 and ending at station 25 + 50.*

Limits of the Assignment

- The information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspections on 5/24/2018 and 5/25/2018.
- Tree removal count is approximate. *Final removal count will be made after clearance pruning and tree removal phase is completed.*
- Tree locations by station are + or – 10 feet.
- **Ordinance regarding 'protected' status of trees on United State Army property not available at the time of this report. Determination of permitting requirements for removal of U.S. Army trees, is not included in this report.**
- The inspection is limited to visual examination of accessible items without climbing, dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in questions may not arise in the future.

Purpose and use of the report

The report is intended to identify all the trees within the plan area that could be affected by this project. The report is to be used by the contractor, their agents, and the approval authorities for the City of Seaside and the United States Army, as a reference for tree management decisions of trees affected by the pipeline installation.

Resources

All information within this report is based on site inspections performed on 5/24/2018 and 5/25/2018.
Referenced plan set provided was:

- Plat to Accompany Description of a 20' Wide Easement Through Parcel 1 (Vol. 28 Surv. Pg. 133) dated 5/13/10.
- *Station locations referenced in Tree Assessment Chart – Appendix A, are shown on this plan set.*

OBSERVATIONS

The property, a utility easement and adjacent lands is an approximately one-half mile strip, beginning at engineer's station 48 + 33 and ending at station 26 + 03, above a public school. The upper section is primarily composed of undeveloped, dense, low growing, coast live oak woodland (Image #1). In the middle section adjacent to Ardennes Circle, the tree density thins out and the tree size increases. In the lower section most of the trees are young coast live oaks located immediately adjacent to a road cut. A few mature Monterey pines and live oaks are located further off the road cut. The topography ranges from flat to gently sloping to steeply sloping. located further off the road cut. The topography ranges from flat to gently sloping to steeply sloping.

Image #1 – coast live oaks (Station 46 + 42) – typical size and grove density of upper section.

DISCUSSION

Construction Impacts

Most trees assessed are in fair condition and are suitable for retention based on their condition. A majority of the trees requiring removal are because they cannot be clearance pruned beyond excavator boom swing, without significant damage to the tree. Some trees are recommended for removal due to excessive root loss, because of pipe line trenching activities too close to tree trunk.

Impacts to the trees from the excavator machine include, potential tree canopy damage from the excavator boom, root damage from trenching, and root loss from soil compaction. Due to the degree of swing required for the boom, there is certain to be significant tree canopy damage, to many trees, including irreparable damage, unless mitigation methods are employed. Clearance pruning is the mitigation method performed on identified trees, to allow sufficient distance for the excavator boom swing to operate, without damaging the tree canopy.

Significant root loss due to trenching too close to tree trunks will occur to some trees. In these cases, the percentage of root loss will significantly affect the trees ability to uptake water. The trees root loss and ability to deliver water will exceed the trees water requirement, resulting in decline and eventually tree mortality. Also, when trenching occurs at less than three times the trunk diameter, tree stability may be affected as anchoring roots responsible for tree stability are lost. Additionally, some root loss will occur due to soil compaction from the weight of the excavator and track which causes soil compaction.

Tree Removal Inventory

Three hundred eight (308), of the three hundred eleven (311) trees, recommended for removal are coast live oak, (234 U.S. Army & 74 City of Seaside). The remaining tree species recommended for removal are three (3), Monterey pines, (1 U.S. Army & 2 City of Seaside).

The 311 trees recommended for removal is the maximum number estimated for removal. It is possible that some adjustments may be made in the field during pipeline installation, allowing clearance pruning to some trees (rather than removal), so that they may be retained. Some oak trees in the upper section have multiple trunks. In cases where only one trunk requires removal, the action is considered pruning rather than removal since other trunks on the tree will be retained.

Seventy -six (76) trees to be removed are within City of Seaside jurisdiction, have heights of 10 feet or greater, *or* trunk diameters of 6.36 inches (measured at 2 feet above grade) and are considered “protected trees”. For each City of Seaside tree removed, replacement trees may be required, planted at a one to one ratio for each tree removed, in a location designated by the approval authority.

Species List

TOTAL SUBJECT TREES: **364 Trees**

357	Coast Live Oak	(*Quercus agrifolia*)
5	Monterey Pine	(*Pinus radiata*)
2	Monterey Cypress	(*Hesperocyparis macrocarpa*)

TOTAL SUBJECT TREES – CITY OF SEASIDE: 118 Trees

TOTAL SUBJECT TREES – UNITED STATES ARMY: 246 Trees

TOTAL SUBJECT TREES RECOMMENDED FOR REMOVAL CITY OF SEASIDE: **76 Trees**

74	Coast Live Oak	(*Quercus agrifolia*)
2	Monterey Pine	(*Pinus radiata*)

TOTAL SUBJECT TREES RECOMMENDED FOR REMOVAL UNITED STATES ARMY: **235 Trees**

234	Coast Live Oak	(*Quercus agrifolia*)
1	Monterey Pine	(*Pinus radiata*)

Condition Rating

A trees condition is determined by an assessing both the **health** and **structure**, then combining the two factors to reach a *condition rating*. Tree condition is rated as good, fair poor, or dead. Each trees condition was assessed and recorded in the Tree Assessment Chart, Appendix A.

Tree Evaluation and Recording Methods

Site evaluations were made on 5/24/2018 and 5/25/2018.

The health and structural **condition** of each tree was assessed and recorded.

The recorded data is included in the *Tree Assessment Chart, Appendix A,* of this report.

Descriptions for tree assessment methodology used in the Tree Assessment Chart are included in *Criteria for Tree Assessment* - Appendix B, of this report.

Due to the density of trees in many areas of the upper and lower sections, some of the trees were recorded as groups. Trunk diameters for tree groups were recorded as a range, with the smallest and largest trunk diameter of the group listed. Tree canopies were listed as an average size for the group.

No criteria were available for “protected” trees within the U.S. Army jurisdiction. A minimum nominal tree diameter of 4 inches was assigned to all trees evaluated. This is a typical average “definition of a tree” diameter size, used by surrounding jurisdictions in similar oak woodland settings.

CONCLUSION

The project involves the installation of a 24" recycled water pipeline through a utility easement including both City of Seaside and United States Army jurisdictions. The subject property in this report is primarily composed of undeveloped, dense, low growing oak woodland. The topography ranges from flat to gently sloping to steeply sloping.

To install the pipeline, the removal or clearance pruning of protected trees will be required. The City of Seaside Municipal Code designates trees with height of 10 feet or greater, or a trunk circumference of 20" or greater (6.36 inches diameter), as "protected" trees. No information was available at the time of this report as to the protected status of trees under United States Army jurisdiction.

Three hundred sixty-four (364) trees that will be affected by the pipeline installation were assessed. Two hundred forty-six (246) are under U.S. Army jurisdiction. One hundred eighteen (118), are under City of Seaside jurisdiction. Three hundred eleven (311) trees are recommended for removal, (235 U.S. Army & 76 City of Seaside). Nearly all the trees recommended for removal are coast live oak (*Quercus agrifolia*). Five Monterey pines (*Pinus radiata*), are also recommended for removal. The remaining 53 trees, (42 City of Seaside & 11 U.S. Army), can be retained and receive clearance pruning to prevent canopy damage from construction equipment.

Most of the trees inspected were in fair condition. Some were in good or poor condition.

Most of the trees requiring removal are because they cannot be clearance pruned without significant damage to the tree. Some trees are recommended for removal due to excessive root loss, as a result of the pipe line trenching activities, too close to tree trunk.

Impacts to the trees from the excavator machine include, soil compaction, root damage from trenching and potential tree canopy damage from the excavator boom. Clearance pruning of the trees recommended for retention, is the mitigation method recommended to reduce the potential impacts from the excavator boom movement.

Locations of the proposed pipeline installation with reviewed on site with Mr. Travis Headen, Project Manager for Mountain Cascade Inc. and Mr. Brian Jensen, Sr. Construction Manager for MWH Constructors. Field decisions for pipe installation locations during the site review were made to minimize tree impacts.

The 311 trees recommended for removal is the maximum number estimated for removal. It is possible that some adjustments may be made in the field during pipeline installation, allowing clearance pruning to some trees (rather than removal), so that they may be retained. The tree removal count is approximate. Final removal count will be made after clearance pruning and tree removal phase is completed. The pipeline project meets City of Seaside criteria for removal of protected trees and replacement trees may be required, planted at a one to one ratio for each tree removed.

RECOMMENDATIONS

1. Obtain all necessary permits prior to removing or significantly altering any trees on site.

2. Remove trees highly affected by the project.

3. Clearance prune selected trees to reduce construction impacts.

4. All tree work should follow good forestry and arboricultural practices as established in the Best Management Practices of the International Society of Arboriculture (ISA) and the American National Standards Institute series, *Safety Requirements in Arboriculture Operations* ANSI Z133-2017.

5. Plant replacement trees for trees removed, if required.

This tree evaluation and recommendations are based on my findings and represent decisions based on my experience. Final decisions on the removal or retention of trees will be made by the approval authority.

Respectfully submitted,

Kurt Fouts

Kurt Fouts ISA Certified Arborist WE0681A

Kurt Fouts
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826 Monterey Avenue
Capitola, CA 95010
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kurtfouts1@outlook.com

City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
1 to 4	U.S. Army	48 + 33	South	coast live oak (*Quercus agrifolia*)	8 -12"	12'X15'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
5 to 10	U.S. Army	48+30	North	coast live oak	4-10"	10'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
11	City of Seaside	48+28	North	coast live oak	8"	12'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
12 to 14	U.S. Army	48+24	North	coast live oak	6"-8"	10'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
15	City of Seaside	48 +22	North	coast live oak	8"	12'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
16	City of Seaside	48 + 21	North	coast live oak	9"	10'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
17 to 28	U.S. Army	47 + 80	South	coast live oak	4" - 10"	10'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
29 to 33	U.S. Army	47 + 70	South	coast live oak	4" - 10"	12'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
34 to 40	U.S. Army	47+ 59	South	coast live oak	4" - 10"	12'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
41 to 54	U.S. Army	47 + 44	South	coast live oak	4" - 10"	14'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
55 to 62	U.S. Army	47 + 34	South	coast live oak	4" - 10"	14'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.

Kurt Fouts
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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
63 to 68	U.S. Army	47 + 08	South	coast live oak (*Quercus agrifolia*)	4" - 6"	15'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
69 to 74	U.S. Army	46 + 98	South	coast live oak	4" - 11"	15'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
75 to 82	U.S. Army	46 + 78	South	coast live oak	6" - 10"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
83 to 92	U.S. Army	46 + 68	South	coast live oak	4" - 10"	15'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
93 to 99	U.S. Army	46 + 42	South	coast live oak	6" - 10"	18'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
100 to 105	U.S. Army	46 + 28	South	coast live oak	6" - 11"	18'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
106	City of Seaside	45 + 85	North	coast live oak	11"	12'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
107	City of Seaside	45 + 84	North	coast live oak	10"	17'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
108	City of Seaside	45 + 84	North	coast live oak	11"	16'X8'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
109	City of Seaside	45 + 84	North	coast live oak	11"	18'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
110	U.S. Army	45 + 62	North	coast live oak	9", 12"	18'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.

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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
111 to 120	US. Army	45 + 58	South	coast live oak (*Quercus agrifolia*)	8" -10"	18'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
121	City of Seaside	45 + 48	North	coast live oak	7"	9'X6'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
122	City of Seaside	45 + 46	North	coast live oak	9"	9'X8'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
123 to 131	U.S. Army	45 + 12 to 45 + 8	South	coast live oak	9 " - 12"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
132 to 155	U.S. Army	45 + 8 to 44 + 88	South	coast live oak	4" - 11"	15'X9'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
156 to 161	City of Seaside	44 + 79 to 44 + 64	South	coast live oak	7" - 11"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
162 to 164	U.S. Army	44 + 71	South	coast live oak	9" - 11"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
165 to 174	U.S. Army	44 + 68 to 44 + 44	South	coast live oak	6" - 11"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
175 to 176	U.S. Army	44 + 37 to 44 + 35	South	coast live oak	6", 10"	12'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
177	U.S. Army	44 + 22	South	coast live oak	12"	12'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
178 to 194	U.S. Army	44 + 11 to 43 + 88	South	coast live oak	5" - 12"	18'X15'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.

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May 30, 2018

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195 to 221	City of Seaside	43 + 0 to 42 + 63	South	coast live oak (*Quercus agrifolia*)	7" -12"	18'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
222	City of Seaside	42 + 85	North	coast live oak	10"	12'X12'	Fair	Remove	Cannot be clearance pruned without significant damage to tree.
223	City of Seaside	42 + 84	North	coast live oak	10", 6"	12'X12'	Fair	Prune	Cannot be clearance pruned without significant damage to tree.
224	City of Seaside	42 + 77	North	coast live oak	10"	15'X12'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
225	City of Seaside	42 + 75	North	coast live oak	10"	12'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
226	City of Seaside	42 + 74	North	coast live oak	10"	12'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
227	City of Seaside	42 + 54	North	coast live oak	10"	12'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
228	City of Seaside	42 + 51	North	coast live oak	10"	12'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to tree.
229	City of Seaside	42 + 46	North	coast live oak	8"	6'X6'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.
230	City of Seaside	42 + 46	North	coast live oak	8"	8'X8'	Poor	Remove	Cannot be clearance pruned without significant damage to tree. Fair health, poor structure, trunk nearly horizontal.
231	City of Seaside	42 + 33	North	coast live oak	9"	8'X8'	Poor	Remove	Cannot be clearance pruned without significant damage to tree. Fair health, poor structure, trunk nearly horizontal.

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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
232 to 262	U.S. Army	42 + 70 to 42 + 16	South	coast live oak (*Quercus agrifolia*)	4" - 12"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
263	City of Seaside	42 + 18	North	coast live oak	8"	10'X10"	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.
264	City of Seaside	42 + 15	North	coast live oak	9"	15'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
265	City of Seaside	42 + 14	North	coast live oak	10"	15'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
266	City of Seaside	42 + 13	North	coast live oak	9"	15'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
267	City of Seaside	42 + 13	North	coast live oak	11"	15'X10'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.
268 to 270	City of Seaside	42 + 12 to 41 + 94	South	coast live oak	7" - 10"	12'X10'	Fair	Remove	Pipe trench is within 1' of tree trunks.
271	City of Seaside	41 + 94	South	coast live oak	8"	10'X10'	Fair	Remove	Pipe trench is within 1' of tree trunks.
272	City of Seaside	41 + 74	North	coast live oak	7"	8'X8'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.
273	City of Seaside	41 + 74	North	coast live oak	7"	8'X8'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.
274	City of Seaside	41 + 62	North	coast live oak	10"	15'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment. Fair health, poor structure, trunk nearly horizontal.

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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
275 to 277	U.S. Army	41 + 74 to 41 + 54	South	coast live oak (*Quercus agrifolia*)	11",7"	18'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
278	U.S. Army	41 + 52	South	coast live oak	8"	15'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
279 to 281	City of Seaside	41 + 41	South	coast live oak	7"-9"	16'X8'	Fair to Poor	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree. At least one tree with poor health.
282 to 287	U.S. Army	41 + 41 to 41 + 3	South	coast live oak	5" - 12"	18'X6'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
288 to 289	City of Seaside	41 +24 to 41 + 3	South	coast live oak	7"- 12"	18'X6'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
290 to 296	City of Seaside	40 + 75	South	coast live oak	7" - 10"	15'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
297	City of Seaside	40 + 67	North	coast live oak	12"	18'X20'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
298	City of Seaside	40 + 57	North	coast live oak	8"	12'X10'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
299 to 300	U.S. Army	40 + 40 to 40 + 20	South	coast live oak	5' - 12"	15'X8'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
301	U.S. Army	37 + 90	South	coast live oak	15"	20'X20'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
302	U.S. Army	36 + 23	South	coast live oak	10"	15'X15'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair structure, poor health.

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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
303	U.S. Army	36 + 15	South	coast live oak (*Quercus agrifolia*)	9"	15'X15'	Poor	Prune	Prune to provide adequate clearance from excavation equipment. Fair structure, poor health.
304	U.S. Army	36 + 10	South	coast live oak	10"	15'X8'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
305	U.S. Army	35 + 73	South	coast live oak	11"	18'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
306	U.S. Army	35 + 71	South	coast live oak	11"	18'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
307	U.S. Army	35 + 49	South	coast live oak	10"	20'X30'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
308	U.S. Army	35 + 24	South	coast live oak	14"	15'X15'	Poor	Remove	Cannot be clearance pruned without significant damage to trees.
309	U.S. Army	35 + 22	South	coast live oak	11"	15'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
310	U.S. Army	35 + 21	South	coast live oak	9"	15'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
311	U.S. Army	34 + 83	South	coast live oak	6"	15'X7'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
312	U.S. Army	34 + 73	South	coast live oak	12"	15'X15'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
313	U.S. Army	34 + 71	South	coast live oak	10"	18'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.

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5/30/2018

City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
314	U.S. Army	34 + 41	South	coast live oak (*Quercus agrifolia*)	14",12", 10"	20'X35'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
315	City of Seaside	33 + 51	North	Monterey cypress (*Hesperocyparis macrocarpa*)	15"	38'X30'	Good	Prune	Prune to provide adequate clearance from excavation equipment.
316	City of Seaside	32 + 58	North	coast live oak	11",10", 9"	16'X22'	Good	Prune	Prune to provide adequate clearance from excavation equipment.
317	U.S. Army	32 + 46	South	coast live oak	17", 8"	18'X25'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
318	U.S. Army	31 + 56	South	coast live oak	18"	20'X40'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
319	U.S. Army	31 + 50	South	coast live oak	8"	15'X8'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
320	U.S. Army	31 + 50	South	coast live oak	8"	15'X8'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.
321	City of Seaside	31 + 21	North	Monterey Pine (*Pinus radiata*)	7"	35'X18'	20'X10'	Remove	Cannot be clearance pruned without significant damage to trees.
322	City of Seaside	31 + 10	North	Monterey cypress	16"	55'X40'	20'X20'	Prune	Prune to provide adequate clearance from excavation equipment.
323	U.S. Army	31 + 2	South	Monterey Pine	6"	15'X6'	Poor	Remove	Cannot be clearance pruned without significant damage to trees.
324	City of Seaside	30 + 75	North	Monterey Pine	16"	60'X40'	Good	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.

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City of Seaside & U.S. Army - Tree Assessment & Recommendations Chart -Appendix A

May 30, 2018

Tree #	Jurisdiction/ Seaside or U.S. Army	Tree Location/ Station Recording (in feet)	Tree Orientation/ North or South Side of Pathway	Species	Trunk Diameter @ 2' a.g.	Crown Height & Spread	Condition Rating	Prune / Remove	Comments
325	City of Seaside	30 + 25	North	coast live oak (*Quercus agrifolia*)	18", 16"	20'X40'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
326	City of Seaside	30 + 15	South	coast live oak	22"	30'X40'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
327	City of Seaside	29 + 95	North	Monterey Pine (*Pinus radiata*)	8"	35'X10'	45'X30'	Prune	Prune to provide adequate clearance from excavation equipment.
328	City of Seaside	29 + 75	North	coast live oak	13"	18'X18'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
329	City of Seaside	29 + 65	North	Monterey Pine	24"	65'X35'	Good	Prune	Prune to provide adequate clearance from excavation equipment.
330	City of Seaside	29 + 23	South	coast live oak	10",9"	15'X30'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
331	City of Seaside	29 + 13	South	coast live oak	14"	15'X35'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
332 to 333	City of Seaside	27 + 63 to 27 + 41	North	coast live oak	7" -8"	10'X10'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
334	City of Seaside	27 + 39	South	coast live oak	13"	20'X20'	Good	Prune	Prune to provide adequate clearance from excavation equipment.
335	City of Seaside	27 + 34	North	coast live oak	14"	15'X20'	Fair	Remove	Pipe trench is within 1' of tree trunk or cannot be clearance pruned without significant damage to tree.
336 to 358	City of Seaside	27 + 28 to 25 + 54	North	coast live oak	7" -12"	12'X10'	Fair	Remove	Cannot be clearance pruned without significant damage to trees.

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359	City of Seaside	27 + 20	North	coast live oak (*Quercus agrifolia*)	10", 10", 9"	25'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
360	City of Seaside	27 + 03	North	coast live oak	16", 14"	20'X40'	Fair	Prune	Prune to provide adequate clearance from excavation equipment. Fair structure, poor health. Consider removal.
361	City of Seaside	26 + 33	South	coast live oak	13"	20'X20'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
362	City of Seaside	26 + 03	South	coast live oak	11"	20'X15'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
363	City of Seaside	25 + 90	North	coast live oak	12",10", 8"	20'X40'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.
364	City of Seaside	25 + 50	North	coast live oak	14"	20'X20'	Fair	Prune	Prune to provide adequate clearance from excavation equipment.

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APPENDIX B – CRITERIA FOR TREE ASSESSMENT CHART

Following is an explanation of the data used in the tree evaluations. The data is incorporated in the *Tree Assessment Chart, Appendix A.*

Trunk Diameter and Number of Trunks:

Trunk diameter as measured at 2 feet above grade. The number of trunks refers to a single or multiple trunked tree. Multiple trunks are measured at 2 feet above grade.

Health Ratings:

Good: A healthy, vigorous tree, reasonably free of signs and symptoms of disease

Fair: Moderate vigor, moderate twig and small branch dieback, crown may be thinning and leaf color may be poor

Poor: Tree in severe decline, dieback of scaffold branches and/or trunk, most of foliage from epicormics

Structure Ratings:

Good: No significant structural defects. Growth habit and form typical of the species

Fair: Moderate structural defects that might be mitigated with regular care

Poor: Extensive structural defects that cannot be abated.

Suitability for Preservation Ratings:

Rating factors:

Tree Health: Healthy vigorous trees are more tolerant of construction impacts such as root loss, grading and soil compaction, then are less vigorous specimens.

Structural integrity: Preserved trees should be structurally sound and absent of defects or have defects that can be effectively reduced, especially near structures or high use areas.

Tree Age: Over mature trees have a reduced ability to tolerate construction impacts, generate new tissue and adjust to an altered environment. Young to maturing specimens are better able to respond to change.

Species response: There is a wide variation in the tolerance of individual tree species to construction impacts.

Rating Scale:

Good: Trees in good health and structural condition with potential for longevity on the site

Fair: Trees in fair health and/or with structural defects that may be reduced with treatment procedures.

Poor: Trees in poor health and/or with poor structure that cannot be effectively abated with treatment. Trees can be expected to decline or fail regardless of construction impacts or management . The species or individual may possess characteristics that are incompatible or undesirable in landscape settings or unsuited for the intended use of the site.

Construction Impacts:

Rating Scale:

High: Development elements proposed that are located within the Tree Protection Zone that would severely impact the health and /or stability of the tree. The tree impacts cannot be mitigated without design changes. The tree may be located within the building footprint.

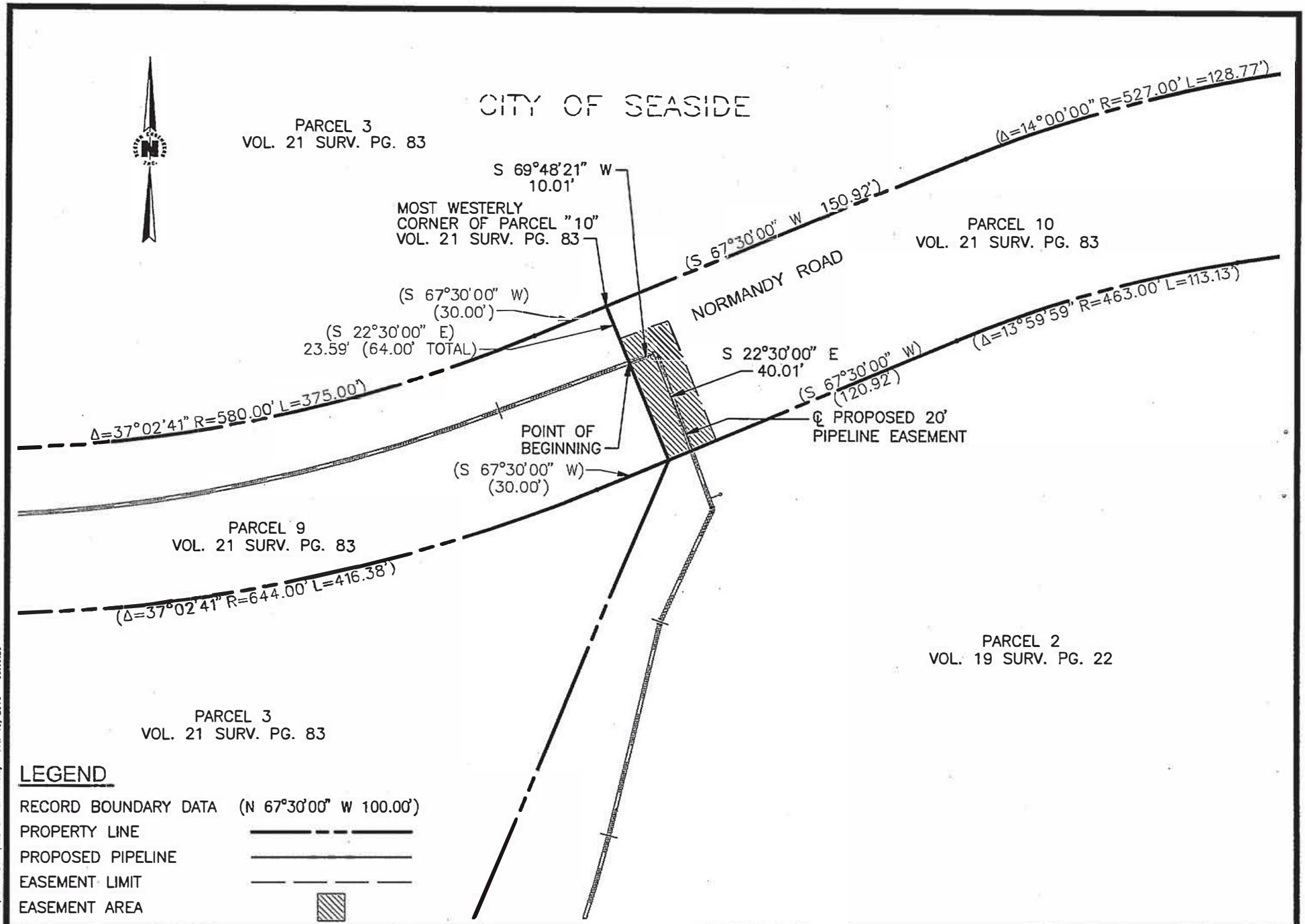
Moderate: Development elements proposed that are located within the Tree Protection Zone that will impact the health and/or stability of the tree and can be mitigated with tree protection treatments.

Low: Development elements proposed that are located within or near the Tree Protection Zone that will have a minor impact on the health of the tree and can be mitigated with tree protection treatments.

None: Development elements will have no impact on the health and stability of the Tree.

Tree Protection Zone (TPZ):

Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, particularly during construction or development.



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PLAT TO ACCOMPANY DESCRIPTION
OF A 20' WIDE EASEMENT THROUGH PARCEL 10

COUNTY OF MONTEREY, CALIFORNIA

SCALE:	1"= 50'
DATE:	5/13/10
SHEET:	1 OF 1
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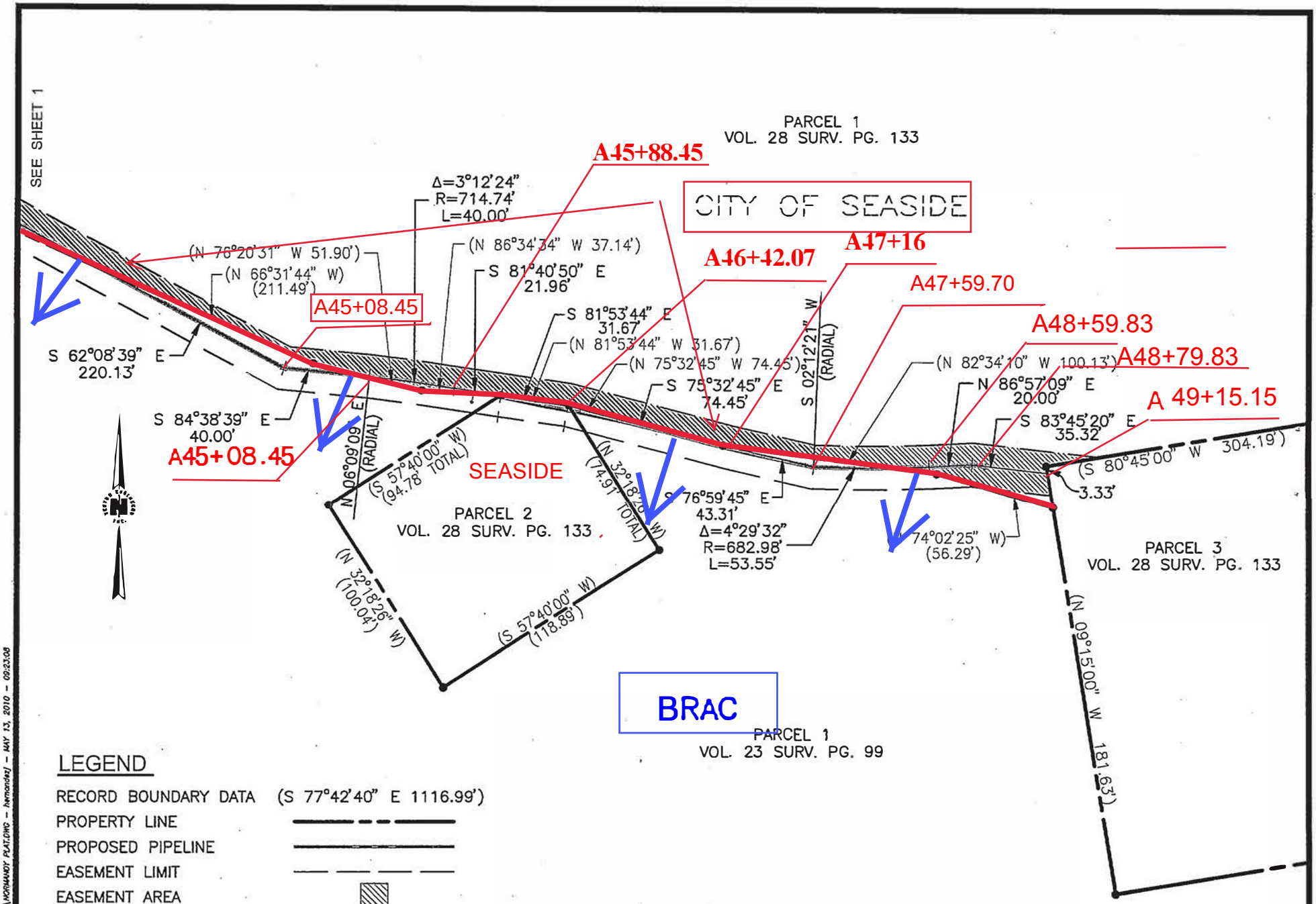

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(VOL. 28 SURV. PG. 133)

COUNTY OF MONTEREY, CALIFORNIA

SCALE: 1"= 60'
DATE: 5/13/10
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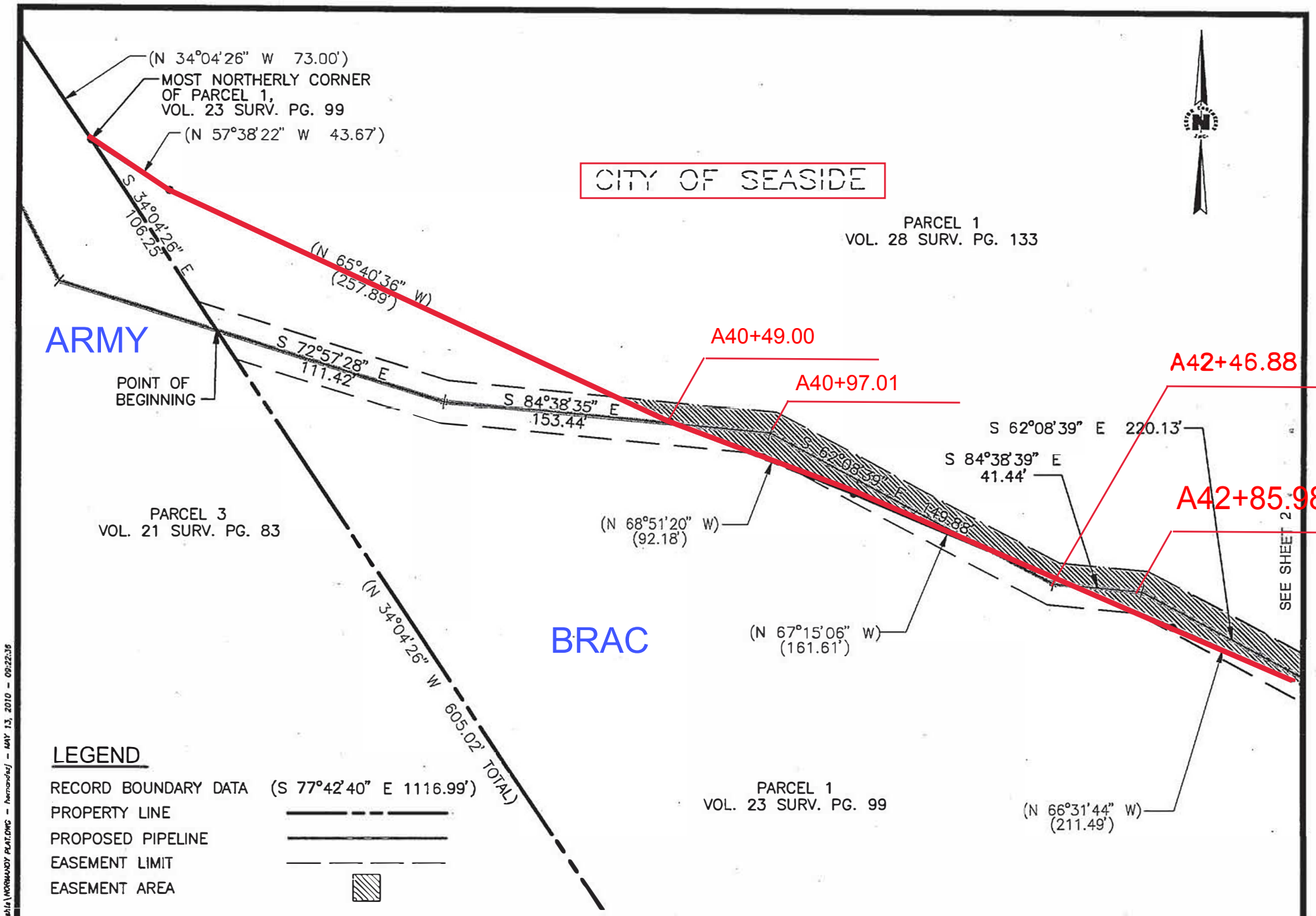

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COUNTY OF MONTEREY, CALIFORNIA

SCALE:	1"= 60'
DATE:	5/13/10
SHEET:	1 OF 2
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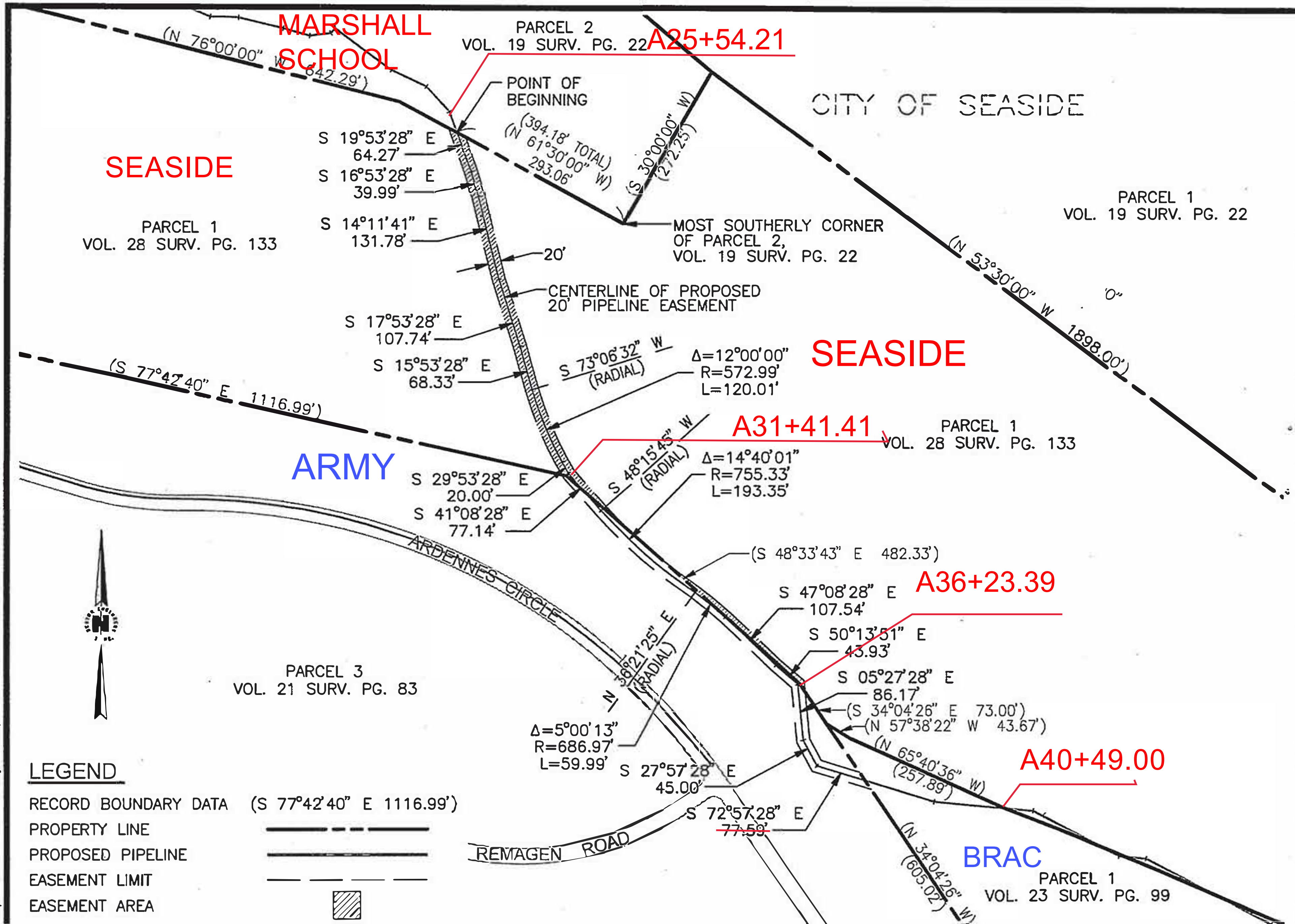

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(VOL. 28 SURV. PG. 133)

COUNTY OF MONTEREY, CALIFORNIA

SCALE:	1"= 200'
DATE:	5/13/10
SHEET:	1 OF 1
WO:	6637.03

Appendix D - Tree Work Standards and Qualifications

All tree work, removal, pruning, planting, shall be performed using industry standards of workmanship as established in the Best Management Practices of the International Society of Arboriculture (ISA) and the American National Standards Institute series, *Safety Requirements in Arboriculture Operations* ANSI Z133-2017.

Contractor licensing and insurance coverage shall be verified.

Trees to be removed shall be cut into smaller manageable pieces consistent with safe arboricultural practices, and carefully removed so as not to damage any surrounding trees or structures. The trees shall be cut down as close to grade as possible. Tree removal is to be performed by a qualified contractor with valid City Business/ State Licenses and General Liability and Workman's Compensation insurance.

City of Seaside – Protected Tree Definition & Removal Criteria

8.54.020 Definitions.
"Tree" means a woody perennial plant which usually but not necessarily has a single trunk and a height of ten feet or more, or has a circumference of twenty inches measured at twenty-four inches above the ground; references in this chapter to "tree" include the plural "any tree or trees."

8.54.040 Permit – Application requirements – Issuances.

C. The director of public works, or his designee, shall inspect the tree and the side, or the site, of the proposed planting and shall consider the following factors in deciding whether to issue or deny the permit:

1. The condition of the tree with respect to disease, general health, damage, public nuisance, danger of falling, proximity to existing or proposed structures, interference with utility services or public improvements, age or remaining life span, and whether or not the tree acts as host for a plant which is parasitic to other species of trees which are in danger of being infested or exterminated by the parasite.

2. The necessity of the requested action to construct improvements, or allow economic or other enjoyment of the property.

3. The topography of the land and the effect of the requested action on erosion, soil retention, water retention, and diversion or increased flow of surface waters.

4. The number, species, size and location of existing trees in the area and the effect of the requested action in terms of providing shade, protection from wind, air pollution reduction, historic value and scenic beauty and its effect upon the health, safety, aesthetics and general welfare of the city as a whole.

5. The protection of privacy for the property on which the tree is located or for adjacent property.

6. Proximity to public streets or thoroughfares. The director of public works or his designee shall determine any tree in question is part of a scenic vista or fronts on a public thoroughfare or park.

7. Good forestry practices such as, but not limited to, the number of healthy trees a given parcel of land will support. (Ord. 871 § 1 (Exh. A), 1997; Ord. 706 § 2 (Exh. A), 1986)

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided by the appraiser/consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as the quality of any title.
2. The appraiser/consultant can neither guarantee nor be responsible for accuracy of information provided by others.
3. The appraiser/consultant shall not be required to give testimony or to attend court by reason of this appraisal unless subsequent written arrangements are made, including payment of an additional fee for services.
4. Loss or removal of any part of this report invalidates the entire appraisal/evaluation.
5. 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(s) to whom it is addressed without written consent of this appraiser/consultant.
6. This report and the values expressed herein represent the opinion of the appraiser/consultant, and the appraiser/consultant's fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.
7. Sketches. Diagrams. Graphs. Photos. Etc., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.
8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.
9. When applying any pesticide, fungicide, or herbicide, always follow label instructions.
10. No tree described in this report was climbed, unless otherwise stated. We cannot take responsibility for any defects which could only have been discovered by climbing. A full root collar inspection, consisting of excavating around the tree to uncover the root collar and major buttress roots, was not performed, unless otherwise stated. We cannot take responsibility for any root defects which could only have been discovered by such an inspection.

CONSULTING ARBORIST DISCLOSURE STATEMENT

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 risk of living near trees, Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly 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 specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

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Attachment 4

Pipeline Location and Tree Removal Survey