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March 5, 2015

Noyo Headlands Unified Design Group
Attn: Michael Grady, Susan Kelley, and George Reinhardt

PO Box 2553
Fort Bragg, CA 95437

RE: Mill Site Creek Daylighting – Road Map
Former Georgia-Pacific Mill Site
Fort Bragg, CA 95437
Anticipated Study Area:
APNs 008-020-13, 008-151-22, 008-161-08, 008-171-05, 008-171-07,
018-010-67, 018-020-01

Dear NHUDG,

Thank you for the opportunity to prepare a Road Map for the Noyo Headlands Unified Design Group's concept for a proposed Maple and Alder Creeks Daylighting project on the former Georgia-Pacific Mill Site.

This Road Map identifies the process for determining the feasibility of daylighting these two creeks so that NHUDG and project proponents may ultimately determine how or if to proceed with the project. In this Analysis, NHUDG has brought about a significant contribution to the process of development and conversion of the former mill site.

The daylighting of these two creeks can be much more than simply an environmental restoration project. The daylighting of these two creeks has the potential to knit together two parts of the city that have been separated ever since the City was founded in the mid 1800s (**Exhibit 1**). The fact that these two creeks are in the center of town means that they would connect the Central Business District – a walking district – with the Coastal Trail. The daylighted creeks would include multi-use trails alongside them, as well as interpretive signage describing the complete natural and cultural history of the lands through which they pass, including Native American and Historic uses, local geomorphology and watersheds.

The Road Map presents the exciting prospect of centrally-located daylighted creeks and their accompanying trails "opening the door" and leading the way to innovative development of the mill site. Pedestrian and bicycle access from Laurel/Redwood/Alder/Oak streets to the Coastal Trail and the Fort Bragg Landing area could be stupendously beautiful, successful, and make Fort Bragg's coast and the Noyo Headlands an outstanding place.

The daylighted creeks would be an attractive amenity, guiding the flavor and tenor of the vanguard developers of the former Mill Site. Compare this image with the first new-millennium developers who would have rather only an abandoned and scarred industrial site with which to work – with a coastal trail that is just out of reach – and you can see the potential for exponential positive impact on our community such an amenity will have in attracting the next wave of economic settlers.

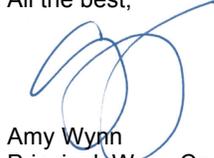
Encl: n/a
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Fort Bragg is ready for this. Fort Bragg has been asking for this throughout numerous public meetings in a myriad of venues: Coast Vision 2020, Fort Bragg Coastal Trail, Georgia-Pacific Mill Site Specific Plan, Blueprint 2020, Industrial Arts Center, and NHUDG's own Design Strategies for a Sustainable Future.

This is a significant opportunity to help our community strengthen and grow in the best way possible. NHUDG is actively seeking a partner (or partners) to make this vision a reality.

Please let us know if you have any questions or comments regarding this exciting potential.

All the best,



Amy Wynn
Principal, Wynn Coastal Planning

ALDER AND MAPLE CREEKS DAYLIGHTING PROJECT – ROAD MAP

1.0 PROJECT DESCRIPTION

The goal of this project is to daylight and restore the functions of two creeks, Alder Creek and Maple Creek, totaling approximately 2,500 linear feet, on a former industrial site (**Exhibits 1 & 2**).

Twenty years ago, 160 feet of Jolly Giant Creek in Arcata were daylighted. The project began as an environmental education project at Arcata high school. The school's biology instructor got a fisheries department class at Humboldt State University to do surveys and other feasibility study work. Two of the university students continued to work on the project and wrote a design plan. The biology teacher approached a regional non-profit, the Redwood Community Action Agency, which obtained initial grants from the California Department of Water Resources Urban Streams Restoration Program. Citizens got involved and formed the Friends of Jolly Giant and began a campaign of presentations, input at city meetings, letter-writing, and other activities to convince the city to allow the neighborhood to plan a natural landscape park as a with passive recreational opportunities in former mill site property downstream. (Pinkham, R. Daylighting: New Life for Buried Streams; Rocky Mountain Institute, 2000)

The creek daylighting project on the Former Georgia-Pacific Mill Site has the potential to be a regional success story, illustrating the community's dedication to restoring coastal ecology, protecting environmental resources, and providing public access to the coast that is an amenity to the community and to the future owners and developers of the former Georgia-Pacific Mill Site. Additionally, this project aims to create construction & management jobs for the coastal region utilizing local labor as well as maximizing the local volunteer force.

2.0 PROJECT GOALS

This project aims to restore functionality to two buried perennial streams that cross industrial property (former Georgia-Pacific Mill Site), the whole of which has been going through a Specific Plan process to determine future uses. Daylighting will establish a new starting point (or baseline) for planning future uses based on a healthy restored ecosystem and stream complex.

2.1 PROJECT ELEMENTS:

- Restore and enhance the ecological viability of riparian ecosystems.
- Provide flood management and erosion control benefits, including stormwater quality treatment.
- Promote public awareness and local stewardship of streams.
- Will comply with all laws and regulations pertinent to the project site
- Enhance community understanding of native people's presence on these coastal bluffs. Possible discovery and documentation of native sites

2.2 PROJECT BENEFITS

ENVIRONMENTAL:

- Water Quality
- Education and Recreation
- Habitat Enhancement
 - Was likely a Bishop Pine Forest, based on remnants and historical maps; potential for restoration
- Advance the cleanup of toxins.
- Greater awareness of natural and social history.
- Fulfill Coastal Commission requirement of maintaining and enhancing wetlands.
- Groundwater recharge
- Small Hydro-Power Potential
- Improve City of Fort Bragg's storm drain system capacity

ECONOMIC (direct and indirect):

- Enhance property values in areas near the daylighted creeks
 - There is an opportunity to conduct a research study to gather and analyze quantitative data about the positive economic affect of such projects on a community.
- Attractive amenity to other development
- Tourism attraction, lodging amenity
- Builds sense of community
 - Awarding project to local contractors brings employment income to local families (if privately produced project)
 - Light maintenance of facility employs local community members
- Opportunity to sell wetland and/or riparian mitigation credits to developers, private and public alike, such as CalTrans, County of Mendocino and public works projects
- Infrastructure cost savings – potential to reduce burden on stormdrain infrastructure
 - A one-time investment in daylighting a creek compares well with repeated replacement of obsolete and failing culverts over time.

3.0 SITE HISTORY

The lands of the former Georgia Pacific Mill Site have been inhabited for at least 13 millennia based on cross dating of cultural resources (projectile points) found at locally-investigated sites. In 2011, the Fort Bragg Native American Archaeological District was created, having 24 contributing archaeological sites, at least two of which are within the Study Area for the proposed Maple & Alder creek daylighting project. This archaeological district reflects persistent and intensive Native American use of the headlands between the Noyo River and Pudding Creek, from the Upper Archaic Period to present. It is the only oceanfront location on the Mendocino Coast continuously occupied by Native Americans. The setting is a discrete portion of the local coast between two major watercourses, with good access to intertidal resources, fish and a rare outcropping of Franciscan chert. This area may also be a Traditional Cultural Property for members of the Sherwood Valley Rancheria.

(adapted from City of Fort Bragg Coastal Trail Phase II Subsequent EIR, 12/2014)

Georgia-Pacific Corporation operated a lumber production facility onsite from 1973 until 2002. Prior to the plant closure, logs were received by truck, unloaded, and stored in the log storage areas. Logs were then removed from inventory, debarked, and milled. Milled lumber was then either shipped green, kiln dried, or air dried on site. Finished lumber was transported by rail or flatbed trailers. Bark and wood refuse were transported by truck, conveyer, or pneumatic system to the power plant where they were burned to generate steam for electricity. Historically, the facility operations were conducted in the sawmills, planer buildings, a fence plant, a power plant, lumber storage areas, and various maintenance facilities.

(from <http://www.envirostor.dtsc.ca.gov/public/>)

4.0 PROJECT AREA

The Study Area is approximately 60 acres on the former Georgia-Pacific Mill Site (**Exhibits 1 & 2**). The estimated final stream restoration area and final disposition of Lands of Stream Restoration, which includes streambeds within a 150' wide ownership corridor, is approximately 8 to 10 acres.

The Study Area extends from Main Street to the Pacific Ocean at Fort Bragg Landing, encompassing the area known as the Mill Pond Complex and associated lowland areas, as well as the adjacent upland areas connecting the lowland to the lands adjacent to Main Street. The site is dominated by paving as well as degraded wetlands, industrial ponds and grasslands largely comprised of invasive species.

5.0 LAND OWNERSHIP

In order to make the Creek Daylighting project happen, it is believed that real property must be acquired from Georgia-Pacific, as a willing seller. The Feasibility Study will identify potential partners in making the purchase of the lands. Potential landowner partners include:

- City of Fort Bragg (Coastal Trail parcels)

The State Coastal Conservancy awarded a \$4.165M grant to the City of Fort Bragg for the City to purchase approximately 35 acres of parkland on the Mill Site. As a part of the acquisition, Georgia-Pacific donated a 100' wide "Coastal Trail corridor," which the City acquired in January 2010, totaling approximately 82 acres. As part of the donation, Georgia-Pacific also recorded an irrevocable offer to dedicate that connects the 82 acre north and south trail alignments over the beach berm, with an alternative alignment for a parcel that would travel around Pond 8 and the lowland area in the event that this alignment is preferred for public access to this area (**Exhibit 3**).

City of Fort Bragg Coastal Trail Phase II – Subsequent EIR, December 2014
- Mendocino Coast Recreation and Parks District
Owns and/or operates several recreational facilities along the coast, including the Mendocino Coast Botanical Gardens.
- Mendocino Land Trust
Owns numerous easements along the Mendocino Coast, for the express purpose of public access.
- Noyo Marine Science Center
Exists on lands currently owned by the City of Fort Bragg, ultimately to be disposed to the Center as a funded non-profit.
- Trust for Public Land
- Private Investors

6.0 GRANT OPPORTUNITIES

6.1 POTENTIAL GRANT FUNDERS:

Applications with funding from more than one source are found to be generally more competitive. Some grants require sponsors and co-sponsors. Potential grant funders for project elements from Planning to Implementation include:

- California Department of Water Resources's Urban Streams Restoration Program appears to be one well-suited grant for a project such as this.
- Coastal Conservancy
- Alternative Transportation Program (ATP)
- Community Development Block Grants through the City of Fort Bragg
- Private foundations
- Private individuals

6.2 POTENTIAL GRANT PARTNERS:

Grants often require sponsors and partners. The Noyo Marine Science Center, North Coast Resource Conservation & Development Council, and California Coastal Conservancy may be appropriate organizations to approach.

6.3 FUNDING MATCH/COST SHARE:

NHUDG expects community contribution to the project, by means of a financial match, an in-kind contribution, or a combination of both. Examples of these contributions include:

- Labor
- Materials
- Expertise such as planning, design, permitting, implementation, monitoring, maintenance, or project interpretation (i.e. seminar or educational workshop)
- Use of heavy equipment
- Rights of way/easements
- Funds
- Wetland mitigation banking
- Carbon credits or grants for CO₂ and N₂O sequestration

7.0 PROJECT OPPORTUNITIES AND CONSTRAINTS

This project is complicated by steep coastal topography, potential presence of hazardous material, potential presence of archaeological resources, and unique coastal biology. In response, the study team will need to analyze a myriad of project constraints and involve professionals from several science, design, and engineering disciplines.

The biggest constraints that we anticipate are archaeology and potential for toxins in the soils. As this is a biological restoration project, it is anticipated that any impacts to natural resources will be temporary in order to meet the project goal of repaired function of those resources.

7.1 CULTURAL RESOURCE CONSTRAINTS & OPPORTUNITIES

There is a known history of Native American presence on the Lands of the Former Georgia-Pacific Mill Site. As the Project Area is comprised of fill on top of former creek beds, it is anticipated that Cultural Resource Investigations will identify further resources within the Project Area, both before obtaining entitlement (Planning and natural resource agency) permits as well as during construction. The process for identifying whether cultural resources remain includes extensive boring and monitoring. It is anticipated that resources may be identified during the project implementation phase, thereby altering the project footprint during implementation or perhaps removal and cataloging of resources as permitted and supported by the Native American community and resource agencies.

While the existence of these potential resources may be seen as a constraint, they also present a tremendous opportunity to exhibit, highlight and demonstrate the Native American history on this site and of this part of the coast. The opportunity exists to create a rich and deep, integrated natural and cultural resources exhibit. Therefore, what may be perceived as a project altering constraint may actually be project enhancement. Restoration of creeks and their accompanying riparian areas to a much more natural condition may actually get sincere and heartfelt support from Native American descendants of the original inhabitants of this area. Trails running along the course of historic waterways might well receive Native American names.

7.2 TOXIC REMEDIATION CONSTRAINTS AND OPPORTUNITIES

Georgia-Pacific, under the oversight of the Department of Toxic Substances Control (DTSC), has been preparing remediation strategies for much of the Mill Site over the past decade. They are currently assessing the potential risks presented by contaminants in the Mill Pond and the other areas within Operable Unit E, which includes nine ponds and the central area of the former Mill Site. The next step will be evaluating remedial strategies in a Feasibility Study for Operable Unit E, followed by a remedy proposal in a draft Remedial Action Plan. It is expected that the remediation will take place within the next five years (by 2019). Depending on the remediation strategy, the Mill Pond may or may not be incorporated into the Project Area for daylighting Maple and Alder Creeks.

Alder and Maple Creeks are currently included under DTSC reviews in Operable Units C & E. The Feasibility Study for remediation of Alder Creek, in Operable Unit C, has recently been completed, while Maple Creek's Study, for Operable Unit E, is due in 2015. The Remedial Action Plan for the Alder Creek area is currently under evaluation, while the review for the Maple Creek area is expected to be completed in Fall 2015. Implementations for both Remedial Action Plans are anticipated to be in the Summers of 2015 and 2016.

7.3 BIOLOGICAL RESOURCE CONSTRAINTS AND OPPORTUNITIES

As a creek restoration project of a highly degraded site, the opportunities for this project are great, many and perhaps obvious. Restoration of a ruderal, "highly degraded" site is something that the city of Fort Bragg undertook in the development of Pomo Bluffs Park. The City's Community Development Director, Marie Jones, responded to an audience comment about this at the Coastal Restoration and Trail Phase II Public Scoping Meeting (October 3, 2014), including utilizing Adaptive Resource Management¹ to re-

¹ Adaptive Management (AM), also known as Adaptive Resource Management (ARM), is a structured, iterative process of robust decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring.

vegetate the area with native plants. The City therefore has experience in such an undertaking and might be able to offer some advice learned from that experience.

The constraints exist largely in the strict regulations of the permitting agencies, which are charged with balancing restoration with protection and enhancement of natural resources. For instance, the wetland regulations require in-kind mitigation for impacts to wetland resources. That means that if an existing wetland is to be directly impacted by the restoration project, the wetland must be protected and/or enhanced to the greatest extent feasible. If it cannot be protected while servicing the greater goals of the project, then the wetland function and values must be replaced elsewhere, preferably on site, at a ratio large enough to ensure that the new wetland area survives in perpetuity (often a replacement ratio of 4:1). However, an opportunity exists on this site that exists in few coastal areas in Mendocino: the previous industrial use of the Mill Site has impacted numerous wetlands on the property, thereby calling for restoration and/or enhancement. Public Works agencies such as CalTrans and the Mendocino County Department of Transportation are often in need of off-site wetland mitigation areas. There is the potential that the relocation and/or restoration of wetlands in the Project Area may serve as Wetland Mitigation Banks for such public works projects. Mitigation Banking is a financial opportunity, much like carbon credits, for any landowner with the resources to facilitate such mediation. Sales of wetland mitigation credits could be used to pay for the continued maintenance and operation of the daylighted creeks, infrastructure and associated exhibits.

Therefore, not only does the Creek Daylighting project offer a great restoration opportunity for the functions of these two long-buried creeks, but also an option for greater wetland restoration and mitigation banking.

7.4 GEOLOGICAL OPPORTUNITIES AND CONSTRAINTS

Portions of the Project Area have been studied previously for the purpose of the City's Coastal Trail (BACE Engineering Geologic Reconnaissance Report for Planned Blufftop Access Trail, September 29, 2004). That Reconnaissance identified that the site bedrock is partially covered with as much as 30 feet of Pleistocene terrace deposits (a natural phenomenon) and man-placed fill. At the western end of the project area, most of the erosion that is taking place is due to runoff from hard surfaces; proposed edge development will need to ensure that runoff is not concentrated outside of the designed stream channels. Hydrologic modeling will play an essential role in the design process. The Mill Pond is within the Study Area, which has stability issues that may need to be addressed. There is rip rap in places at the western end of the Study Area that will either need to be designed around or addressed. Lastly, Sea Level Rise is a reality that will be analyzed in the project design.

Because this project involves cutting into the historic man-placed fill and potentially the bedrock, there may exist an opportunity to demonstrate the geologic features of the site – including the historic and proposed fluvial geomorphology of the creek daylighting itself – through interpretive signage and an exhibit, similar to the signage and exhibit that illustrates the Pygmy Staircase at the Mendocino Coast Botanical Gardens. An excellent example of this is the Briscoe Geology Park in downtown Ashland, Oregon, that is an outdoor, open-access trail, which guides you through the geologic history of the Earth, providing a richly intuitive and explicit interpretive displays. As the creek daylighting site is within walking distance of downtown Fort Bragg (presumably open to the public without charge) and at the western end of one of the main streets that accesses the Fort Bragg schools, the opportunity for easy access to this potential educational element is great.

8.0 PLANNING, DESIGN & ENTITLEMENT PHASES - summary

8.1 ANTICIPATED STEPS TO OBTAINING ENTITLEMENT PERMITS FOR IMPLEMENTATION

To aid in preparation for this project, we have reviewed the project goals and present the following as the steps that are expected to be required in order to obtain approval for the physical daylighting of these two creeks, from project conception to completion (see **Sections 9.0, 10.0 & 11.0** for further detail).

1. Preliminary Feasibility Study
2. Detailed Site Assessment
3. Focused Feasibility Study & Conceptual Design
4. Community Based Design Development Charette(s)
5. Identify Willing Landowner & Project Partners
6. Conditional Purchase of Property and/or Refinement of Easement Agreement (as necessary, contingent upon approval of Project)
7. Engineering & Project Design
8. Permitting, including Environmental Compliance
9. Construction Bidding
10. Construction Assistance & Adaptive Management during Construction
11. Open Park to Public!
12. Post-Construction Mitigation Monitoring & Adaptive Management

8.2 BALLPARK TIME & COST

The preliminary ballpark cost for the entirety of the Planning, Design & Entitlement Phases (Steps 1 through 8) may cost between \$570K and \$1M. (see **Section 10.0** for further detail). Conjecture on ballpark construction implementation costs cannot be made until the project has been designed and a strong sense of likelihood of approval can be determined.

The preliminary ballpark timeframe for the entirety of the Planning, Design & Entitlement process may take upwards of four to five years, from initiation of the Preliminary Feasibility Study to permits in hand and ready for construction bidding (see **Section 11.0** for further detail).

The first phases – the Preliminary and Focused Feasibility Studies – are anticipated to cost between \$170K and \$350K, and take between one and two years.

8.3 PRELIMINARY FEASIBILITY STUDY – OVERVIEW

WRA Environmental Consultants (WRA) has prepared a Scope of Work and Cost Estimate for a Preliminary Feasibility Study for the Daylighting of Alder and Maple Creeks. This study would be the first in a series of planning and design phases, which are detailed in **Section 10.0**, below, with a preliminary range of cost.

The purpose of WRA's Preliminary Feasibility Study (PFS) is to develop conceptual design alternatives as a basis for developing focused studies for a subsequent detailed site assessment and focused feasibility study. This will be the first phase in a multi-phased planning and design process, which was outlined above. This phase will include consensus building during which WRA will clarify the project objectives, identify opportunities and constraints, and develop the preliminary conceptual design alternatives for the project. Based on the concept designs, they will identify detailed site assessments and outline requirements for a more focused feasibility study. This will allow WRA to narrow the focus of the detailed studies.

9.0 PLANNING, DESIGN & ENTITLEMENT PHASES - detail

ANTICIPATED STEPS TO OBTAINING ENTITLEMENT PERMITS FOR IMPLEMENTATION:

To aid in preparation for this project, we have reviewed the project goals and present the following as the steps that are expected to be required in order to obtain approval for the physical daylighting of these two creeks, from project conception to completion. We have identified potential Grant Funding Segments that may ease the grant seeking process; Segments may be combined if such combining increased funding opportunities. See **Section 10.0** for further detail.

→ GRANT FUNDING SEGMENT – PLANNING GRANT

1. PRELIMINARY FEASIBILITY STUDY

- a. **From reviewing background information** (all pertinent previous studies for the Project Area and related sites on the Mill Site) to **identifying which studies need to be performed (and to what extent)** in order to complete any missing information for the purpose create the Focused Feasibility Study.
- b. **Identify Opportunities & Constraints**
 - i. Can constraints be overcome
 - ii. What opportunities exist to enhance the project
- c. **Develop Conceptual Design Alternatives with Project Proponents**
- d. **Napkin Sketch #1** (include public access & landscape architecture)
 - i. In-house preliminary design development (Project Team & NHUDG)
 - ii. Preliminary review of design with permitting agencies (recommended):
 1. Lead Agency² (City of Fort Bragg)
 2. Stakeholder Agencies³, including, but not limited to:
 - a. CA Coastal Commission
 - b. CA Dept of Fish & Wildlife (CDFW)
 - c. US Dept of Fish & Wildlife (USDFW)
 - d. Regional Water Quality Control Board (RWQCB)
 - e. Army Corps of Engineers (ACOE)
 - f. Dept of Toxic and Substance Control (DTSC)
 - g. National Oceanic & Atmospheric Administration (NOAA)

→ GRANT FUNDING SEGMENT – PLANNING GRANT

2. DETAILED SITE ASSESSMENT

- a. Studies that may be required to create a Detailed Site Assessment include (some studies may already be complete, others may simply need to be updated to complement an incomplete analyses for this project area and project goals):
 - i. Cultural Resource Analysis
 1. To determine presence/absence of archaeological, historical resources
 - ii. Geotechnical Analysis
 1. To determine what the soil & rock capacities are in order to properly design the restored and/or new creek alignments
 - iii. Biological Analysis
 1. To identify existing protected natural resources (wetlands, riparian areas, rare plants, rare plant communities, rare species).
 2. Identifies what resources to be avoided and protected in order to obtain no-net-loss of protected resources
 - iv. Hazardous Materials Assessment
 1. Soils testing
 - v. Sea Level Rise & Adaptation Analysis
 1. Alternatively, General Hydrologic Analysis

² The Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project, according to CEQA.

³ A Stakeholder Agency is a public agency having an interest in or a concern regarding a proposed project.

3. **FOCUSED FEASIBILITY STUDY & CONCEPTUAL DESIGN**
 - a. Hydrologic & Geomorphologic Modeling, preliminary (streambed design)
 - b. Site Plan & Illustrations (highly iterative process)
 - Napkin Sketch #2**
 - i. In house review (Project Team & NHUDG)
 - ii. Preliminary review with Lead & Stakeholder Agencies
 - c. Biological – habitat restoration, revegetation & recommended mitigations
 - d. Cultural Resource Report (draft) – recommended mitigations
 - e. Hazardous Materials – identify possible Remedial Action Plan (if necessary)
 - f. Refine Site Plan & Illustrations (highly iterative process)
 - Napkin Sketch #3**
 - i. In house review (Project Team & NHUDG)
 - ii. Preliminary review with Lead & Stakeholder Agencies
 - g. Finalize Conceptual Site Plan & Illustrations
4. **COMMUNITY BASED DESIGN DEVELOPMENT**
 - a. Presentation of Conceptual Site Plan & Illustrations to community for input & support
 - b. Refine Site Plan if necessary to address community input
 - c. Stakeholder review
5. **IDENTIFY WILLING LANDOWNER & PROJECT PARTNER(s)**
6. **CONDITIONAL PURCHASE OF PROPERTY and/or REFINEMENT OF EASEMENT AGREEMENT, Contingent upon approval of Project**
- **GRANT FUNDING SEGMENT – PLANNING GRANT**
 7. **Engineering & Project Design**
 - a. Civil Engineering, Hydrologic Modeling, Floodplain Enhancements, Salmon & Riparian Habitat Enhancements
 - b. Biological Compliance Report
 - c. Geotechnical Report & Recommendations
 - d. Hazards – Remedial Action Plan (if necessary)
 - e. Finalize Site Plan & Illustrations for applications
- **GRANT FUNDING SEGMENT – PLANNING GRANT**
 8. **Permitting, including Environmental Compliance (see Section 11.0)**
 - a. Lead Agency Permits (including, but not limited to):
 - i. Coastal Development Permit, Design Review, Grading Permit – City of Fort Bragg
 1. Includes CEQA review (and NEPA if project receives Federal Funding)
 - b. Stakeholder Agency Permits (including, but not limited to):
(after obtaining Conditional approval for Permits from Lead Agency)
 - i. USFWS Permit
 1. Incidental Take Permit (if necessary)
 - ii. CDFW Permits
 1. Incidental Take Permit (if necessary)
 2. Lake & Streambed Alteration Agreement
 - iii. RWQCB Permit
 1. Porter-Cologne Water Quality Control Act permitting
 - iv. ACOE Permit
 1. Federal Clean Water Act permitting
 - v. DTSC
 1. Remedial Action Plan approval
 - vi. MAQMD
 1. Air Quality

→ **GRANT FUNDING SEGMENT – IMPLEMENTATION GRANT**

9. Construction bidding

- a. Project Goals include maximizing local skilled talent (contractors), complemented by skilled volunteers from the community – including future users of the park – to the greatest extent feasible while maintaining a quality product.

10. Construction Assistance & Adaptive Management during Construction

- a. Implement mitigation measures as required during construction
- b. There is a high likelihood that Adaptive Management⁴ will be required for protection of any Cultural Resources that may arise during the construction of the project. See **Section 7.1** for further detail.

11. Open Park to Public!

12. Post-Construction Mitigation Monitoring, Adaptive Management & Maintenance

- a. Projects that directly impact protected and regulated natural resources – even enhancement projects – require Monitoring after the project has been completed in order to ensure that the Project Goals and Conditions of the Permits (requirements) have been achieved. If the completed project falls below the required Performance Measures, then Adaptive Management must be implemented – revision of the Mitigation Measures – so that the project can achieve the required Performance Measures.
 - i. For instance, if the Performance Measure is to ensure that there is 80% cover of riparian vegetation within 3 years of project construction and the project has achieved only 60% cover of same, then the biologist will suggest to the permitting agency(ies) revised Mitigation Measures, such as: increase plantings, increased protections of plantings (from deer browse or invasives), invasives removal, irrigation, etc. The Monitoring schedule may be extended in order to achieve the Project's Performance Measures.

10.0 PRELIMINARY FEASIBILITY STUDY – DETAIL

WRA's Preliminary Feasibility Study would be the first in a series of planning and design phases, which are outlined below with a preliminary range of cost.

10.1 PLANNING, DESIGN & ENTITLEMENT PHASES

BUDGET ESTIMATE⁵

A. Preliminary Feasibility Study	\$70K to \$100K
B. Detailed Site Assessment & Focused Feasibility Study	\$100K to \$250K
C. Community Based Design Development	\$40K to \$80K
D. Engineering Design, Permitting and Environmental Compliance	\$300K to \$500K
E. Bid and Construction Assistance	\$20K to \$40K
F. Community Outreach, Planning & Funding Development	\$40K to \$60K

10.2 PRELIMINARY COST ESTIMATE – Phase A

The following is a cost estimate for this phase of the project. The estimate was generated with input from some of the subconsultants in the various professional disciplines. The estimate was intended to serve as the basis for fund raising for this phase of the project. The cost estimate does not represent a fee proposal for these services and would need to be reviewed prior to submitting a fee proposal. The cost estimate is based on work being

⁴ Adaptive Management, also known as **adaptive** resource management (ARM), is a structured, iterative process of robust decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring (Wikipedia).

⁵ Please note that these costs are intended for project planning. In addition these costs do not include remedial costs for site assessment, contaminant delineation or removal. All costs are subject to revision as our knowledge base for the site develops.

performed in 2014 and should be adjusted by an average rate of 10% per year based on the projected start date and duration of the project. It is estimated that the work could be completed within 8 to 12 months from the start of the project.

Task 1 - Review Background Information	\$19,500
Task 2 - Identify Opportunities and Constraints	\$14,000
Task 3 - Develop Conceptual Design Alternatives	\$32,000
Task 4 - Public Outreach	\$17,500
Task 5 - Identify Focused Studies for Focused Feasibility Study	\$11,500
Administration	\$3,250
Total	\$97,750

We have compiled a preliminary Design Team of professionals with the expertise and experience to plan and design this project. WRA would be the prime consultant for the project and will utilize the expertise of several subconsultants. The following list of the potential consulting firms and their role on the project:

- WRA (Prime Consultant)
 - Project Management, Site Plan & Illustrations, Revegetation, Public Access and Landscape Architecture, Regulatory Permits, Biology
- Kamman Hydrology
 - Hydrologic modeling, Floodplain enhancements, Salmon and riparian habitat enhancements
- BACE
 - Geotechnical Engineering
- Thad Van Bueren
 - Archaeology
- Arcadis (or Northgate Environmental)
 - Hazardous material assessment, Environmental engineering, Soil testing & remediation
- Forrest Francis Land Surveying
 - Site survey, including drainage infrastructure, Topographic survey

11.0 ENVIRONMENTAL REVIEW PROCESS - detail

The project will comply with all regulatory agencies, following the CEQA process (and NEPA if required) as reviewed by the Lead Agency, the City of Fort Bragg.

Anticipated resources to be evaluated and resulting reports and studies include:

RESOURCE	STUDY/REPORT	PERMIT AGENCY	PLANNING & DESIGN PHASE	ESTIMATED TIMEFRAME
I. Aesthetics	Visual Analysis, illustrative drawings	City	C. Community Based Design Development	Year 2-3
II. Agriculture & Forestry Resources	No impact; no study required	n/a	n/a	n/a
III. Air Quality	Construction Mitigations & BMPs		E. Construction Assistance (Conditions of Approval)	Year 5-6
IV. Biological Resources	Biological Assessment and Mitigations	City, ACOE, RWQCB, CDFW, USFW	B. Detailed Site Assessment D. Permitting & Environmental Compliance	Year 1-2 Year 3-5
V. Cultural Resources	Archaeological Report	City	B. Detailed Site Assessment C. Community Based Design Development	Year 1-2 Year 2-3
VI. Geology & Soils	Geotechnical Report Grading & Erosion Control Plan	City	B. Detailed Site Assessment D. Engineering Design	Year 1-2 Year 3-5
VII. Greenhouse Gas Emissions	Construction behavior: minimize construction traffic	n/a	E. Construction Assistance (Conditions of Approval)	Year 5-6
VIII. Hazards & Hazardous Materials	Hazardous Materials Assessment	City, DTSC	B. Detailed Site Assessment D. Permitting & Environmental Compliance	Year 1-2 Year 3-5
IX. Hydrology & Water Quality	Hydrologic Modeling, Floodplain enhancements Grading & Erosion Control Plan	City, ACOE, RWQCB, CDFW, USFW	B. Detailed Site Assessment D. Permitting & Environmental Compliance	Year 1-2 Year 3-5
X. Land Use & Planning	n/a	City	D. Permitting & Environmental Compliance	Year 3-5
XI. Mineral Resources	No impact; no study required	n/a	n/a	n/a
XII. Noise	Construction behavior	City	E. Construction Assistance (Conditions of Approval)	Year 5-6
XIII. Population & Housing	No impact; no study required	n/a	n/a	n/a
XIV. Public Services	No studies; ensure that park does not cut off access, ensure that park has agency managing maintenance	City	B. Detailed Site Assessment C. Community Based Design Development	Year 1-2 Year 2-3

XV. Recreation	No impact; no study required	City	C. Community Based Design Development	Year 2-3
XVI. Transportation/Traffic	Potential Traffic Study depending on Design concept	City	B. Detailed Site Assessment C. Community Based Design Development	Year 1-2 Year 2-3
XVII. Utilities & Service Systems	Civil Engineering	City	B. Detailed Site Assessment C. Community Based Design Development	Year 1-2 Year 2-3
XVII. Mandatory Findings of Significance ⁶	n/a	City	D. Permitting & Environmental Compliance (Lead Agency)	Year 3-4

⁶ Mandatory Findings of Significance: CEQA requires that a determination of significant impacts be stated in the Environmental Document (CEQA document; i.e., MND, EIR, etc). The CEQA Guidelines define "significant effect" as "... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant" (CEQA Guidelines, 15382).

"An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area" (CEQA Guidelines 15064).

NHUDG CREEK DAYLIGHTING PROJECT
Daylight Alder & Maple Creeks to restore the function
of those drainages to a natural state on the Former GP Mill Site

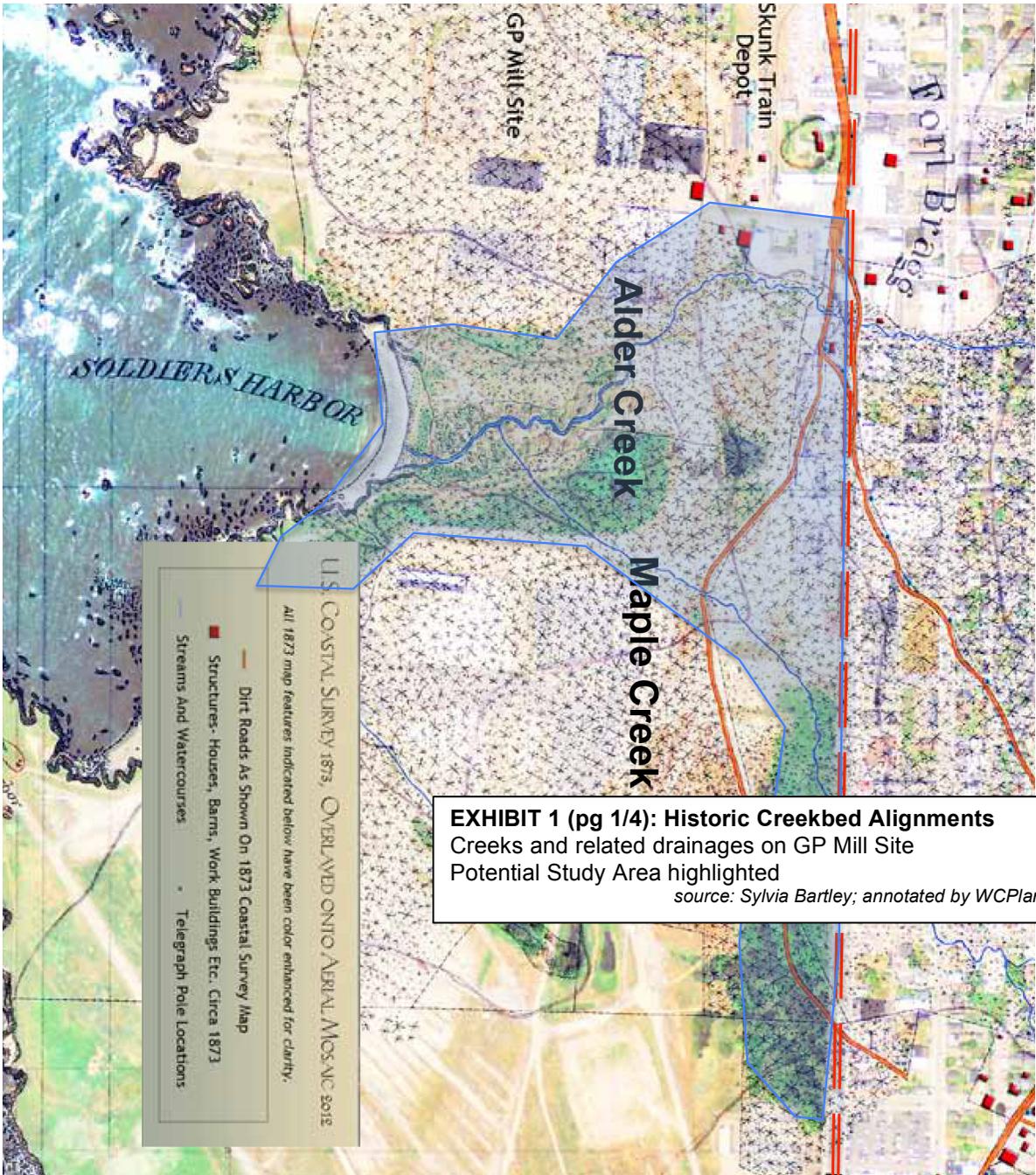


EXHIBIT 1 (pg 1/4): Historic Creekbed Alignments
Creeks and related drainages on GP Mill Site
Potential Study Area highlighted
source: Sylvia Bartley; annotated by WCPlan

APPROXIMATE PROJECT AREA
Includes former natural drainages of Alder & Maple Creeks and related drainages on GP Mill Site
Expand or Contract as you see fit per your expertise





Fort Bragg Restoration and Coastal Trail



1:10,000

EXHIBIT 1 (pg 2/4): Fort Bragg Restoration and Coastal Trail
 Potential Daylighted Creek location annotated in relation to Coastal Trail Phases I & II (Phase II Alternative B) and Central Business District

*sources: City of Fort Bragg Coastal Trail Phase II Scoping PowerPoint 10.2014
 City of Fort Bragg Coastal Trail Phase I Site Map; annotated by WCPlan*

Site Map

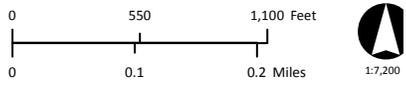


EXHIBIT 1 (pg 3/4): Lands of Georgia Pacific and Surrounding Lands
 Potential Daylighted Creeks in relation to Central Business District
 source: County of Mendocino Cartographer; annotated by WCPlan

Map produced by the Mendocino County Planning & Building Services, October, 2014
 Aerial photography via USDA NAIP, June 2010
 Assessors parcel data current as of October, 2013
 All spatial data is approximate. Contour interval is 40 feet, where applicable.
 Do not make a business decision based on this map without consulting the appropriate agency.
 Map is intended as a tool to approximate CASGEM well locations and should be used to establish absolute position

THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIND

2010 NAIP AERIAL ORTHOPHOT





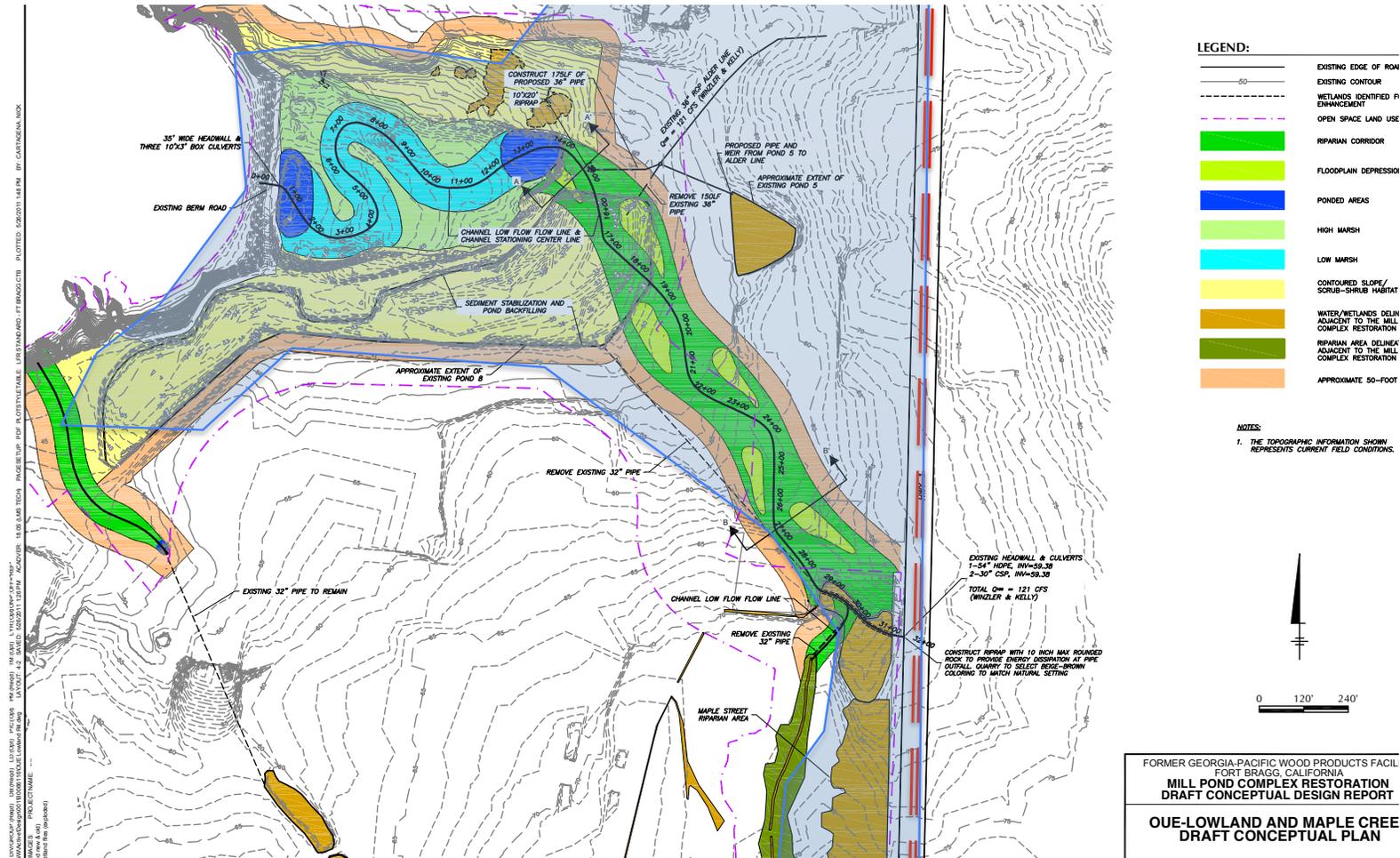


EXHIBIT 2: Approximate Project Study Area
 Includes former natural drainages of Alder & Maple Creeks and related drainages on GP Mill Site.
source: Arcadis, OUE Lowland & Maple Creek Conceptual Plan; annotated by WCPlan

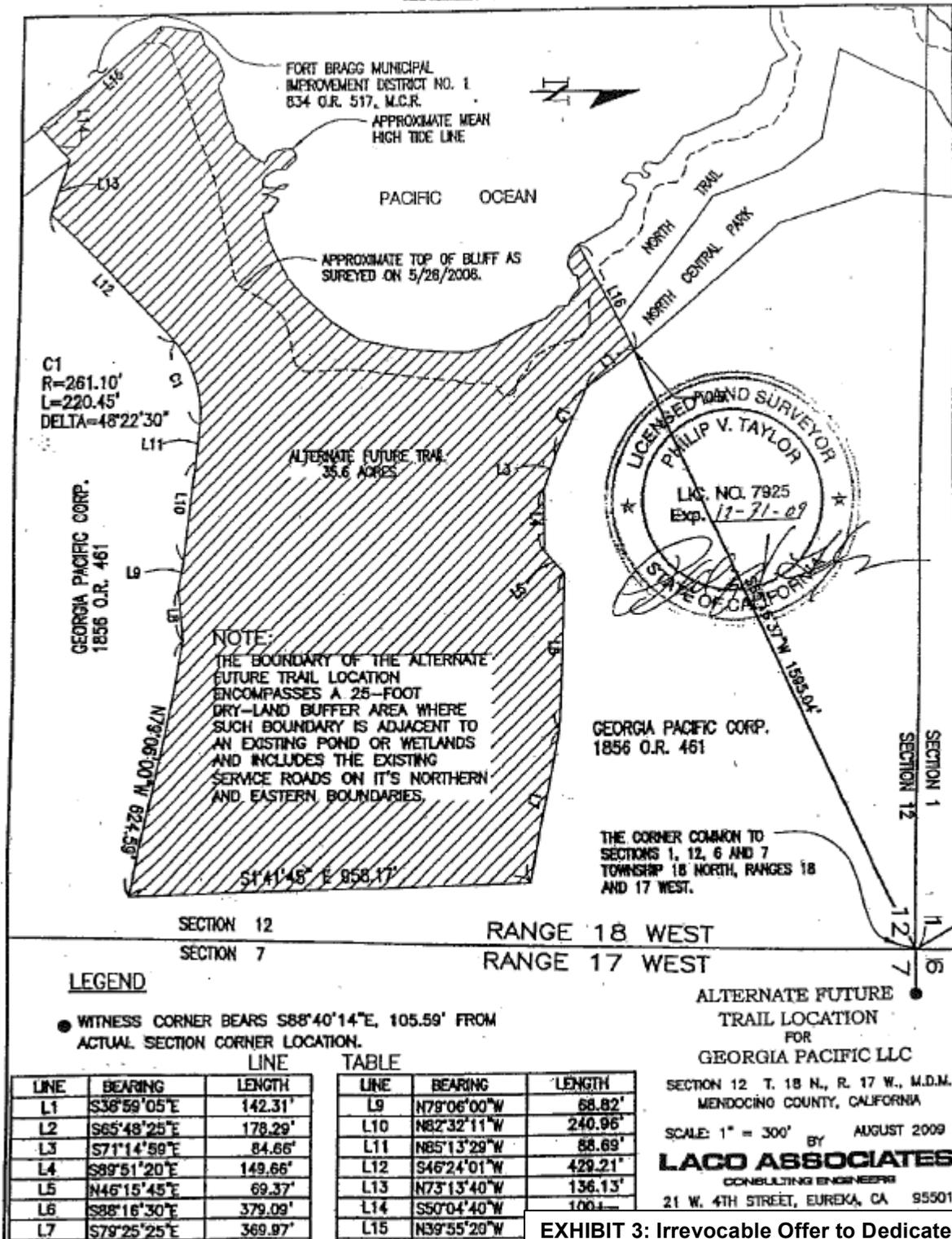


EXHIBIT 3: Irrevocable Offer to Dedicate
 source: City of Fort Bragg Coastal Trail Phase II Subsequent EIR,
 12.08.2014