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April 13, 2011

TO: Coastal Commissioners and Interested Parties

FROM: Alison Dettmer, Deputy Director
Kate Huckelbridge, Analyst

SUBJECT: Addendum to Staff Report for Application No. E-11-002, City of Goleta

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This addendum includes one revision to the March 30, 2011 staff report on the City of Goleta's proposed project to re-abandon three oil wells and remove five water wells and one groundwater monitoring well. These revisions do not change staff's recommendation that the Commission approve the proposed site and preliminary restoration plan.

REVISIONS TO FINDINGS: Staff recommends modifying the staff report as shown below in strikeout/underline:

Page 2, third paragraph, make the following change:

> "This work is required to remove hazards from an area that now serves as a public park. Nonetheless, the well abandonment work itself is hazardous and could result in a release of petroleum hydrocarbons or other hazardous substances. The oil well abandonment work will be performed by or under the supervision and requirements of DOGGR, and ~~the City~~ DOGGR will provide on-site oil spill containment and cleanup equipment in the event of an accidental spill.…."

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Staff:	K. Huckelbridge - SF
Staff Report:	3-30-11
Hearing Date:	4-14-11

STAFF REPORT
COASTAL DEVELOPMENT PERMIT APPLICATION

CDP Application No.:	**E-11-002**
Applicant:	**City of Goleta**
Project Location:	Ellwood Mesa Open Space, 501 Santa Barbara Shores Drive, City of Goleta.
Project Description:	Re-abandon three historic oil wells, abandon five water wells, and remove one groundwater monitoring well and, if necessary, remove petroleum hydrocarbon soil contamination.
Substantive File Documents:	See Appendix A

The City of Goleta ("City") proposes to: (1) re-abandon oil wells Doty 4 and 5 and Elwood 1; (2) abandon five non-functional water wells; (3) remove one groundwater monitoring well; and (4) if necessary, remove soil contaminated with petroleum hydrocarbons at the Ellwood Mesa Open Space in the City of Goleta. The oil well work is required by the California Department of Conservation's Division of Oil, Gas and Geothermal Resources ("DOGGR") and the water and groundwater well work is required by the California Department of Water Resources and the Santa Barbara County Fire Protection Division ("SBCFPD"), respectively, to address public safety concerns related to the potential release of oil and the contamination of groundwater.

The project raises several Coastal Act issues. The Ellwood Mesa Open Space, which serves as a park and recreation area, contains hundreds of vernal pools and marshes. The City has designed the project to minimize adverse impacts to on-site wetlands and environmentally sensitive habitat. Nevertheless, the project will result in the loss of a total of 75 square feet of vernal pools due to abandonment activities required at two of the oil well sites. The City will mitigate on-site for the loss of these wetlands at a 4:1 mitigation ratio. The Commission staff recommends in **Special Condition 1** that the City submit for the Executive Director's approval a revised Restoration and Monitoring Plan that includes restoration goals, deadlines, methods, monitoring requirements and detailed performance and success criteria.

The project will also result in the loss of a very small area of native grassland, about 0.05 acres (2178 square feet), that the City will mitigate on-site at a 3:1 mitigation ratio. The City's Restoration and Monitoring Plan must also include the same measures identified above for the project's wetland impacts to ensure successful restoration of the native grassland.

This work is required to remove hazards from an area that now serves as a public park. Nonetheless, the well abandonment work itself is hazardous and could result in a release of petroleum hydrocarbons or other hazardous substances. The oil well abandonment work will be performed by or under the supervision and requirements of DOGGR, and the City will provide on-site oil spill containment and cleanup equipment in the event of an accidental spill. The Commission staff recommends in **Special Condition 2** that the City submit for the Executive Director's approval a project-specific Oil Spill Contingency Plan that includes a description of the worst-case spill scenario and demonstrates that the appropriate procedures and equipment will be in place to respond to that scenario.

The Commission staff believes that, as conditioned, the project will be carried out consistent with the Chapter 3 policies of the Coastal Act. The Commission staff recommends **approval** of the project, as conditioned.

Figure 1: Vicinity Map for Ellwood Mesa

Figure 2: Project Map - Proposed Access Routes and Well Abandonment Sites Showing Environmentally Sensitive Areas

Figure 3a-h: Proposed Work Areas for Individual Well Sites

Figure 4: Proposed Vernal Pool Restoration Site at Doty 5

Figure 5: Proposed Vernal Pool Restoration Site at Elwood 1

1. STAFF RECOMMENDATION

Approval
The staff recommends conditional approval of the permit application.

Motion:
I move that the Commission approve Coastal Development Permit E-11-002 subject to conditions set forth in the staff recommendation specified below.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

Resolution:
The Commission hereby approves the Coastal Development Permit for the proposed project and adopts the findings set forth below on grounds that the development will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

2. STANDARD CONDITIONS

This permit is subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

3. SPECIAL CONDITIONS

This permit is subject to the following special conditions:

1. **Restoration and Monitoring Plan**. Prior to issuance of this permit, the City of Goleta shall submit a revised Restoration and Monitoring Plan to the Executive Director for review and approval that includes (in addition to the elements included in the initial Plan):

    a. A description of the natural habitats (e.g., vernal pools, native grasslands) to be created/restored, including a general overview of physical and biological characteristics and the expected range of biodiversity;
    b. An explanation of the scientific basis for choosing the reference site(s) (i.e., why is the selected site considered "typical" of that habitat type), and data on metrics (i.e., species diversity, % total cover, etc.) to be used for quantitative comparison;
    c. If results of the dry weather vernal pool surveys indicate the presence of fairy shrimp cysts, collection of cysts to be used for reseeding during restoration of the vernal pools;
    d. A post-project assessment of the direct and indirect impacts sustained to wetlands and ESHA at the project site to be performed within 15 days of project completion;
    e. Performance criteria for each year of post-planting that is comparable to species diversity, percentage of total cover, and density of plants at the reference site(s);
    f. A timeline that includes initiation of restoration work within 30 days of project completion;
    g. A description of final performance criteria and the quantitative methods used judge success of the restoration project; and
    h. A description of contingency measures in case annual performance criteria are not achieved.

    Compliance with the plan shall include annual monitoring and reporting to the Executive Director for five years. The first annual report shall be submitted 12 months after completion of the initial restoration work. If at the completion of the five years monitoring and reporting period, the Executive Director determines that the final mitigation performance criteria described within the approved plan have not been met, the City shall submit, within 60 days of the Executive Director's determination, a new plan for the Executive Director's approval that addresses the restoration work that was not successful.

2. **Oil Spill Contingency Plan.** Prior to issuance of this permit, the City of Goleta shall submit a project-specific Oil Spill Contingency Plan to the Executive Director for review and approval that includes, at minimum, the following:
    a. A description of the project's reasonable worst-case spill, including source of spill and volume; and

b. A list of equipment kept on site during well abandonment activities (e.g., vacuum trucks, oil spill boom, bins) sufficient to respond to and recover the project's identified worst-case spill.

4. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

4.1 Project Description and Background

In the 1920's, several oil wells, including "Doty" 4, "Doty" 5 and "Elwood" 1, were drilled to tap into the Ellwood Oil Field in the City of Goleta ("City")(see Figures 1 and 2). Although initially successful, Elwood 1 was abandoned and plugged with cement in 1935, while Doty wells 4 and 5 were abandoned and plugged in 1951. Onshore oil and gas production diminished through the 1950's and the land was eventually sold to new owners interested in residential development. Between the 1960's and 1990's, as part of the exploration of residential development options in the area, a total of five water wells and one groundwater monitoring well were drilled in the property (see Figure 2).

In a 2004 land exchange, the City obtained ownership of the privately-owned 137-acre Ellwood Mesa property, also known as Sperling Preserve or Ellwood Mesa Open Space. This Preserve is used as a public recreation area, with numerous trails for pedestrians, equestrians and bicyclists. As part of that land exchange, the California Department of Conservation, Division of Oil, Gas and Geothermal Resources ("DOGGR") required re-abandonment of Doty Wells 4 and 5 and Elwood Well 1 to meet current well abandonment regulatory requirements. One of the well sites, Elwood 1, contains an exposed well head that could pose a physical hazard to people or animals and therefore needs to be removed. The California Department of Water Resources and the Santa Barbara County Fire Protection Division (SBCFPD) also required the destruction of on-site water and groundwater monitoring wells, respectively, to prevent interference with and possible contamination of the underlying aquifer. These requirements were incorporated as conditions of City approval for the land exchange and funds were deposited into a mitigation account to offset the expense of any required site remediation.

In this application, the City proposes to: (1) re-abandon oil wells Doty 4 and 5 and Elwood 1; (2) abandon five non-functional water wells; (3) remove one groundwater monitoring well; and (4)if necessary, remove soil contaminated with petroleum hydrocarbons. The project is expected to take approximately 30 days to complete.

DOGGR or its designated contractor will perform all oil well re-abandonment tasks. Each well head will be exposed by excavating a 15 feet by 15 feet by 5 feet volume of soil with a backhoe. The excavated soil, estimated to be about 35 cubic yards (63 tons) of soil per well, will be wrapped in Visqueen plastic and tested for possible petroleum hydrocarbon contamination. If the soil is determined to be contaminated, it will be disposed of at a state-licensed facility

qualified to accept petroleum waste.[1] The existing well cellar will then be tested for the presence of explosive gas, hydrogen sulfide, or any other hazardous conditions. Once conditions are deemed safe, the steel plate on the well head will be removed and if necessary, DOGGR personnel will replace the cement cap.

To abandon the water wells, the City will first excavate a volume of soil measuring approximately 8 foot by 10 foot by 6 foot (totaling about 18 cubic yards) over each well head. Once the existing steel surface sleeve is removed and the existing well casing cut, the remaining well casing will be filled with inert material and capped with concrete. The groundwater monitoring well will be removed using a truck mounted auger drill to overdrill the well casing and then removing all well materials. The open borehole will be then be sealed.

Work vehicles will enter the Ellwood Mesa through the gate at the southern terminus of Santa Barbara Shores Drive and then access the various well sites primarily via existing dirt roads and trails (see Figure 2). The project is expected to require approximately 180 truck trips and involve the following vehicles: backhoe, water truck, vacuum truck, cement truck, dump truck and several smaller support vehicles (i.e., pick-up trucks and passenger vehicles). Access routes will be set and marked by a biologist retained by the City. Vehicles and equipment will be staged either within the individual work areas associated with each well or within a larger fenced area at water well 3.

4.2 Coastal Act Issues

4.2.1 Wetlands

Coastal Act Section 30233 states in relevant part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
> *(2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
> *(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*

[1] If soil at each of the three wells is determined to be contaminated with petroleum hydrocarbons a maximum of 105 cubic yards of soil would be hauled to the Azusa Landfill in Los Angeles County, requiring a maximum of 10 truck trips.

> *(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
> *(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
> *(6) Restoration purposes.*
> *(7) Nature study, aquaculture, or similar resource dependent activities.*

The Ellwood Open Space Mesa contains hundreds of vernal pools and marshes, and several vernal pools are located within close proximity to the nine project areas. The City proposes to minimize impacts to these vernal pools by excluding them from the fenced work areas and access routes and conducting the work during the dry season. However, the proposed project will unavoidably impact two vernal pools that could not be excluded from the project footprint. The well-heads at two of the oil wells, Elwood 1 and Doty 5 have been classified as vernal pools (see Figure 2), with a surface area of 25 square feet and 50 square feet, respectively. Effective re-abandonment of these oil wells necessitates the removal of these vernal pools in their entirety to reach the wellhead beneath. As a result, the proposed project involves the removal of wetland substrate and vegetation and thus constitutes "dredging" of wetlands under Section 30233(a). These activities are only allowable under the Coastal Act if three tests are met: (1) filling and/or dredging must constitute an allowable use under Section 30233(a); (2) there is no feasible less environmentally damaging alternative; and (3) feasible mitigation measures will be provided to minimize any adverse effects.

Allowable Use Test

Filling and dredging of wetlands may be allowed only if its purpose falls within one or more of the enumerated uses listed in Coastal Act Section 30233(a). The proper abandonment of the site's oil wells is part of a larger effort by the City to restore the site from its former use as an oil production site and then potential residential area to one that now serves as a park and recreational area. As such, the proposed project serves a restoration purpose and is allowed under Coastal Act Section 30233(a)(6).

No Less Environmentally Damaging Feasible Alternative

The second test of Section 30233(a) requires that there is no feasible less environmentally damaging alternative. The proposed project also meets this test. DOGGR is requiring the City to properly abandon the site's two oil wells to avoid a potential oil spill and remove other hazards. The vernal pools in question are located immediately on top of the wellheads. In fact, these vernal pools exist solely because of the anthropogenic features associated with the wellheads.[2] There is no technical means to effectively abandon these oil wells without affecting the vernal pool above it. For this reason, the Commission finds that no feasible environmentally superior alternative exists and therefore the project is consistent with the second test of Coastal Act Section 30233(a).

[2] Elwood 1 contains an open well cellar that has filled with water, thus technically forming a wetland. The vernal pool at Doty 5 formed due to compaction of the soil used to bury the wellhead.

Feasible Mitigation Measures

The final test of Section 30233(a) requires that feasible mitigation measures be provided to minimize any adverse effects. The City has proposed several measures to protect wetland resources on the site. For example, all work will take place between June 1 and September 30 to minimize impacts to wetlands[3], monarch butterflies and breeding birds. All work areas have been delineated and will be fenced off under the direction of the City's biologist to exclude any sensitive resources to the maximum extent possible. As shown in Figures 3a-h, the work areas around each of the nine well sites were delineated to exclude the vast majority of potentially affected vernal pools from the work sites. The City's biologist will also meet with all site workers prior to commencement of the project to indicate sensitive biological resources, such as adjacent vernal pools, at each site and steps that must be taken to protect these resources. Finally, the biologist will monitor all activities for compliance with the Work Plan and permit conditions of approval.

To date, fairy shrimp, a vernal pool indicator species also considered a sensitive wetland species, have not been detected at either of the vernal pools that will be impacted by this project. However, three different species of fairy shrimp have been identified in vernal pools within a five-mile radius of the Ellwood Mesa, and thus, the USFWS directed the City to conduct both wet and dry weather surveys for fairy shrimp species. Results of wet weather surveys, completed as of March 2011, indicate that adult or juvenile fairy shrimp are not present. Dry weather surveys will be completed prior to the start of the project, likely in April. Given the degraded nature of these wetlands, it is highly unlikely that fairy shrimp cysts will be found. However, **Special Condition 1** requires the City to submit the results of the dry weather survey to the Executive Director for review prior to the commencement of project activities. If fairy shrimp cysts are found, the City will be required to collect and store the cysts and then reseed them during restoration of the vernal pools.

As mentioned previously, the proposed work will impact approximately 75 square feet of vernal pool habitat. To mitigate for this impact, the City proposes to restore vernal pool habitat in a 4:1 ratio by re-creating shallow depressions at the Doty 5 and Elwood 1 wellheads. Specifically, a 100 square foot vernal pool will be created at the Doty 5 wellhead and a 1,900 square foot vernal pool will be created at the Elwood 1 wellhead.

The City submitted a Restoration and Monitoring Plan, included as Attachment 1, which provides details on the restoration location, size and methodology (see Figures 4 and 5 in for plan detail of the vernal pool footprints). As part of its vernal pool restoration project, the City commits to the following:

- Selection of appropriate reference site(s);
- Determination of existing site characteristics for the vernal pools (i.e., soil texture, depth of clay subsoil, available biological inoculum);

[3] The wetlands affected by this project are seasonal. All project work will be conducted during the dry season when wetland habitat is absent.

- Specific design of vernal pool basin to reflect characteristics present at the reference site.
- Use of berms to protect vernal pool habitat;
- Use of existing topsoil and biological inoculum in the restored basin (if, after testing, soil is shown to be uncontaminated);
- Seeds and plantings to be used in the restoration will be collected from within the Sperling Preserve;
- Monitoring of the restoration project for a total of five years, including interim and final reporting; and
- Qualitative assessment of hydrologic function.

Although the City's proposal addresses some of the key elements of a habitat restoration plan, it does not provide adequate detail on the specific characteristics of the habitat to be restored, or enough information on the selection process for a reference site. In addition, the "qualitative" assessment of restoration success described in the submitted plan is inadequate. Determination of restoration success must involve a quantitative analysis. Therefore, the Commission is requiring in Special Condition 1 that the City, prior to issuance of this permit, submit for the Executive Director's review and approval a revised Restoration and Monitoring Plan that includes the following:

- An extensive description of the natural habitats to be created/restored (e.g., vernal pools, native grasslands), including a general overview of physical and biological characteristics and the expected range of biodiversity;
- Additional information on the selection of reference sites for both the vernal pool and native grasslands restoration. Specifically, the plan should address the scientific basis for choosing a particular site as a reference site (i.e., based on biological data or if data is unavailable, a literature review), and include the specific metrics (i.e., species diversity, % total cover, etc.) that will be used for quantitative comparison;
- A post-project survey of the direct and indirect impacts sustained to wetlands and ESHA at the project site to be performed within 15 days of project completion;
- A description of annual and final performance criteria and the quantitative methods used to judge success of the restoration project. The plan submitted by the City does contain details on the type of sampling methods that will be used to evaluate the restoration projects. However, the plan also needs to include quantitative success criteria (i.e., species diversity at the restoration project must be within 10% of the species diversity at the reference site, etc.) so that success of the restoration project, and thus compliance with the requirements of the CDP, can be adequately evaluated; and
- A description of contingency measures in case annual performance criteria are not achieved.

With these revisions, as required by Special Condition 1, the Commission believes that project-related wetland impacts will be adequately restored in a timely manner. The Commission therefore finds the project, as conditioned, consistent with the final test of Coastal Act Section 30233(a).

For the reasons described above, the Commission finds the project consistent with the three tests of Coastal Act Section 30233(a).

4.2.2 Environmentally Sensitive Habitat Areas

Coastal Act Section 30240 states:

> *(a)Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

As discussed in the previous section, the City has proposed several measures to protect existing biological resources including native grasslands that are environmentally sensitive habitat areas (ESHA). All work will take place between June 1 and September 30 to minimize impacts to wetlands, monarch butterflies and breeding birds. All work areas have been delineated and will be fenced off under the direction of the project biologist to exclude any ESHA to the maximum extent possible. The biologist will also meet with all site workers prior to commencement of the project to indicate sensitive biological resources, such as adjacent patches of native grassland, at each site, and steps that must be taken to protect these resources. Finally, the biologist will monitor all activities for compliance with the Work Plan and permit conditions of approval.

Even with the above measures in place, the proposed project requires the removal of a small area (0.05 acres or 2178 square feet) of native grassland within the project areas of Water Well 1 and 2, including purple needlegrass (Nassella pulchra) and California Brome (Bromus carinatus). In addition, a 100-foot segment of the access route to Water Well 2, and a 35-foot segment of the access route to Water Well 5 traverse through patches of native grassland. These areas will likely sustain some temporary damage from vehicle travel due to trampling, although due to the timing of the project during the dry season, these impacts are expected to be minor and the grassland is expected to recover quickly. The proposed access routes to these wells through this area of grassland is preferable to the alternatives which would unavoidably impact a larger, better quality patch of native grassland ESHA or a vernal pool.

For the loss of native grassland at Water Well sites 1 and 2, the City proposes to mitigate at a 3:1 ratio (an estimated 0.15 acres or 6534 square feet) native grasslands at a plot adjacent to a larger native grasslands restoration project to the northwest of Water Well 2 (see Figure 3c).[4] The proposed restoration site is currently occupied with non-native grasslands and perennial weeds. The exact size of the restoration project will depend on the size of the impact sustained during project activities.

Coastal Act Section 30240(a) requires that ESHA be protected against any significant disruption of habitat values and that only uses dependent on the ESHA resource are allowed within ESHA.

[4] The larger restoration project is mitigation for the Bluffs at Sandpiper Residential Development project, a development located to the northwest of the Ellwood Mesa.

As described previously, this project is part of an overall effort by the City to restore the site by removing infrastructure once used for oil production and potential residential development. Implementation of this project will therefore result in removal of a non-resource dependent use from ESHA (i.e., the wells). As discussed above, the project will cause the unavoidable loss or disturbance to a small area of ESHA. Since the affected area is very small, and the City will mitigate the loss of native grasslands at a 3:1 mitigation ratio, the project will not result in a significant disruption of habitat values. Thus, no long-term adverse impacts to ESHA will result from the project.

As discussed in the previous section, the City submitted a Restoration and Monitoring Plan, included as Attachment 1, which provides details on the restoration location, size and methodology (see Figure 3c). As part of its native grasslands restoration project, the City commits to the following:

- Selection of appropriate reference site(s);
- Use of a grow-kill cycle to kill and suppress undesired vegetation;
- Re-vegetation consisting of the application of a native grassland seed mix and seedlings collected from seed stocks in the Sperling Preserve;
- Irrigation until plants are self-sustaining
- Regular maintenance (i.e., weed removal and mulching) for a total of five years
- Monitoring of the restoration project for a total of five years, including interim and final reporting; and
- Performance goals of 80% relative cover of native species and less than 25% relative cover of invasive non-native plant species.

Similar to the vernal pool portion of the City's submitted Restoration Plan, the native grasslands portion of the Plan is missing some key elements. There is inadequate detail on the specific characteristics of the habitat to be restored and the selection process for a reference site. Although quantitative performance criteria are provided, there is no explanation as to how these criteria were derived and why they are appropriate. To address these deficiencies, **Special Condition 1** requires the City to submit for the Executive Director's approval, a revised Restoration and Monitoring Plan that in part explains the scientific basis for choosing the reference site and the quantitative methods used to judge success of the mitigation site.

For the reasons described above, the Commission finds the project, as conditioned, consistent with Coastal Act Section 30240.

4.2.3 Public Access and Recreation

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30221 of the Coastal Act states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30223 of the Coastal Act states:

> *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Project activities will interfere with the public's use of five public trails on the Ellwood Mesa Open Space. Within the Mesa, project vehicles will primarily use two north-to-south and three east-to-west unpaved trails to access each individual well site. These trails are currently used by pedestrians, bicyclists and equestrians for recreation. For the estimated 30-day duration of the project, visitors to the Mesa will be directed to use the seven other trails not affected by the project, although access to the affected trails will still be available and detours will be provided where necessary. No impacts to public parking at the Mesa will occur. Although the project will temporarily limit recreational opportunities on some trails, other comparable trails will be available and overall access will not be significantly affected. For these reasons, the Commission finds the project would not interfere with the public's right of access and recreational opportunities, and is therefore consistent with Coastal Act Sections 30211, 30221 and 30223

4.2.4 Cultural Resources

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measure shall be required.*

Four prehistoric sites have been recorded on the Ellwood Mesa. These sites were estimated to occupy a total of 7,730 square meters based on the distribution of surface artifacts. Individual artifacts, not associated with a cultural deposit, have also been found on the Mesa. Two of the sites, LRW-90-47 and LRW-90-50 will potentially be impacted by the project.

To minimize impacts to any cultural resources, the City proposes to institute several monitoring and protection measures, outlined in the City of Goleta General Plan, the Coastal Land Use Plan, and incorporated as conditions of approval for the Ellwood Open Space Plan. These measures include a thorough review of current information on existing archeological sites on the Mesa including an assessment by a qualified archeologist as to the significance of the identified sites and any additional recommended mitigation measures. In addition, a qualified archeologist will be present during all activities involving earth disturbance within the well abandonment areas. If archeological artifacts or remains are encountered, all work will cease immediately until the qualified archeologist and a Native American representative can evaluate the significance of the find. If the find is deemed to be significant, it will be subject to a Phase 3 mitigation program consistent with City of Goleta Archeological Guidelines.

With implementation of the procedures described above, the Commission finds that adequate mitigation measures are in place to protect archeological resources. Thus, the Commission finds the project consistent with Coastal Act Section 30244.

4.2.5 Release of Oil or Other Hazardous Materials

Coastal Act § 30232 states:

> *Protection against spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

Although one of the purposes of this project is to properly abandon three non-functioning oil wells to prevent spills and leaks, undertaking the well abandonment work itself could result in the release of hydrocarbons. During the removal of the existing well cap, it is possible that an oil spill could occur if there is residual oil and/or gas pressure that have built up behind the cap. The first test of Coastal Act Section 30232 requires an applicant to protect against the spillage of oil or other hazardous substances. The City has committed to a series of measures designed to prevent the release of oil during project activities, including:

- The use of a hot tap to check for internal casing pressure when the well head is exposed initially;
- The use of a blow-out preventer during all well drilling activities; and
- The use of plastic sheeting and drip pans to catch any fluid or debris from equipment and vehicles.

Notwithstanding implementation of these and other measures to prevent an oil spill, accidental spills can and do occur. The second test of Coastal Act Section 30232 requires the applicant to provide effective containment and cleanup facilities and procedures in the event of a spill. DOGGR, the state agency that will be performing the oil well re-abandonment tasks, will operate under its Incident Contingency Plan (updated March 1, 2011), a district-wide plan that describes how the agency will respond to, control and remove all spills resulting from oil and gas drilling, production and plugging/abandonment operations. The Commission staff requested but did not receive this Incident Contingency Plan for review prior to the Commission taking action. Therefore, the Commission is requiring in **Special Condition 2** that the City submit a project-specific Oil Spill Contingency Plan for the Executive Director's review and approval that includes, at minimum, the following:

- A description of the project's reasonable worst-case spill, including source of spill and volume; and

- A list of equipment that will be kept on site during well abandonment activities (e.g., vacuum trucks, oil spill boom, bins) sufficient to respond to and recover the project's identified worst-case spill.

With the implementation of **Special Condition 2**, the Commission finds that the applicant will implement measures to protect against the spillage of oil and will provide containment and

cleanup equipment if a spill should occur. The Commission therefore finds that the project is consistent with Coastal Act Section 30232.

5. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. As discussed above, the proposed project has been conditioned to be found consistent with the policies of the Coastal Act. Mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, that would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of CEQA.

Appendix A: Substantive File Documents

Documents

Storrer Environmental Services. Site Restoration and Monitoring Plan, Ellwood Mesa – Sperling Reserve, Goleta, CA. November 19, 2010.

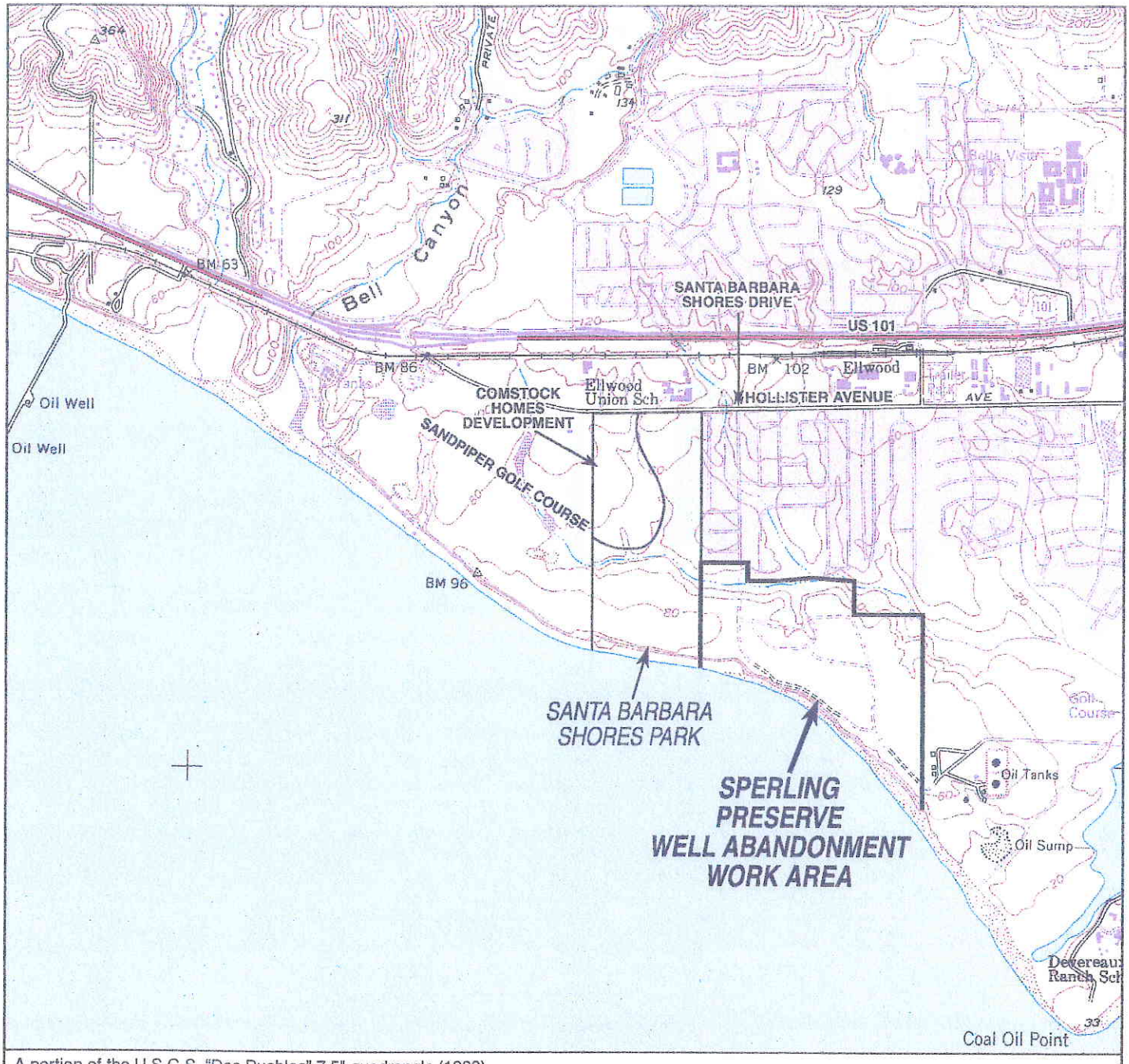
Storrer Environmental Services. Biological Resources Evaluation, Proposed Ellwood Mesa Well Abandonment Project. March 23, 2010.

Campbell Geo, Inc. Work Plan for the Abandonment of Oil Wells, Water Production Wells, and Groundwater Monitoring Well, Ellwood Mesa/Sperling Preserve, Goleta, CA. March 25, 2010 (revised November 19, 2010).

Correspondence

Dan Nemecheck, Senior Planner, City of Goleta. Re: Submittal of Supplemental Application Information, Ellwood Mesa Abandonment Project, Coastal Development Permit Application E-11-002. March 16, 2011.

Figure 1



A portion of the U.S.G.S. "Dos Pueblos" 7.5" quadrangle (1988)

PROJECT LOCATION MAP
WELL ABANDONMENT
ELLWOOD MESA/SPERLING PRESERVE
Goleta, California

N

SCALE IN FEET

0 2000 4000

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By DAS Date 3-26-10

Plate 1

COMSTOCK HOMES DEVELOPMENT

SITE ACCESS AT SANTA BARBARA SHORES DRIVE
NOTE: MAIN GATE IS 10'0" WIDE BETWEEN BRICK PILLARS; EMERGENCY ACCESS GATE IS 13' WIDE

Devereaux Creek

100' BUFFER AREA FROM MONARCH BUTTERFLY OCCUPIED TREE CANOPY AND RAPTOR BIRD NESTING AREAS

MONITORING WELL MW-1

100' BUFFER AREA SOUTH OF DEVEREAUX CREEK

OIL WELL 'ELWOOD' #1

WATER WELL #1

MOBILE LAB (WITHIN PLANNED STAGING AREA)

WATER WELL #3

100' WETLAND BUFFER

SPERLING PRESERVE

SANTA BARBARA SHORES PARK (NOT A PART OF WELL ABANDONMENT PLAN)

100' WETLAND BUFFER

OIL WELL 'DOTY' #4

100' WETLAND BUFFER

100' WETLAND BUFFER

TRUCK TURNAROUND

100' WETLAND BUFFER

WATER WELL #4

OIL WELL 'DOTY' #5

WATER WELL #2

WATER WELL #5

CURRENT GRASSLAND RESTORATION AREA (URS CORPORATION FOR COMSTOCK HOMES)

Pacific Ocean

Figure 2

Legend

Environmentally Sensitive Habitats

- Beach and Shoreline
- Unvegetated Open Creek Channel
- Open Water
- Riparian/Marsh/Vernal Pool
- Native Grassland
- Sage Scrub/Dune/ Bluff Scrub
- Native Upland Woodlands /Savannahs
- Monarch Butterfly and/or Raptor Roosting Habitat
- Critical Habitat for the Western Snowy Plover

Other Features

- Goleta City Boundary
- Coastal Zone
- Creeks
- Proposed Access Routes to Well Abandonment Sites
- Buffer Zones from Designated ESHA's near Well Sites per City of Goleta GP/CLUP Conservation Element (Chapter 4)

Source of Aerial/ESHA Layers: JDL Mapping, Inc. Date of Aerial: August 2008

Sources: Habitat mapping conducted by Jones & Stokes in April-May 2006 based on aerial imagery (1-foot resolution) and field observation, merged with 1) information on the occurrence of special status habitats and species collected by City from recent information from local environmental review ; 2) mapping of creeks, ponds, lakes and reservoir location based on USGS topographic map review and habitat management plan documents, air photo interpretation, and field survey; and 3) review of California Natural Diversity Database (CNDDB) records by Jones & Stokes for occurrence of special status species in the Goleta and Dos Pueblos quadrangles and vicinities (2006 databases). Habitats reflect those comprising an ESHA.

Notes: ESHA locations are approximate. Any area not designated on the ESHA map that meets the ESHA criteria shall be accorded the same protections as if the area was shown on the map. ESHA buffers in the vicinity of the wells are shown. Other ESHA buffers are not shown on this map. Refer to the applicable policy in the General Plan for the specific buffer widths.
Work Area site plan details, fence location, and survey coordinates for each well site are shown on the plans in Appendix A of the Well Abandonment Work Plan.

N

PROPOSED ACCESS ROUTES AND WELL ABANDONMENT SITES SHOWING ENVIRONMENTALLY SENSITIVE HABITAT AREAS

ELLWOOD MESA/SPERLING PRESERVE GOLETA, CALIFORNIA

November 2010

SCALE IN FEET

0 200 400

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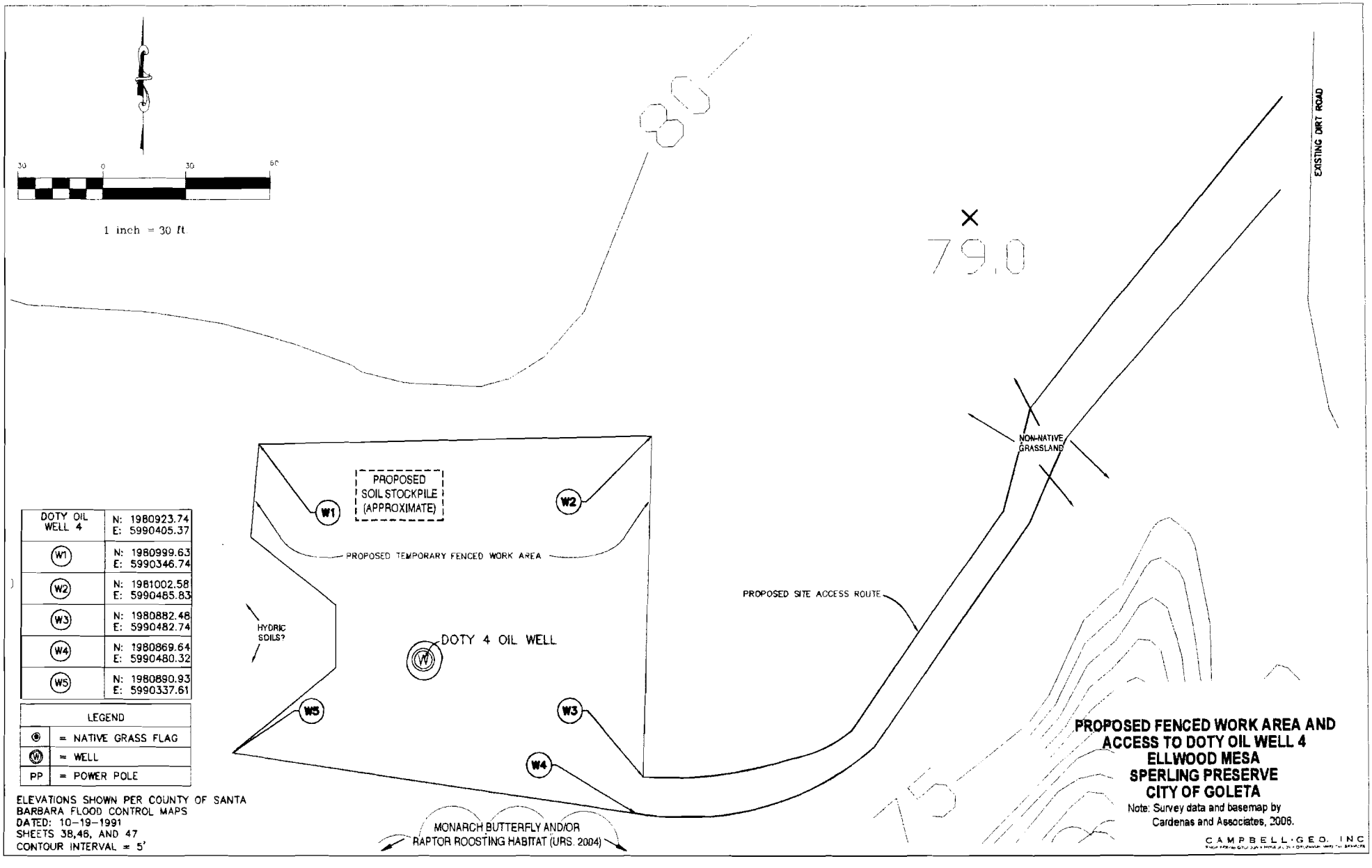
ENGINEERING GEOLOGY • HYDROLOGY • GEOENVIRONMENTAL SERVICES

Plate 2

Figure 3a



DOTY OIL WELL 4	N: 1980923.74 E: 5990405.37
W1	N: 1980999.63 E: 5990346.74
W2	N: 1981002.58 E: 5990485.83
W3	N: 1980882.48 E: 5990482.74
W4	N: 1980869.64 E: 5990480.32
W5	N: 1980890.93 E: 5990337.61

LEGEND	
◉	= NATIVE GRASS FLAG
Ⓦ	= WELL
PP	= POWER POLE

ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10-19-1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'

Figure 3b

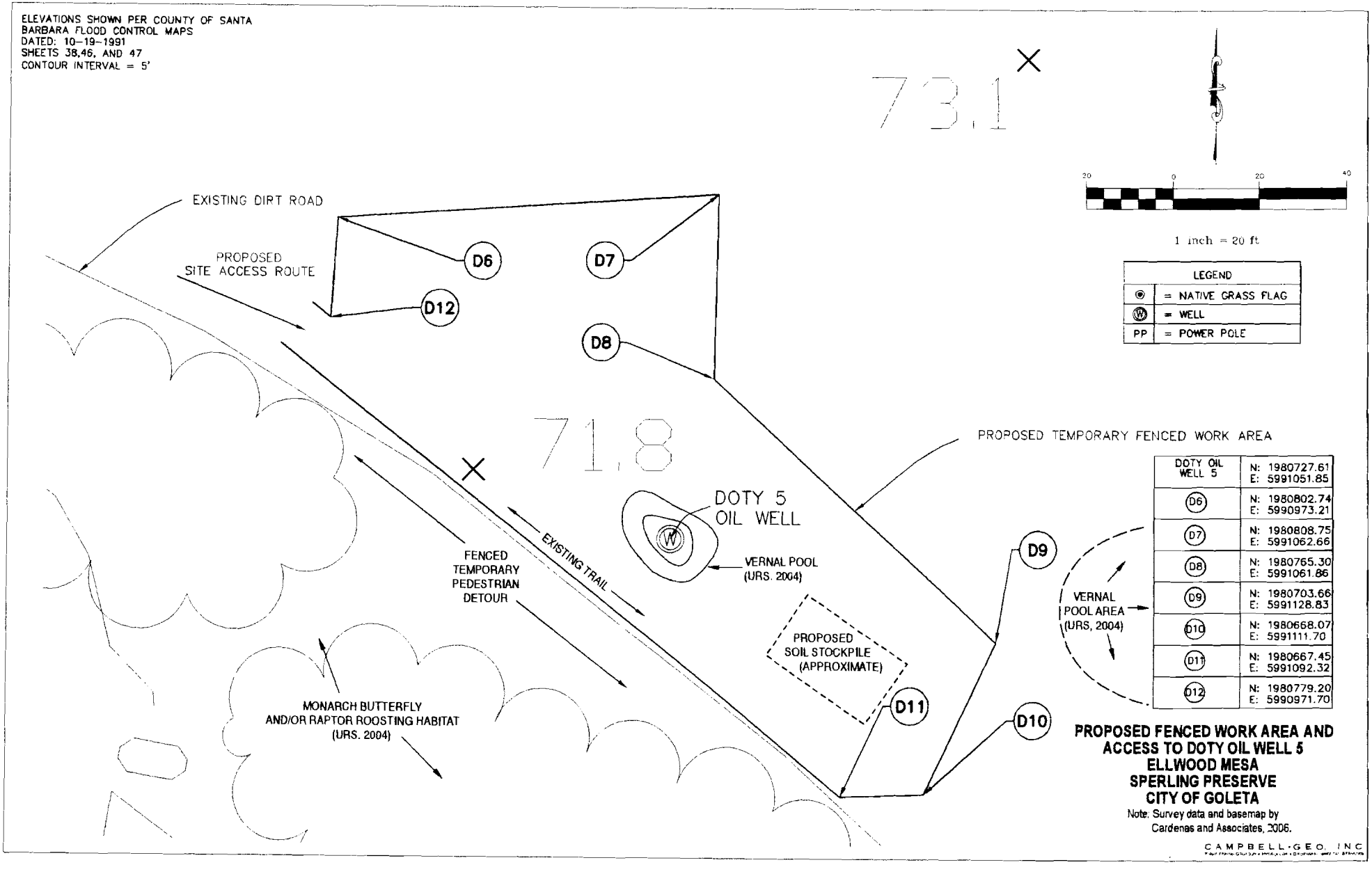
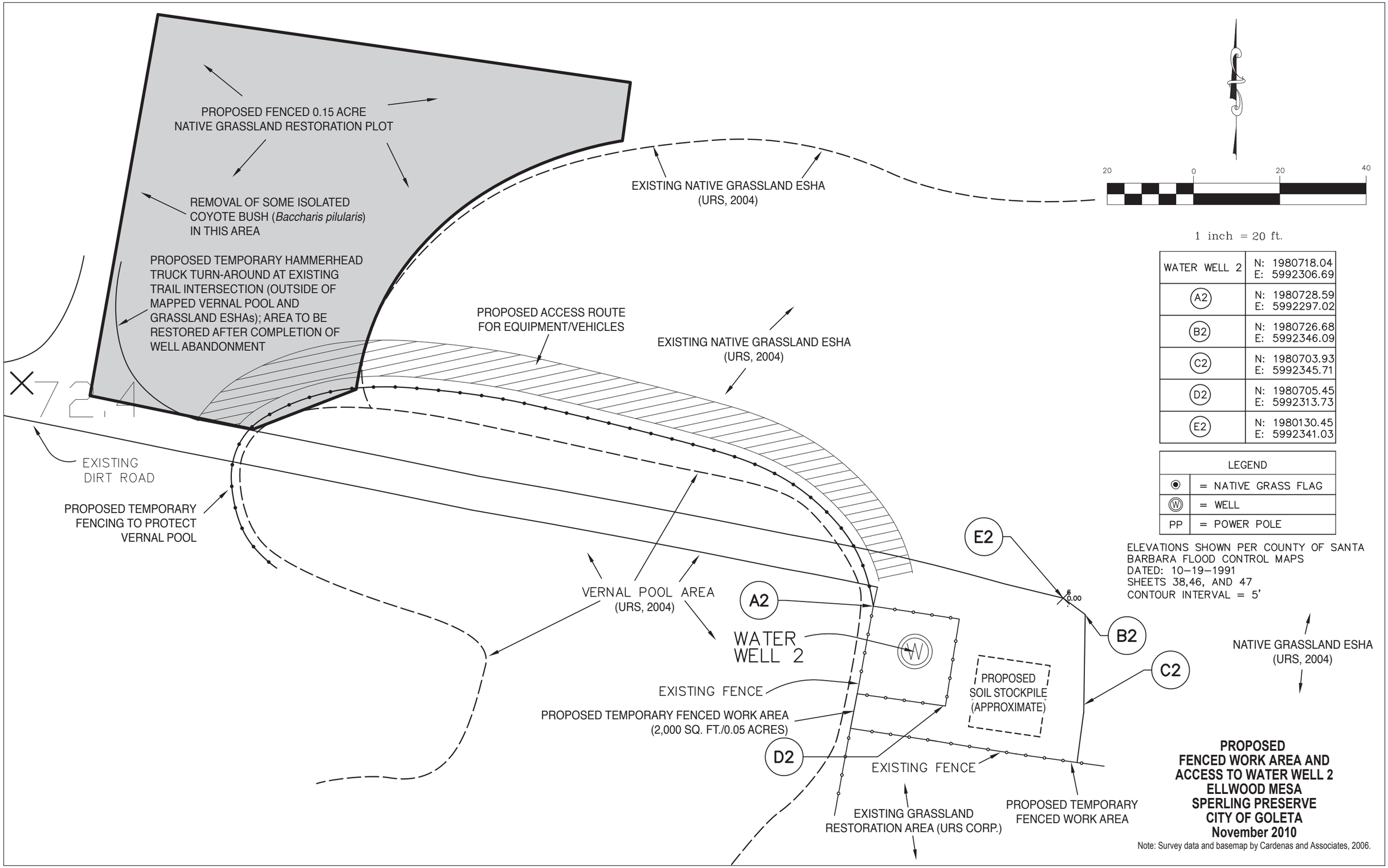

ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10-19-1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'
73.1
71.8
EXISTING DIRT ROAD
PROPOSED SITE ACCESS ROUTE
D6
D7
D8
D9
D10
D11
D12
PROPOSED TEMPORARY FENCED WORK AREA
DOTY 5 OIL WELL
VERNAL POOL (URS. 2004)
EXISTING TRAIL
FENCED TEMPORARY PEDESTRIAN DETOUR
PROPOSED SOIL STOCKPILE (APPROXIMATE)
MONARCH BUTTERFLY AND/OR RAPTOR ROOSTING HABITAT (URS. 2004)
VERNAL POOL AREA (URS, 2004)
20 0 20 40
1 inch = 20 ft
LEGEND
= NATIVE GRASS FLAG
= WELL
PP = POWER POLE
DOTY OIL WELL 5 N: 1980727.61 E: 5991051.85
D6 N: 1980802.74 E: 5990973.21
D7 N: 1980808.75 E: 5991062.66
D8 N: 1980765.30 E: 5991061.86
D9 N: 1980703.66 E: 5991128.83
D10 N: 1980668.07 E: 5991111.70
D11 N: 1980667.45 E: 5991092.32
D12 N: 1980779.20 E: 5990971.70
PROPOSED FENCED WORK AREA AND ACCESS TO DOTY OIL WELL 5
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA
Note: Survey data and basemap by Cardenas and Associates, 2006.
CAMPBELL-GEO, INC

Figure 3c



WATER WELL 2	N: 1980718.04 E: 5992306.69
A2	N: 1980728.59 E: 5992297.02
B2	N: 1980726.68 E: 5992346.09
C2	N: 1980703.93 E: 5992345.71
D2	N: 1980705.45 E: 5992313.73
E2	N: 1980130.45 E: 5992341.03

LEGEND	
◉	= NATIVE GRASS FLAG
Ⓦ	= WELL
PP	= POWER POLE

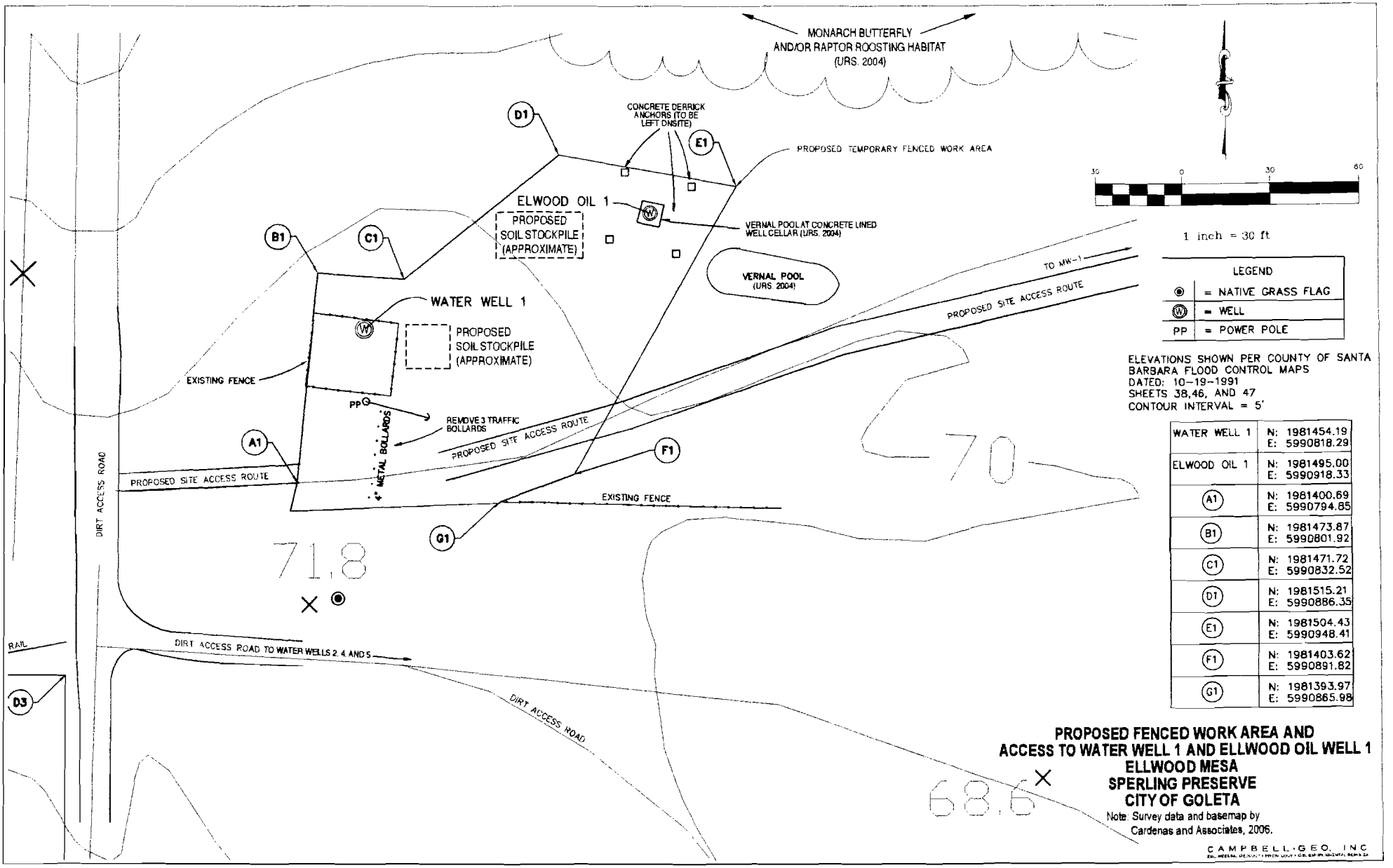
ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10–19–1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'

NATIVE GRASSLAND ESHA
(URS, 2004)

**PROPOSED
FENCED WORK AREA AND
ACCESS TO WATER WELL 2
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA
November 2010**

Note: Survey data and basemap by Cardenas and Associates, 2006.

Figure 3d



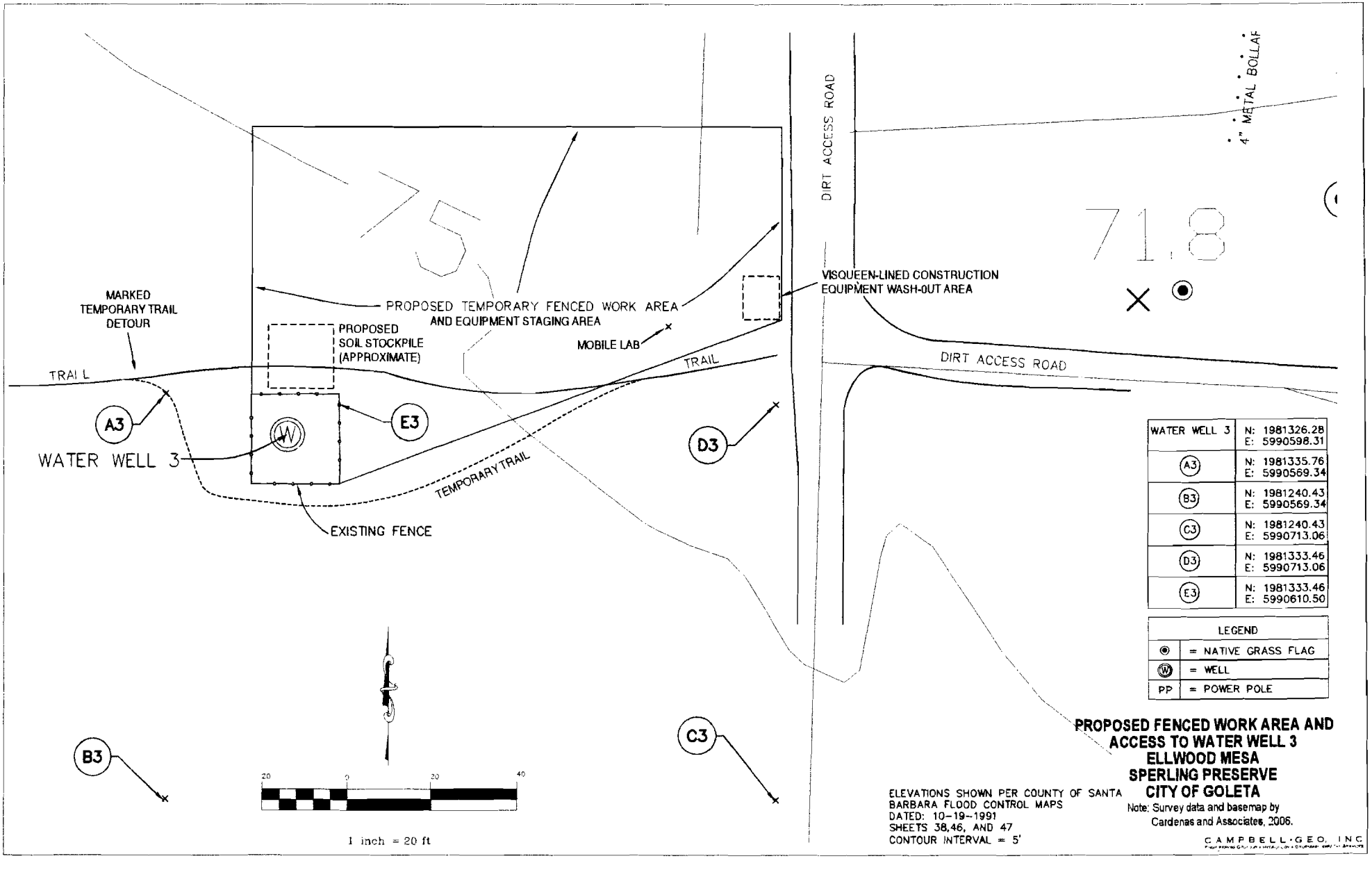
WATER WELL 1	N: 1981454.19 E: 5990818.29
ELWOOD OIL 1	N: 1981495.00 E: 5990918.33
A1	N: 1981400.69 E: 5990794.85
B1	N: 1981473.87 E: 5990801.92
C1	N: 1981471.72 E: 5990832.52
D1	N: 1981515.21 E: 5990886.35
E1	N: 1981504.43 E: 5990948.41
F1	N: 1981403.62 E: 5990891.82
G1	N: 1981393.97 E: 5990865.98

PROPOSED FENCED WORK AREA AND ACCESS TO WATER WELL 1 AND ELLWOOD OIL WELL 1
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA

Note: Survey data and basemap by Cardenas and Associates, 2006.

CAMPBELL-GEO, INC

Figure 3e



WATER WELL 3	N: 1981326.28 E: 5990598.31
A3	N: 1981335.76 E: 5990569.34
B3	N: 1981240.43 E: 5990569.34
C3	N: 1981240.43 E: 5990713.06
D3	N: 1981333.46 E: 5990713.06
E3	N: 1981333.46 E: 5990610.50

LEGEND	
◉	= NATIVE GRASS FLAG
Ⓦ	= WELL
PP	= POWER POLE

PROPOSED FENCED WORK AREA AND ACCESS TO WATER WELL 3
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA

Note: Survey data and basemap by Cardenas and Associates, 2006.

ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10-19--1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'

CAMPBELL-GEO, INC

Figure 3f

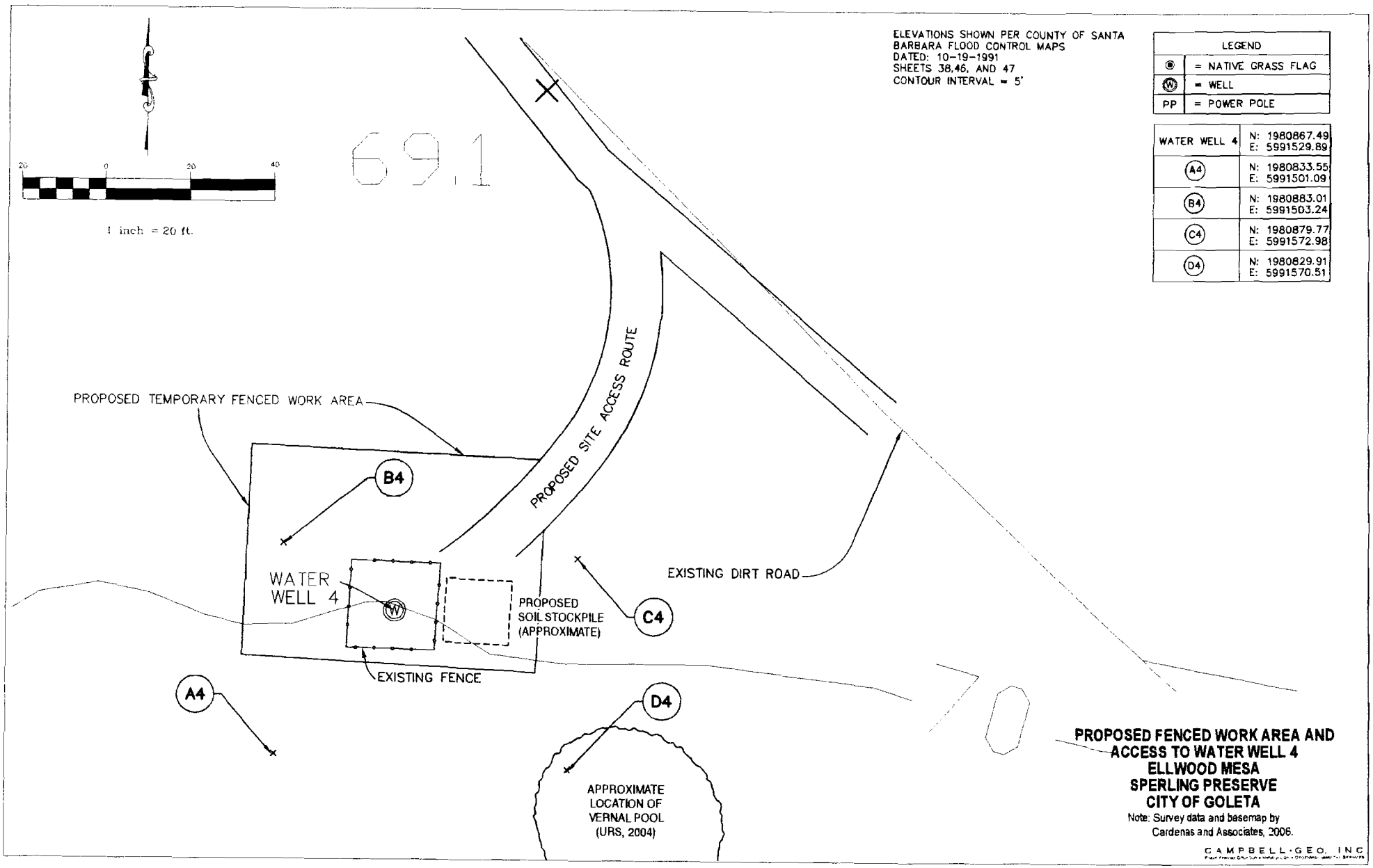
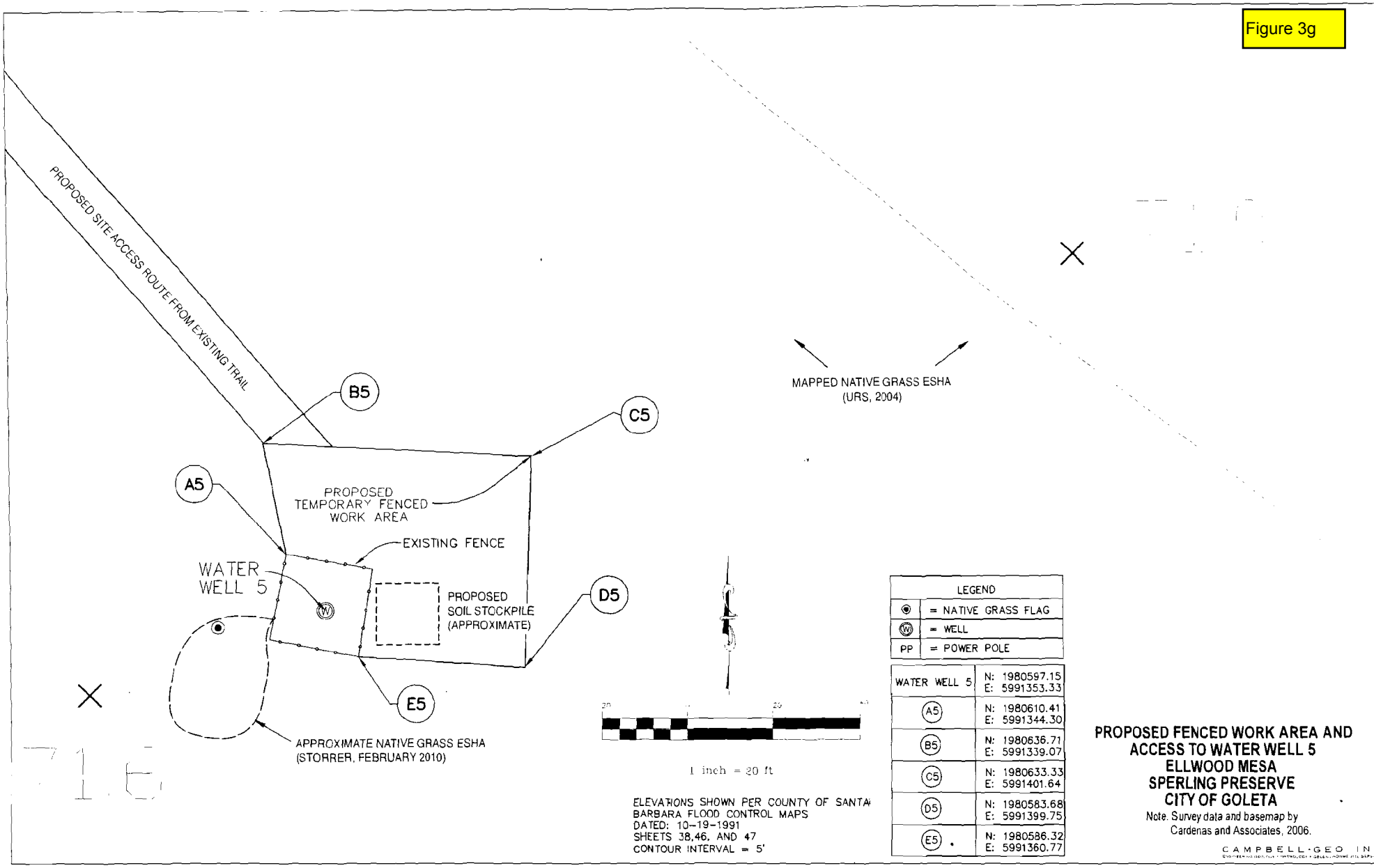

ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10-19-1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'
LEGEND
= NATIVE GRASS FLAG
= WELL
PP = POWER POLE
WATER WELL 4 N: 1980867.49 E: 5991529.89
A4 N: 1980833.55 E: 5991501.09
B4 N: 1980883.01 E: 5991503.24
C4 N: 1980879.77 E: 5991572.98
D4 N: 1980829.91 E: 5991570.51
20 0 20 40
1 inch = 20 ft.
69.1
PROPOSED TEMPORARY FENCED WORK AREA
PROPOSED SITE ACCESS ROUTE
B4
WATER WELL 4
PROPOSED SOIL STOCKPILE (APPROXIMATE)
EXISTING DIRT ROAD
C4
EXISTING FENCE
A4
D4
APPROXIMATE LOCATION OF VERNAL POOL (URS, 2004)
PROPOSED FENCED WORK AREA AND ACCESS TO WATER WELL 4
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA
Note: Survey data and basemap by Cardenas and Associates, 2006.
CAMPBELL-GEO, INC

Figure 3g



LEGEND	
◉	= NATIVE GRASS FLAG
Ⓦ	= WELL
PP	= POWER POLE

WATER WELL 5	N: 1980597.15 E: 5991353.33
A5	N: 1980610.41 E: 5991344.30
B5	N: 1980636.71 E: 5991339.07
C5	N: 1980633.33 E: 5991401.64
D5	N: 1980583.68 E: 5991399.75
E5	N: 1980586.32 E: 5991360.77

PROPOSED FENCED WORK AREA AND ACCESS TO WATER WELL 5
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA

Note. Survey data and basemap by Cardenas and Associates, 2006.

CAMPBELL-GEO INC

Figure 3h

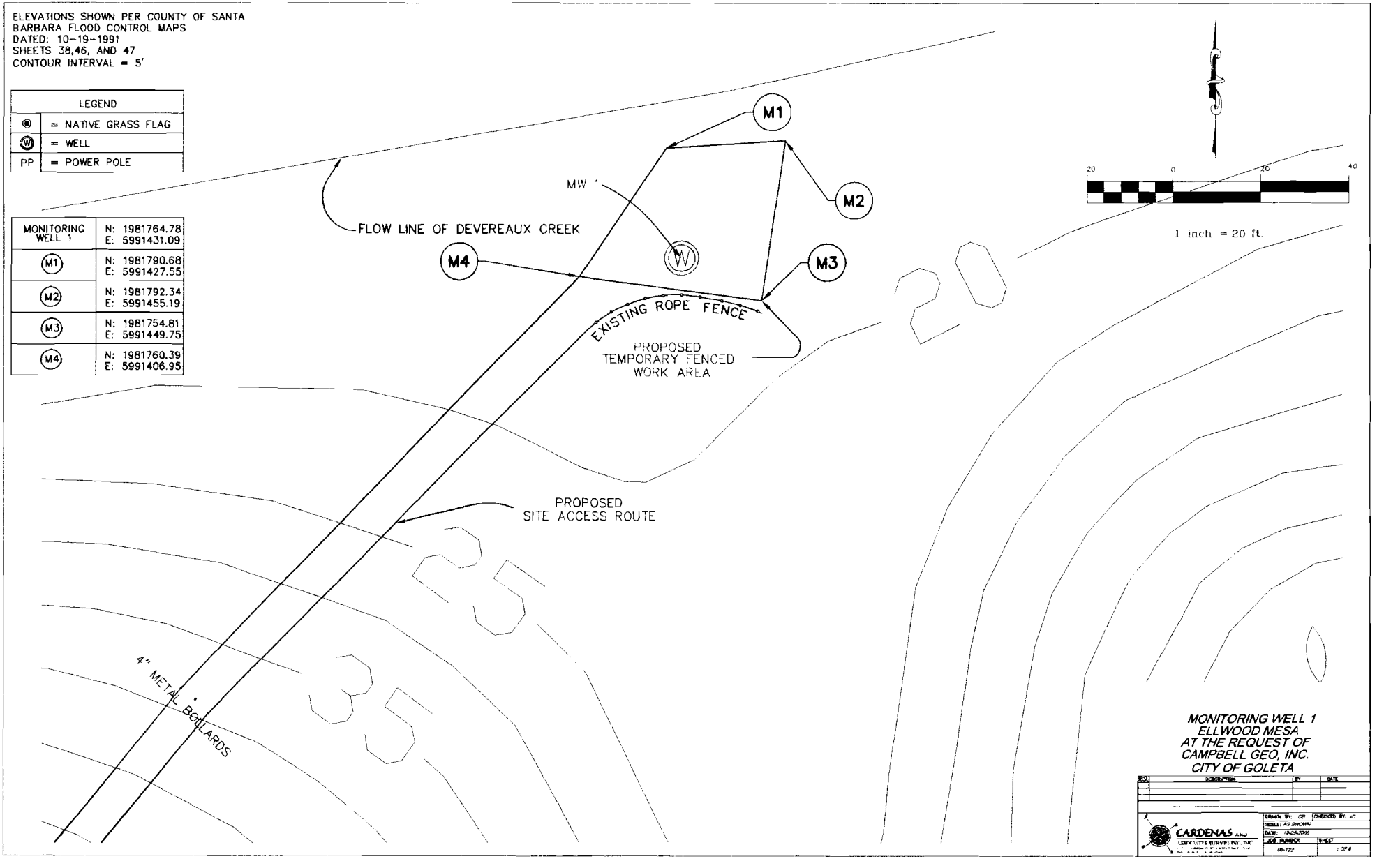
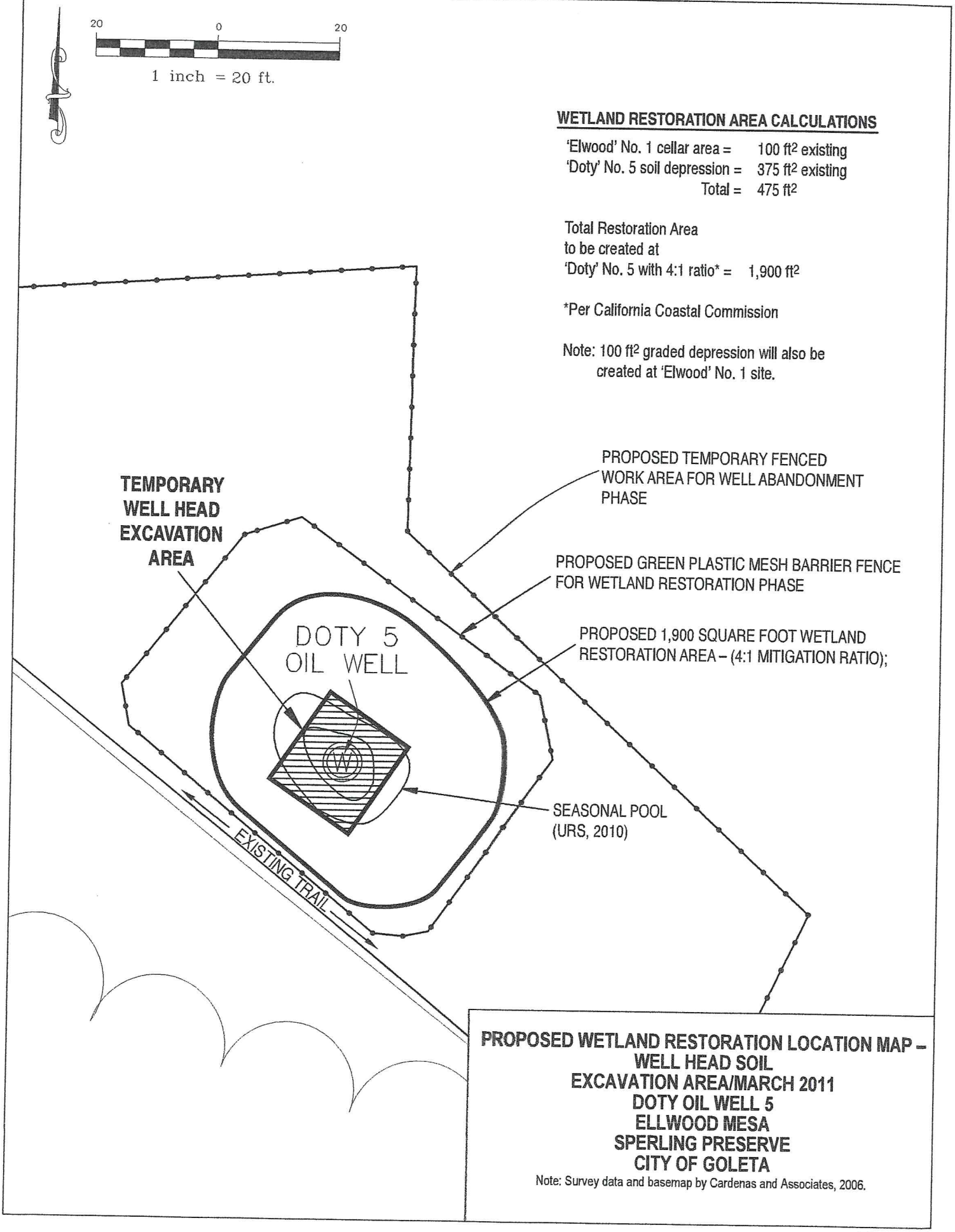

ELEVATIONS SHOWN PER COUNTY OF SANTA BARBARA FLOOD CONTROL MAPS
DATED: 10-19-1991
SHEETS 38,46, AND 47
CONTOUR INTERVAL = 5'
LEGEND
= NATIVE GRASS FLAG
= WELL
PP = POWER POLE
MONITORING WELL 1 N: 1981764.78 E: 5991431.09
M1 N: 1981790.68 E: 5991427.55
M2 N: 1981792.34 E: 5991455.19
M3 N: 1981754.81 E: 5991449.75
M4 N: 1981760.39 E: 5991406.95
M1
M2
M3
M4
MW 1
FLOW LINE OF DEVEREAUX CREEK
EXISTING ROPE FENCE
PROPOSED TEMPORARY FENCED WORK AREA
PROPOSED SITE ACCESS ROUTE
4" METAL BOLLARDS
20
35
20
0
20
40
1 inch = 20 ft.
MONITORING WELL 1
ELLWOOD MESA
AT THE REQUEST OF
CAMPBELL GEO, INC.
CITY OF GOLETA
CARDENAS

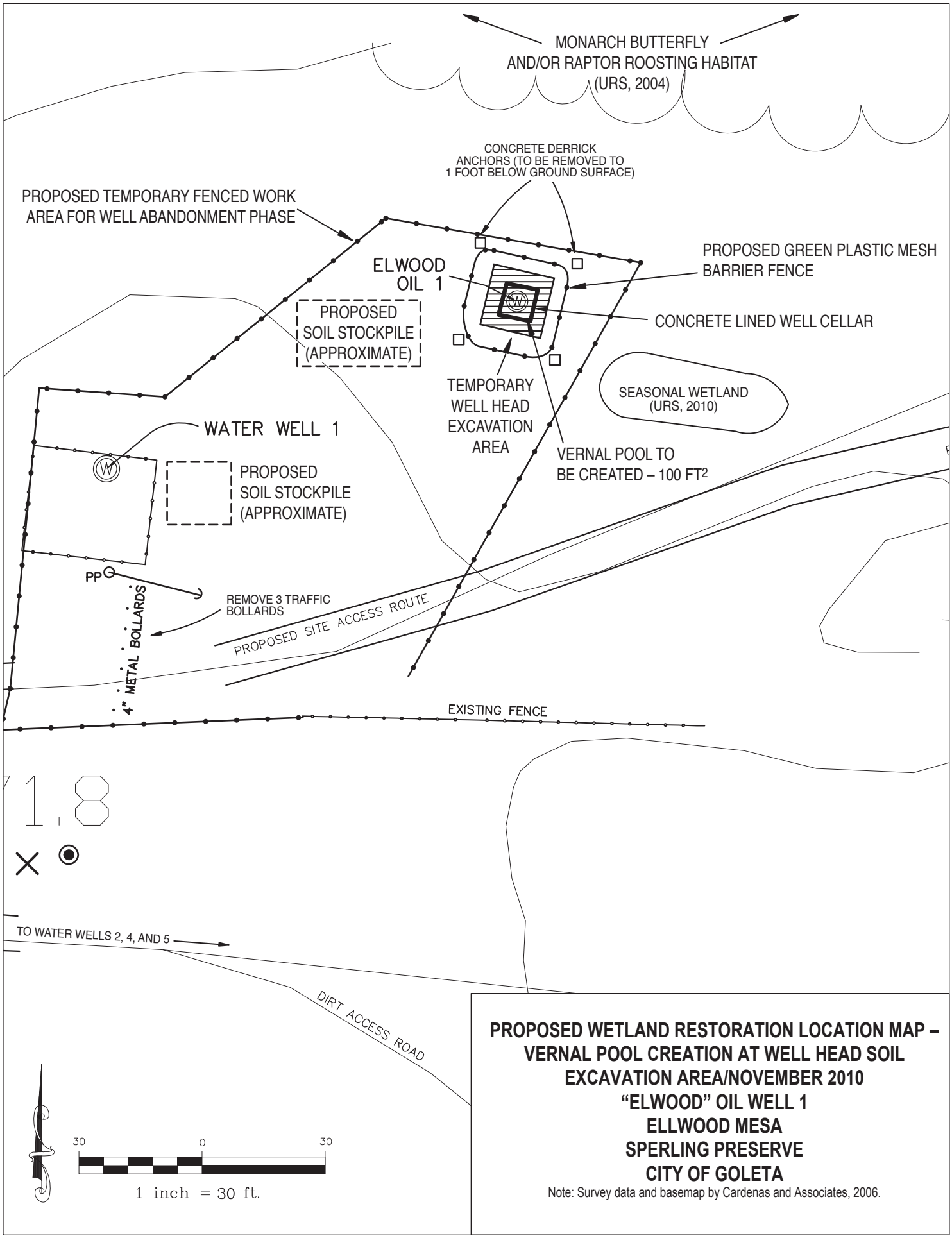
Figure 4



PROPOSED WETLAND RESTORATION LOCATION MAP – WELL HEAD SOIL EXCAVATION AREA/MARCH 2011
DOTY OIL WELL 5
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA

Note: Survey data and basemap by Cardenas and Associates, 2006.

Figure 6



PROPOSED WETLAND RESTORATION LOCATION MAP – VERNAL POOL CREATION AT WELL HEAD SOIL EXCAVATION AREA/NOVEMBER 2010
"ELWOOD" OIL WELL 1
ELLWOOD MESA
SPERLING PRESERVE
CITY OF GOLETA

Note: Survey data and basemap by Cardenas and Associates, 2006.