THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: PUBLIC WORKS

Urgent ____ Routine ✓

CEO Concurs with Recommendation YES ____ NO ____
(Information Attached)

BOARD AGENDA # *C-1

AGENDA DATE OCTOBER 2, 2001

4/5 Vote Required YES ____ NO ✓

SUBJECT:

AUTHORIZE AMENDMENT NO. 2 TO THE AGREEMENT WITH SCS ENGINEERS TO EXPAND THE SCOPE OF THEIR CURRENT WORK RELATING TO ENVIRONMENTAL REVIEW AND PERMITTING OF THE FINK ROAD LANDFILL EXPANSION AREA

STAFF RECOMMENDATIONS:

1. AUTHORIZE THE CHIEF EXECUTIVE OFFICER TO EXECUTE AMENDMENT NO. 2 TO THE AGREEMENT WITH SCS ENGINEERS TO EXPAND THE SCOPE OF THEIR CURRENT WORK RELATING TO ENVIRONMENTAL REVIEW AND PERMITTING OF THE FINK ROAD LANDFILL EXPANSION AREAS; AND,

2. DIRECT THE AUDITOR/CONTROLLER TO INCREASE APPROPRIATIONS IN ACCOUNT #63280 (CONTRACTS), FUND 4021, ORG. 0041100 (FINK ROAD LANDFILL), IN THE AMOUNT OF $407,407, AS SET FORTH IN THE ATTACHED BUDGET JOURNAL.

FISCAL IMPACT:

Approval of this amendment to the agreement with SCS Engineers adds $407,407 to the previously approved amount of $1,682,259, for a total cost of $2,089,666. This increase will be funded by the Fink Road Landfill Retained Earnings account. There will be no impact to the General Fund from this action because the Fink Road Landfill is an Enterprise Fund operation.

BOARD ACTION AS FOLLOWS:

No. 2001-762

On motion of Supervisor Simon , **Seconded by Supervisor** Blom
and approved by the following vote,
Ayes: Supervisors: Mayfield, Blom, Simon, Caruso, and Chair Paul
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) ____ **Denied**
3) ____ **Approved as amended**
MOTION:

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk **By: Deputy** **File No.**

1010-08

DISCUSSION: Included with the Board of Supervisors May 25, 1999 approval of the purchase of the Vogel property for future expansion of the Fink Road Landfill was the authorization for the Chief Executive Officer to execute an agreement with SCS Engineers relating to environmental review and permitting of the landfill expansion area. Specifically, the agreement executed related to planning, engineering, CEQA compliance and reporting, and State permitting for the completion of the Fink Road Landfill Expansion project. This agreement provided for the preparation of an environmental impact report as the appropriate environmental document.

At a recent meeting with the U.S. Fish and Wildlife Service (USF&WS), the work to be performed as a part of the landfill expansion was discussed. At that meeting it was determined that a habitat conservation plan would be required, which then triggered the need to prepare an environmental impact statement (EIS).

The EIS will utilize the data that has been developed for the Draft EIR by expanding that data to include the NEPA required analysis of the projecdt alternatives. Under CEQA, an EIR is required to identify and list alternatives to the subject project. NEPA requires that all identified project alternatives be studied, and a written analysis of the alternatives be included in the EIS document.

The additional work associated with the preparation of the EIS document, utilizing the Draft EIR work product, makes it necessary to authorize the Chief Executive Officer to execute an amendment to the agreement with SCS Engineers for this additional work. This portion of the amendment will cost an additional $328,907.

It has also been determined that additional work is necessary to provide modeling and analysis associated with air quality emissions and landfill gas generation that will be needed to support bioreactor operation and power generation for the landfill expansion. This portion of the amendment will cost an additional $78,500. The total cost of this amendment will be $407,407.

Approval of this amendment will allow the Federal EIS process to concurrently proceed with the State EIR process, reducing the delay brought about by this additional requirement.

POLICY ISSUE: This action meets the Board's priority of providing a safe and healthy community by providing an environmentally safe solid waste disposal area by taking steps to insure long-term disposal capacity for Stanislaus County.

STAFFING IMPACT: There are no staffing impacts at this time.

PB:la
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AUDITOR - CONTROLLER
COPY

AUDITOR-CONTROLLER
BUDGET JOURNAL

Stanislaus County
Striving to be the Best

Budget Organization: **Stanislaus Budget Org**
Budget: **LEGAL BUDGET**
Accounting Period From: Jul-01
To: Jun-02

Department of Public Works
STANISLAUS COUNTY

BATCH SCREEN

Journal Batch: **PW - LW** BO --
Category: **Budget**

Line	Coding Structure: Fund 4	Org 7	Account 5	G/L Proj 7	Loc 6	Misc 6		Period Sep-01 AMOUNT	Description
1	4021	41100	63280	0	0	0	.0	407,407.00	Increase Appr
2							.0		
3							.0		
4							.0		
5							.0		
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19							.0		
20							.0		
21							.0		
22							.0		
23							.0		
24							.0		
25							.0		
						Totals		407,407.00	

Explanation:
Expand contract with SCS Engineers

Requesting Department	CEO	Auditors Office Only
Larry Wendel		
Signature	Signature	Approved By
25-Sep-01		Admin Approval ($75K+)
Date	Date	Date 9/25/01 Date

AMENDMENT NO. 2
to
PROJECT 99-01
(SCS Engineers)

Pursuant to Paragraph 17 of the Master Agreement For Professional Services dated May 25, 1999 (the "Agreement"), the COUNTY OF STANISLAUS ("County") and STEARNS, CONRAD, AND SCHMIDT CONSULTING ENGINEERS, INC., a Virginia corporation doing business as SCS Engineers ("Consultant"), hereby modify the Agreement as follows:

1. The following additional work tasks are added to the scope of work under Paragraph B of Project 99-01, and Paragraph C.1 of Project 99-01 is amended to include compensation for the additional work tasks as described below:

(a) Additional Task No. 3. The Consultant shall perform additional environmental analysis and work to prepare an Environmental Impact Statement under the National Environmental Policy Act for the Fink Road Landfill expansion project as set forth in, and for the compensation specified in, the Consultant's proposal dated November 6, 2000, copies of which are attached hereto and, by this reference, made a part hereof.

(b) Additional Task No. 4. The Consultant shall perform additional analysis and services related to the incorporation of a bioreactor and power generation into the environmental impact statement and environmental impact report for Fink Road Landfill expansion project as set forth in, and for the compensation specified in, the Consultant's proposal dated May 21, 2001, copies of which are attached hereto and, by this reference, made a part hereof.

Additional Tasks No. 1 and No. 2 were approved in Amendment No. 1 on May 18, 2000.

2. Paragraph C.2 of Project 99-01 Scope of Services is amended to read as follows:

> "The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall not exceed $1,571,660; plus $79,372.00 for Additional Task No. 1; plus $31,227.00 for Additional Task No. 2, including; plus $328,907.00 for Additional Task No. 3; plus $78,500.00 for Additional Task No. 4, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained pursuant to Paragraph 1.6 of the Agreement. The cumulative total compensation shall not exceed the sum of $2,089,666.00."

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 on Oct. 2, 2001, 2001.

COUNTY OF STANISLAUS

By _____
Reagan M. Wilson
Chief Executive Officer

"County"

SCS ENGINEERS

By _____
Joseph J. Miller, P.E.
Vice President

"Consultant"

APPROVED AS TO CONTENT:

By _____
George Stillman, Director
Department of Public Works

APPROVED AS TO FORM:
MICHAEL H. KRAUSNICK
COUNTY COUNSEL

By _____
John P. Doering
Deputy County Counsel

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ADDITIONAL TASK NO. 3

Environmental Consultants

6850 Regional Street
Suite 240
Dublin, CA 94568-2920

925 829-0661
FAX 925 829-5493
www.scseng.com

SCS ENGINEERS

November 6, 2000
File No. 01281200

Mr. David Nordell
Department of Public Works
County of Stanislaus
1716 Morgan Road
Modesto, California 95358

Subject: Revised Scope, Schedule, and Fee Estimate
Environmental Impact Statement
Fink Road Landfill Expansion

Dear Dave:

SCS Engineers (SCS) is pleased to submit this revised scope of work, schedule, and fee estimate (11/3/00) to prepare an Environmental Impact Statement (EIS) for the Fink Road Landfill expansion under the National Environmental Quality Act (NEPA) Standards. At our meeting on May 11, 2000 with the US Fish & Wildlife Service (USFWLS), lead federal agency, it was determined by USFWLS that in addition to meeting CEQA requirements, NEPA Standards for an EIS must be met for the proposed expansion at Fink Road Landfill. This revised scope of work is intended to meet NEPA compliance standards for the expansion. Our revised scope of work, schedule and fee are based on discussion with County of Stanislaus (County) Public Works and Planning Departments.

The tasks that the SCS Team will perform to meet the County's objectives of compliance with NEPA Standards are described in attached Exhibit B. We will perform the work and prepare documents in support of the County Planning Department, which will author the EIS document. The tasks are presented under the headings of Planning and Engineering, Environmental Impact Statement, and Landfill Permitting. They represent a comprehensive analysis of the proposed expansion, particularly of the alternatives to the proposed project. These tasks are to be performed concurrently with the draft and final EIR in the CEQA process as shown on Schedule B-3. It will be important to receive a Notice-to-Proceed for this work as soon as possible in order to maintain the project schedule.

SCS would be pleased to meet with the County of Stanislaus to discuss this scope of work, schedule, and fee estimate to answer questions and provide clarifications. Please call either of the undersigned with questions or to schedule a meeting.

EXHIBIT B
SCOPE OF SERVICES
PLANNING, ENGINEERING, AND EIS ANALYSIS
PROPOSED FINK ROAD 100 MILLION TON LANDFILL EXPANSION

This document provides a scope of services, schedule, and fee estimate for the SCS Engineers Project Team (SCS) to assist Stanislaus County Planning Department with planning, engineering, and an Environmental Impact Statement (EIS) related to a 100 million-ton expansion of the Fink Road Landfill.

In general, our EIS analysis will rely on information previously developed for the environmental review process under CEQA previously prepared by SCS. We are not proposing to conduct additional field work or detailed analyses specific to the proposed project (i.e., the 100 million ton landfill expansion). However, under NEPA, identification of and detailed analyses for project alternatives is required. Our efforts will focus on three alternatives to the proposed project.

For purposes of this proposal, the proposed project and alternatives will be referred to as follows:

- The proposed project. This is the 100-million ton capacity landfill expansion previously proposed and evaluated under the CEQA process. This site would receive up to 5,000 tons per day (tpd). SCS has developed a preliminary design, project description and conducted the CEQA environmental analyses. We will utilize this information for the EIS process.

- "No Project" Alternative. This would involve the continued operation of the existing 219-acre Fink Road Landfill. Under this alternative, the County will have to find other methods of disposing of waste after the current landfill closes.

- The "Canyon Landfill" Alternative. This would involve development of an approximately 129-acre footprint, 16.4 million-ton capacity landfill shown on attached Exhibit B-1. This alternative is essentially a smaller-volume landfill development within the proposed landfill project footprint. SCS previously prepared a conceptual design for a Canyon Landfill alternative as part of the County's original planning processes. However, this concept plan was for 83 acres and was never fully developed or analyzed as part of the CEQA process and further engineering planning and environmental evaluation is necessary for NEPA.

- The "Adjacent Site Landfill" Alternative. This would entail development of an approximately 400-acre landfill on the County's property north and adjacent to the proposed 100 million-ton expansion site, Exhibit B-2. This would be an area-type landfill development, similar to the proposed project. The ultimate capacity of this Adjacent Site landfill would be approximately 50 million tons.

PROJECT OBJECTIVE

The objective of this work is to meet the requirements of the National Environmental Policy Act (NEPA) as it relates to the sighting of an expansion at the Fink Road Landfill. The US Fish & Wildlife Service (USFWLS, lead federal agency) has determined that in addition to meeting the CEQA requirements, NEPA Standards for an Environmental Impact Statement (EIS) must be met for the project.

TASK DESCRIPTIONS

The tasks that the SCS Team will perform to meet the County's objective of compliance with NEPA standards are described below. They are presented under the headings of Planning and Engineering, Environmental Impact Statement, and Landfill Permitting. They represent a comprehensive analysis of the proposed expansion, particularly of the alternatives to the project. These tasks are intended to be performed concurrently with the draft and final EIR in the CEQA process.

PLANNING AND ENGINEERING

Task 4.1 – Landfill Alternatives Analysis

Purpose: *To develop technical information describing the details of the development of landfill alternatives including the "Canyon Landfill" and the "Adjacent Site Landfill".*

Approach:

Task 4.1.1 – Canyon Landfill Alternative - -

The property that the Canyon Landfill is located is shown on Exhibit B-1. The landfill is located in the southern canyon drainage area and will be approximately 129-acres in area. The ultimate capacity will be 16.4-million tons of refuse with a maximum elevation of 656-feet mean sea level (MSL). The site was thoroughly investigated in the early stages of the Proposed Expansion Project. Some of the preliminary engineering work has been performed for the site, but has not been completed. Remaining work will include completing preliminary site plans, conceptual plans for surface water management, leachate management, landfill gas management, and a written project description.

Field Investigation

The Canyon Landfill Site has been investigated in detail through the previous work performed by SCS. Therefore further detailed field investigation is not proposed for this subtask. The information previously developed will be used in performing the evaluations and analysis described in the following paragraphs.

Site Development Plans

SCS will prepare a set of preliminary site development plans that will be used as the master plan for the canyon landfill alternative. We envision that there will be 10 to 12 drawings which show the existing topography, facility layout plan, and concept plans for the landfill excavation and liner system, leachate collection and recovery system (LCRS), fill sequencing plan, site drainage system, landfill gas system, and final grading/cover system details. The site development plans will utilize to the greatest extent possible the previous work on the site.

Surface Water Management

The surface water hydrology of the Canyon Landfill will be evaluated to determine the need for drainage structures and components of a landfill drainage system through the stages of development and at final grade. Drainage structures and components will be sized to control a 1,000-year storm event. SCS will utilize US EPA TR-55 modeling software for the surface water analysis.

A unique feature of the surface water runoff from the site is that drainage from the southerly canyon must cross active farmland before joining a receiving stream. This will require conveyance of the runoff across the farmland without significantly impacting the land. A closed underground conduit will be required. SCS will verify that previously-prepared conduit alignment for the Canyon Landfill and capacity will meet drainage needs. Runoff from other parts of the Canyon Landfill will be routed to receiving drainages to the north and east.

Leachate Management

The potential for leachate generation will be estimated using the HELP model. The estimates will be based on the anticipated operation of the landfill considering potential run-on and run-off quantities for the various stages of development. The volumes of leachate will be evaluated to determine the best methods for managing the liquid. Possible methods include surface evaporation basins and enhanced evaporation using landfill gas as a heat source.

Landfill Gas Management

A landfill gas (LFG) management plan will be developed to address gas generation over the life of the landfill. Generally, the plan will follow the closure plan phasing, and will be consistent with federal NSPS and other applicable regulatory guidelines for control of LFG migration and surface emissions. Design concept drawings and sections showing the LFG system buildout during cell development and at closure will be prepared. We envision two to three sheets will be needed. The drawings will describe the locations of extraction wells, horizontal collectors, and connecting lines to the LCRS system, as appropriate.

Project Description

SCS will prepare a comprehensive written description for the landfill that summarizes the Canyon Landfill Alternative sighting, development, and operation. It will include a description of key site features, design features (i.e., capacity, life, waste composition, maximum elevation, grading, etc.), operating procedures (i.e., soil borrow, hours of operation, refuse placement, etc.), and environmental controls, including groundwater monitoring, leachate collection/treatment, and LFG controls. The text will be suitable for inclusion in the EIS document.

Products:

1. Previously completed Preliminary Geotechnical and Hydrologic Report
2. Site Development Plans
3. Project Description

Task 4.1.2 – Adjacent Site Alternative - -

The property where the Adjacent Site Landfill is located is shown on Exhibit B-2. The landfill is located north of the Proposed Project and will be approximately 400-acres in area. The ultimate capacity will be 50-million tons of refuse with a maximum elevation of 500-feet MSL. The site will need to be investigated to develop basic soil, geologic, and seismic conditions. It will be necessary to prepare preliminary site plans, conceptual plans for surface water management, leachate management, landfill gas management, and a written project description.

Field Investigation

The field investigation for the Adjacent Site will include refinement of the existing geologic map, installation of two borings/monitoring wells, monitoring of the groundwater, and trenching of near surface soils. Our objective for the investigation will be to develop foundation/geotechnical/slope stability/hydrology/groundwater information that will be used for the preliminary design of the 50-million ton landfill.

Refine Existing Geologic Map - -

A general geologic map has already been prepared for the Adjacent Site area based on existing literature and data from the Proposed Project field investigation. We will conduct a geologic site walk to refine the map with site-specific observations. One fault trench (TP-6) has already been excavated in the Adjacent Site area and the investigation did not reveal evidence of faults. No further trenching is needed for the purpose of seismic or geologic mapping. Some photolineaments were found on the Proposed Project site that may extend into the Adjacent Site area, but these photolineaments were not found to be associated with a fault.

Borings - -

Two borings will be advanced to a depth of 60 feet (which should be well below first encountered groundwater). The borings will be logged at 5-foot intervals. Two soil cores will be tested for insitu hydraulic conductivity. This data will be used to describe the soil profile and also to estimate settlement associated with filling the landfill.

Groundwater Monitoring - -

Groundwater elevations in the general area tend to follow surface topography but the Adjacent Site area is very flat, is in a different geologic unit, and may have a significantly different groundwater elevation profile. In order to assess the nature of groundwater, the two borings will be completed as 2-inch diameter monitoring wells. After completion, groundwater elevations will be collected from these two wells and existing wells adjacent to the Adjacent Site project area. Estimates of groundwater gradient, elevation, and flow direction will be made from these measurements. At this time we do not propose to analyze groundwater samples collected from these two wells for chemical constituents.

Trenching - -

One day of backhoe trenching will be conducted. The purpose of the trenching will be to characterize near surface soil engineering properties for settlement and construction. Four soil samples will be collected and analyzed for Atterberg Limits, grain size, moisture-density relationship, moisture content, organic matter, remolded hydraulic conductivity, and action exchange capacity.

Report Preparation - -

Data from this field investigation will be assembled into a stand-alone report dedicated to the Adjacent Site area only. The report will contain a geologic map, engineering properties of soils, faulting assessment, and discussion of hydrogeology. The report will be used to confirm existing information and as the basis for preliminary design and environmental evaluations for the Adjacent Site Landfill.

Site Development Plans

SCS will prepare a set of site development plans that will be used as the master plan for the Adjacent Site Alternative landfill. We envision that there will be 10 to 12 drawings which show the existing topography; and concepts for facility layout plans, excavation and liner plans, leachate collection and recovery system plans, fill sequencing plans, site drainage plans, landfill gas plans, and final grading/cover system details.

Surface Water Management

The surface water hydrology for the Adjacent Site Alternative will be evaluated to determine the need for drainage structures and components during the development of the ultimate landfill. Drainage structures and components will be sized to control a 1,000-year storm event. SCS will utilize US EPA TR-55 modeling software for the analysis. Surrounding receiving streams will be evaluated to determine if up-grades are necessary to accommodate the projected run-off from the landfill area.

Leachate Management

The potential for leachate generation will be estimated using the HELP model. The estimates will be based on the anticipated operation of the landfill considering potential run-on and run-off quantities for the various stages of development. The volumes of leachate will be evaluated to determine the best methods for managing the liquid. Possible methods include surface evaporation basins and enhanced evaporation using landfill gas as a heat source.

Landfill Gas Management

An LFG management plan will be developed to address gas generation over the life of the landfill. Generally, the plan will follow the closure plan phasing, and will be consistent with federal NSPS and other applicable regulatory guidelines for control of LFG migration and surface emissions. Design concept drawings and sections showing the LFG system buildout during cell development and at closure will be prepared. We envision two to three sheets will be needed. The drawings will describe the locations of extraction wells, horizontal collectors, and connecting lines to the LCRS system for the 400-acre landfill footprint.

Project Description

SCS will prepare a comprehensive written description for the landfill that summarizes the Adjacent Site Alternative landfill sighting, development, and operation. It will include a description of key site features, design features (i.e., capacity, life, waste composition, maximum elevation, grading, etc.), operating procedures (i.e., soil borrow, hours of operation, refuse placement, etc.), and environmental controls, including groundwater monitoring, leachate collection/treatment, and LFG controls. The text will be suitable for inclusion in the EIS document.

Products:

1. Separate Preliminary Geotechnical and Hydrologic Report for Adjacent Site
2. Site Development Plans
3. Project Description

ENVIRONMENTAL IMPACT STATEMENT

Task 4.2 – Environmental Review Process

Task 4.2.1 – Administrative Draft EIS - -

Purpose: *To prepare necessary studies, evaluations, and conduct public review in order to satisfy NEPA standards for environmental review.*

Approach:

Subtask 4.2.1.1 – Interagency Consultation and Public Involvement

This subtask will involve interagency consultation to address the concerns of responsible agencies about the project.

1. SCS will meet with County Public Works and Planning, and USFWS staff to define the strategy for interagency consultation. The strategy will outline the objectives of the program, number and type of meetings, and other actions necessary to reach the program's objectives.

2. SCS will work with County Public Works and Planning, and USFWS staff to consult with affected state and federal agencies, neighbors, local government, and environmental organizations. A consultation summary memo will be prepared for the County of Stanislaus with comments categorized into issues for consideration in the EIS.

Products:

1. Five (5) copies of a Consultation Summary Memorandum for the County

Subtask 4.2.1.2 – Determine Necessary Permits and Identify Specific Requirements

This subtask will involve the determination of the permits that will be necessary for the Proposed Project and identify the specific permit requirements.

SCS will assist the County Public Works and Planning, and USFWS obtain necessary permits for the Proposed Project by identifying all agencies with permitting authority over any aspects of the project and by maintaining communication and coordination with these agencies throughout the project. SCS will identify permitting requirements and, in conjunction with County staff, establish how these requirements will be achieved. Based on a preliminary review of the proposed project, SCS anticipates that the following permits will be necessary:

- State and Federal Endangered Species Act Incidental Take Permits

- Clean Water Act Section 404 Permit
- Clean Water Act Section 401 Certification or Waiver
- FGC Section 1601 Streambed Alteration Agreement
- Section 106 determination for cultural and historic resources

SCS will use existing information developed in the EIR process regarding permits. Obtaining these permits is not included within our scope of work.

Products:

1. Up to two (2) meetings with County Public Works and Planning, and USFWS staff and minutes notes.

Subtask 4.2.1.3 – Notice of Intent and Scoping

This subtask will prepare a Notice of Intent (NOI) to describe the anticipated environmental issues to be included in the EIS and refine the EIS contents based on important issues raised during the scoping process by responsible agencies and the public.

1. Prepare a draft NOI for County and USFWS review. The NOI will briefly describe the project and identify potential significant effects on the environment.
2. Following receipt of the comments, revise and submit the final NOI to the USFWS for use in the EIS scoping. USFWS will submit the NOI to the Federal Register.
3. Conduct a public scoping meeting to satisfy NEPA requirements. SCS will help prepare graphics for the meeting and participate in presentations.
4. Prepare a summary of scoping comments and issues identified for use in the EIS, including all letters received and oral comments on significant environmental issues made at the scoping meeting.

Products:

1. Five (5) copies of the scoping summary
2. Five (5) copies of the draft NOI
3. Five (5) copies of the final NOI
4. Attend one (1) public scoping meeting

Subtask 4.2.1.4 – Preparation of the Administrative DEIS

This subtask will involve preparation of a comprehensive and legally defensible EIS for the County and USFWS on the Fink Road Landfill Expansion Project. We will prepare the ADEIS for County Planning Department review and use. The administrative draft version of the EIS will be provided by County Planning to USFWS and County Public Works staff for review and comment.

1. Prepare a project description for the currently proposed 100-million ton landfill for the EIS, based on information provided during the prior tasks to include the following:

   a. Regional and local setting.

   b. Project history.

   c. Purpose and Need (objectives of the project)

   d. Project characteristics, including any discretionary actions required by the USFWS and County of Stanislaus. This section will need to include a description and map of the proposed project area, location and description of key infrastructure improvement plans (on and offsite), construction timing, and operational characteristics.

   e. Intended uses of the EIS including a list of responsible and other agencies expected to use the EIS in decision-making and a list of approvals for which the EIS will be used, including:

      - USFWS approval of the Habitat Conservation Plan
      - USFWS issuance of an Incidental Take Permit
      - USACE issuance of a 404 Permit
      - CDFG implementation of a Section 1601 Agreement
      - RWQCB Section 401 Certification or Waiver
      - Section 106 determination for cultural and historic resources

   We will utilize drawings and text previously prepared for the EIR and will make modifications as necessary to meet EIS requirements.

2. Formal Consultation: Consultation will occur with the appropriate federal and state agencies regarding the Federal Endangered Species Act, the California ESA, Section 404 and 1601 permitting requirements, and Section 106 determinations. All consultation strategies will be subject to prior approval by County of Stanislaus staff. Consultation tasks will be summarized in the EIS to document the process.

3. Prepare the Administrative DEIS Environmental Setting, Significance Thresholds, Impact Analysis, and Mitigation Measures. Perform research and investigations necessary to support the DEIS preparation. To augment information from

previous field visits for the EIR, additional field visits, necessary for impact analysis for endangered or state listed species and plant life on the Adjacent Site, are included in the following tasks. The EIS will include documentation of regional and local baseline conditions, impact evaluations, significance thresholds, mitigation measures, and the levels of significance after application of mitigation measures. The specific environmental topics to be addressed in each technical analysis section of the EIS are described below. Other issue areas will be addressed briefly as effects found not to be significant.

a) Biological Resources (habitats, wildlife, sensitive plant communities, wetland effects, invasive plants, special status plants, special status wildlife)

b) Geology, Soils, and Seismicity (site geology, soil stability, and seismicity)

c) Hydrology and Water Quality (drainage, water quality, flooding)

d) Land Use (compatibility with adjacent uses, consistency with County of Stanislaus General Plan goals)

e) Aesthetics (effects on views of the project, views from the project)

f) Transportation/Circulation (traffic safety, freeway access, emergency vehicle access, traffic volumes and congestion)

g) Air Quality (short and long-term air quality)

h) Noise (short and long-term noise effects)

i) Historic and Archaeological Resources (subsurface archaeological resources, prehistoric sites, Section 106 compliance)

j) Public Health and Safety (landfill gas migration, explosion hazards)

4. Evaluate cumulative impacts in the EIS. The EIS will evaluate cumulative impacts associated with the combination of the Proposed Project and other reasonably anticipated, probable future projects in the vicinity of Stanislaus County.

5. Pursuant to NEPA requirements, discuss in the EIS potential growth-inducing impacts of the proposed project. Potential sources of growth inducement and corresponding impacts, such as removal of obstacles to growth, major new employment generation or economic influences, and development of new infrastructure will be qualitatively analyzed, to the extent that they are applicable.

6. Discuss the alternatives in equivalent detail in the EIS, as required by NEPA. The SCS Team will address up to three (3) alternatives to the proposed project. Generally, we will perform analyses (i.e., biological resources, geology, soils, seismicity, land use, aesthetics, air quality, etc.) that is alternative specific and that is not already covered by the Proposed Project EIR. This section of the EIS will also describe other alternatives previously considered by the County and why they were rejected in favor of the proposed project. (If the need for additional alternatives is identified during the course of the EIS preparation, this would involve amending the scope of work.)

   Discuss the advantages and disadvantages of each alternative and the reasons for rejecting or recommending them based on each projects' objectives. The environmentally superior alternative for the proposed project will be identified.

7. Prepare an executive summary, presenting the significant conclusions of the EIS, in a manner that is easily understood by the public. A summary "table" format will be used to identify less-than-significant impacts, significant impacts, cumulative impacts, mitigation measures, and the effectiveness of the recommended mitigation measures.

8. Prepare other NEPA-mandated sections of the EIS as follows:

   - Effects Found Not to Be Significant
   - Irreversible and Irretrievable Commitment of Resources
   - Short term commitment versus long-term protection of environmental resources
   - Significant and Unavoidable Environmental Effects
   - List of Organizations and Persons Consulted
   - Preparers of the Environmental Document
   - References and Personal Communications
   - Appendices

9. Assemble, synthesize, and edit the Administrative DEIS and appendices and conduct quality assurance review, as part of the report production.

Products:

1. Five (5) copies of the Administrative DEIS for County and USFWS review

Subtask 4.2.1.5 – Prepare Second Draft EIS

This subtask will involve responding to County of Stanislaus and USFWS comments on the Administrative DEIS and preparation of a Second Administrative Draft EIS.

1. The County Planning Department will assemble one (1) unified set of comments on the Administrative DEIS and provide it to SCS. SCS will meet with the County of Stanislaus and USFWS to discuss comments on, and revisions to, the Administrative DEIS.

2. SCS, as required and allowed within the scope of work, will revise the Administrative DEIS based on the comments.

3. The Second Administrative Draft EIS will be provided to the County Public Works and USFWS to review prior to production of the public draft editions.

Products:

1. Five (5) copies and one (1) master reproducible edition of the Draft EIS for County and USFWS review

Subtask 4.2.2 – Prepare Draft EIS

This subtask will involve responding to County of Stanislaus and USFWS comments on the Second Administrative DEIS and preparation the public circulating Draft EIS.

1. The County Planning Department will assemble one (1) unified set of comments on the Second Administrative DEIS and provide it to SCS. SCS will meet with the County of Stanislaus and USFWS to discuss comments on, and revisions to, the Second Administrative DEIS.

2. SCS, as required and allowed within the scope of work, will revise the Second Administrative DEIS based on the comments and produce the public circulating draft EIS.

Products:

1. Five (5) copies and one (1) master reproducible edition of the Draft EIS for County copying and mailing

Task 4.2.3 – Prepare Administrative Final EIS

This task will involve responding to public comments on the DEIS and preparation of the Administrative Final Environmental Impact Statement (AFEIS) and mitigation monitoring plan.

1. The County Planning Department will assemble one (1) unified set of public comments on the DEIS and provide it to SCS. After comments are received on the DEIS, SCS will meet with the County Public Works and Planning and USFWS to discuss the comments and to develop a strategy for responses.

2. SCS will prepare an Administrative FEIS to include the following components: the comment letters; a list of persons, organizations, and public agencies commenting on the DEIS; and responses to the significant environmental points raised in comments received on the DEIS. (A revised DEIS text with modifications indicated in strikeout (~~strikeout~~) for deletions, and bold font (**bold font**) for additions is assumed to not be needed.)

3. A draft mitigation monitoring program (MMP) for the Proposed Project will be developed based on the impact analysis, in accordance with CEQA 21081.6 and submitted to County staff for review with the Administrative FEIS. The MMP will include a listing of all mitigation measures and identification of: the individuals or organizations responsible for monitoring and/or reporting; individuals or organizations responsible for verifying compliance; the phase (or date) of the permit process when each mitigation measure shall be initially implemented; the frequency and duration of required monitoring (if necessary); the performance criteria for determining the success of the mitigation measure (if appropriate); and the cost, proposed funding, and budget for the reporting plan, if appropriate. The MMP will be provided in a "matrix" format.

Products:

1. Five (5) copies of the Administrative FEIS for County of Stanislaus and USFWS review.
2. Five (5) copies of the draft MMP for County of Stanislaus and USFWS review.

Subtask 4.2.3.1 – Prepare Final EIS

This subtask will involve responding to County of Stanislaus and USFWS comments on the Administrative FEIS and preparation of the public circulating Final EIS.

1. The County Planning Department will assemble one (1) unified set of comments on the Administrative FEIS and provide it to SCS. SCS will meet with County Public Works and Planning, and USFWS to discuss comments on, and revisions to, the Administrative FEIS and will revise it based on the comments, in keeping with the scope of work.

Products:

1. Five (5) copies and one (1) master reproducible edition of the Final EIS for County copying and mailing

Subtask 4.2.3.2 – Adoption of a Record of Decision

This subtask will involve obtaining a Record of Decision by USFWLS.

1. SCS will coordinate with County Planning and USFWS regarding adoption of a Record of Decision following completion of the Final EIS. SCS will attend the public hearings for the final EIS and will assist USFWS and County of Stanislaus staff in presentations and question response, as necessary. A draft Record of Decision will be prepared for USFWS use, if deemed appropriate by USFWS staff.

Products:

1. Attend up to two (2) public hearings on the final EIS

2. Five (5) copies of the draft Record of Decision

LANDFILL PERMITTING

Task 4.3 – Incorporate EIS into Permit Process

Purpose: To incorporate the EIS documents into the SWFP application process with CIWMB and other agencies.

Approach:

SCS will coordinate and combine the CEQA and NEPA environmental documentation into a single package that will be submitted with the Solid Waste Facility Permit (SWFP) application. This will include the Final EIS, Record of Decision, and supporting technical documentation.

SCS will also coordinate and provide responses to agency comments during USFWS and public review and the SWFP approval process.

Products:

1. Responses to agency and public comments
3. Six (6) copies of the EIS Package

SCHEDULE

Exhibit B-3 presents the SCS Project Team's proposed schedule for the work described above. Note that weather or other unforeseen circumstances beyond the control of SCS may affect the schedule for field geotechnical and other field tasks. Our schedule is also dependent on County and USFWLS review times for project submittals, which are also beyond the control of SCS. Thus our schedule includes anticipated timeframes to complete each task. The completion dates shown in Exhibit B-3 are consistent with our understanding of the County's overall project scheduling needs.

FEE ESTIMATE

The SCS Project Team fee estimate is presented in Exhibit B-4. The spreadsheet shows the labor hours and other direct costs associated with performing the work for all tasks. Supporting worksheets showing labor and costs are also attached. Our estimated fees will not be exceeded without written approval by the County.

SCS's fee estimate and schedule are based on the following:

1. The County will provide all requested reports, drawings, topographic/boundary/utility maps, and CAD files related to planning and land use.

2. The field geotechnical investigation subtask assumes that 2 borings to 60 feet will be converted to groundwater monitoring wells. It may be necessary in the field to extend the borings and wells in the event that the groundwater table is greater than 60 feet. One day of backhoe trenching is assumed.

3. The landfill gas and landfill site development plans prepared under this scope of work will be suitable for permitting purposes. Preparation of formal plans and specifications is not included.

4. All permit fees, newspaper noticing, and NOP, Draft EIS and Final EIS distribution costs will be the responsibility of Stanislaus County.

5. The analysis of the project alternatives will be based on an average waste stream tonnage of 5,000 tons per day (tpd) with a peak daily tonnage of 6,500 tpd.

6. The format of the Administrative Final Draft EIS will be as an attachment of responses to comments in the text of the draft EIS.

7. NEPA notices for the EIS including the Notice of Preparation, the Notice of Completion, and the Record of determination will be prepared by SCS. All other required public notices will be the responsibility of Stanislaus County.

8. All fieldwork will be performed using "Level D" personal protection equipment.

9. No hazardous materials or contaminated well purge water requiring special handling will be encountered during the fieldwork.

10. No more than three (3) project alternatives will be evaluated in the Draft EIS, including the "No Project" alternative.

11. SCS will prepare for and attend the following presentations:

    - 8 meetings with the County and, or USFWLS
    - 2 public hearings

We envision attendance by no more than 3 SCS Team members at each meeting.

12. SCS budgets for document reproduction and shipping are provided in the attached spreadsheet, Exhibit B-2. Additional copies or document reproduction, if requested, will be billed at cost.

13. Our cost estimate excludes regulatory agency review and permit submittal fees.

14. The CIWMB review and approval time for a revised SWFP is up to 180 days by law. SCS has included 120 man-hours to respond to agency comments during this time. If additional engineering analysis is required at this stage, the effort will be added to the SCS scope and fee.

15. Our scope of work excludes NEPA evaluation or detailed companion projects to the landfill expansion such as off-site use of excavated soils for other construction; energy recovery/power generation from landfill gas; or traffic/air quality assessments in out-of-county areas related to waste import.

16. Our work excludes aerial photography, mapping, and ground or boundary surveys. It is understood that the County will provide the information.

17. Detailed foundation, geotechnical, slope stability analyses are not included in this scope of work.

18. Two field visits to the Adjacent Site Alternative property are included in this scope for biological and other environmental site reconnaissance.

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N 1,968,000
N 1,967,000
N 1,966,000
N 1,965,000
N 1,964,000
N 1,963,000
N 1,962,000
N 1,961,000

W/L 314.8

EXISTING AGRICULTURAL LAND

FINK ROAD

EXISTING ORCHARD

EXISTING LANDFILL ACCESS ROAD

U. S. INTERSTATE 5

EXISTING TRUCK SCALES

LF-1 -- EXISTING CLASS III LANDFILL (CLOSED)

LF-2 EXISTING CLASS III LANDFILL (ACTIVE)

EXISTING VISUAL SCREENING BERM

EXISTING LEACHATE EVAPORATION POND SI-2

EXISTING LEACHATE EVAPORATION POND SI-1

2:1 FILL SLOPE

LIMIT OF DISTURBANCE

PROPOSED MAINTENANCE FACILITY

LF-3 EXISTING CLASS II ASH MONOFILL (ACTIVE)

ORCHARD

PROPOSED EXPANSION AREA LIMIT OF FILL

EXISTING WASTE-TO-ENERGY FACILITY (OGDEN-MARTIN)

CALIFORNIA AQUEDUCT

PROPOSED EXPANSION AREA PROPERTY BOUNDARY

ORCHARD

2:1 CUT SLOPE

1000 0 1000
SCALE

DRAFT

NOTES

BASE MAP TOPOGRAPHY BASED ON AERIAL SURVEY CONDUCTED ON APRIL 2, 1999 BY CARTWRIGHT AERIAL SURVEYS, SACRAMENTO, CALIFORNIA

HORIZONTAL CONTROL: STATE PLANE
VERITCAL: NAD 83

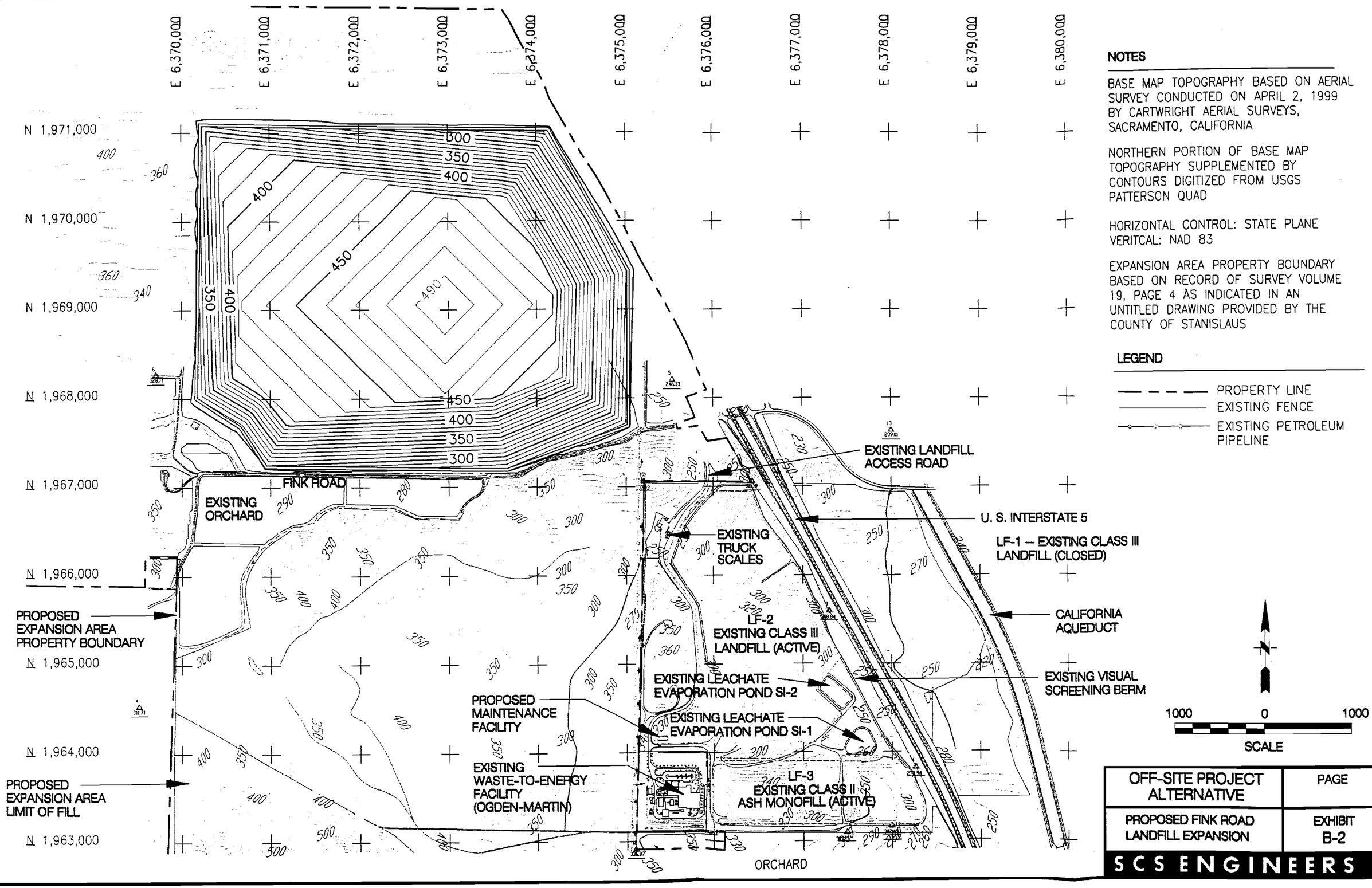
EXPANSION AREA PROPERTY BOUNDARY BASED ON RECORD OF SURVEY VOLUME 19, PAGE 4 AS INDICATED IN AN UNTITLED DRAWING PROVIDED BY THE COUNTY OF STANISLAUS

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- EXISTING PETROLEUM PIPELINE

REDUCED PROJECT ALTERNATIVE	PAGE
PROPOSED FINK ROAD LANDFILL EXPANSION	EXHIBIT B-1

SCS ENGINEERS



NOTES

BASE MAP TOPOGRAPHY BASED ON AERIAL SURVEY CONDUCTED ON APRIL 2, 1999 BY CARTWRIGHT AERIAL SURVEYS, SACRAMENTO, CALIFORNIA

NORTHERN PORTION OF BASE MAP TOPOGRAPHY SUPPLEMENTED BY CONTOURS DIGITIZED FROM USGS PATTERSON QUAD

HORIZONTAL CONTROL: STATE PLANE
VERITCAL: NAD 83

EXPANSION AREA PROPERTY BOUNDARY BASED ON RECORD OF SURVEY VOLUME 19, PAGE 4 AS INDICATED IN AN UNTITLED DRAWING PROVIDED BY THE COUNTY OF STANISLAUS

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- EXISTING PETROLEUM PIPELINE

OFF-SITE PROJECT ALTERNATIVE	PAGE
PROPOSED FINK ROAD LANDFILL EXPANSION	EXHIBIT B-2

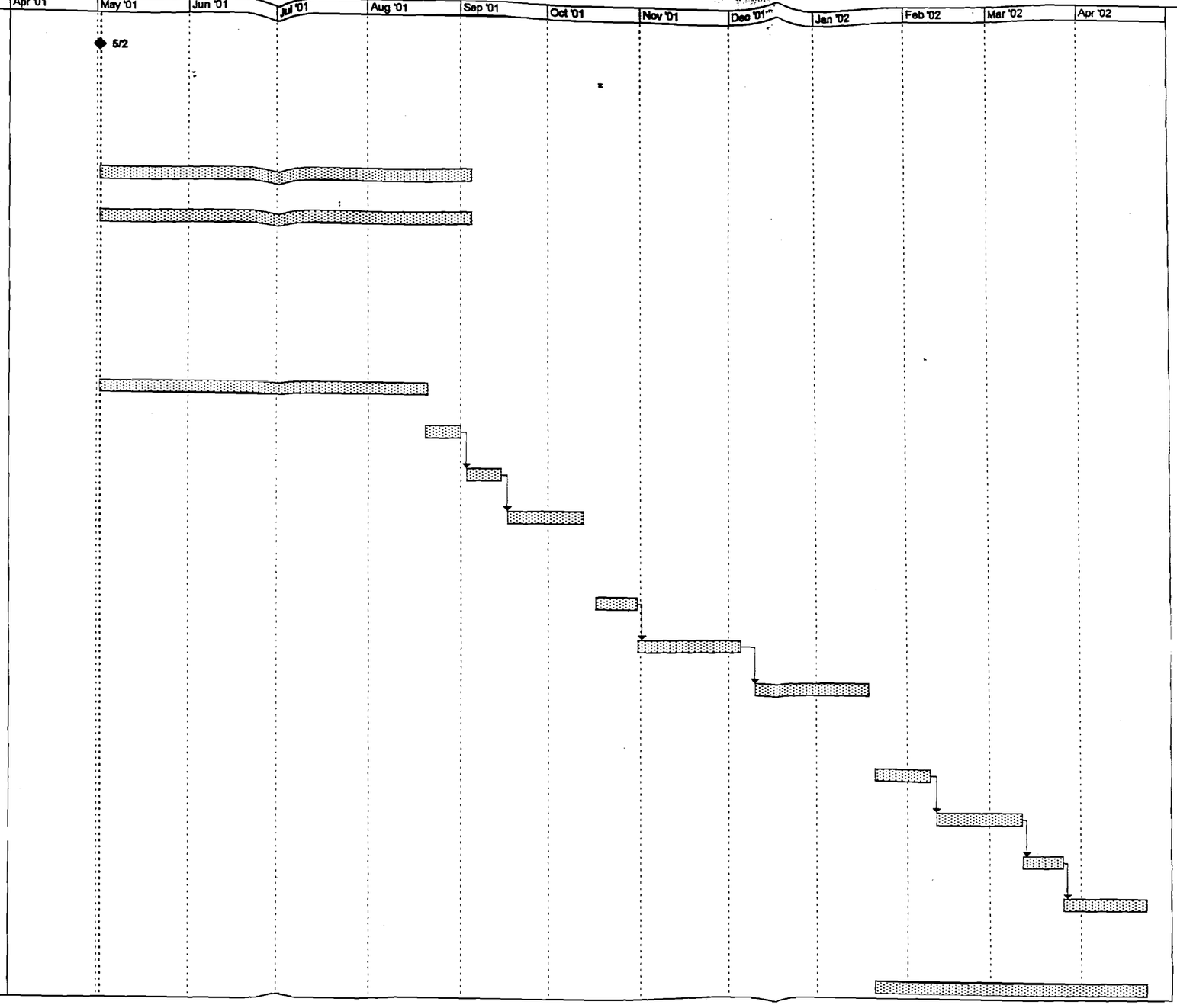
SCS ENGINEERS

EHIBIT B-3

SCHEDULE

FINK ROAD LANDFILL
ENVIRONMENTAL IMPACT STATEMENT SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecessors
1					
2	Notice to Proceed	0 days	Wed 5/2/01	Wed 5/2/01	
3					
4	PLANNING & ENGINEERING	1 day	Wed 5/2/01	Wed 5/2/01	
5					
6	Task 4.1 - Landfill Alternatives Analysis	1 day	Wed 5/2/01	Wed 5/2/01	
7					
8	Subtask 4.1.1 - Canyon Landfill	90 days	Wed 5/2/01	Tue 9/4/01	
9					
10	Subtask 4.1.2 - Adjacent Site	90 days	Wed 5/2/01	Tue 9/4/01	
11					
12	ENVIRONMENTAL IMPACT STATEMENT	1 day	Wed 5/2/01	Wed 5/2/01	
13					
14	Task 4.2 - Environmental Review Process	1 day	Wed 5/2/01	Wed 5/2/01	
15					
16	Subtask 4.2.1 Administrative Draft EIS	1 day	Wed 5/2/01	Wed 5/2/01	
17					
18	1st Administrative Draft	79 days	Wed 5/2/01	Mon 8/20/01	
19					
20	County/USFWLS Review and Comment	10 days	Mon 8/20/01	Fri 8/31/01	
21					
22	2nd Administrative Draft EIS	10 days	Mon 9/3/01	Fri 9/14/01	20
23					
24	County/USFWLS Review and Comment	20 days	Mon 9/17/01	Fri 10/12/01	22
25					
26	Task 4.2.2 - Prepare Draft EIS	1 day	Wed 10/17/01	Wed 10/17/01	
27					
28	Draft EIS	10 days	Wed 10/17/01	Tue 10/30/01	
29					
30	County/USFWLS Review and Comment	25 days	Wed 10/31/01	Tue 12/4/01	28
31					
32	Public Review and Hearing	30 days	Mon 12/10/01	Fri 1/18/02	30
33					
34	Task 4.2.3 - Prepare Final EIS	1 day	Mon 1/21/02	Mon 1/21/02	
35					
36	Administrative Draft EIS	15 days	Mon 1/21/02	Fri 2/8/02	
37					
38	County/USFWLS Review and Comment	21 days	Mon 2/11/02	Mon 3/11/02	36
39					
40	Final EIS & Record of Decision	10 days	Tue 3/12/02	Mon 3/25/02	38
41					
42	Public Review Period	20 days	Tue 3/26/02	Mon 4/22/02	40
43					
44	LANDFILL PERMITTING	1 day	Mon 4/22/02	Mon 4/22/02	
45					
46	Task 4.3 - Incorporate EIS into Permit Process	66 days	Mon 1/21/02	Mon 4/22/02	



Project: FinkRoadSchEIS042001
Date: Wed 5/2/01

Task | Split | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Split | Rolled Up Milestone | Rolled Up Progress | External Tasks | Project Summary

EHIBIT B-4

FEE ESTIMATE

EXHIBIT B-4. ESTIMATED LABOR EFFORT AND COSTS
PLANNING, ENGINEERING, EIS & PERMITS - PROPOSED FINK ROAD LANDFILL EXPANSION, STANISLAUS COUNTY, CALIFORNIA

10/31/00

TASK #	TASK DESCRIPTION	SCS Hours by Task: Senior Professional	Project Engineer	Staff Engineer	Graphics	Word Pr./ Clerical	Total SCS Hours	Total SCS Hours Per Task ($)	SCS Other Direct Costs: Vehicle Mileage	Postage/ Freight	Phone/ Fax	Supplies/ Misc.	Reproduction/ Printing/CAD	Subcontractors: EDAW	Kleinfelder	Subtotal ODCs / Subs ($)	Administration @ 10% ODC ($)	Total Cost Per Task ($)
	Engineering and Planning																	
4.1.1	Canyon Landfill Alternative	16	32	60	16	8	132	11,380	100	25	75	25	100			325	33	11,738
4.1.2	Adjacent Site Alternative	40	160	240	100	40	580	48,500	200	125	150	50	0		31,896	32,421	3,242	84,163
	Environmental Review															**Subtotal, Task 3.1:**		**$95,901**
4.2.1	Administrative Draft EIS																	
	Draft AEIS	40	40	0	0	12	92	10,000	500	250	200	150	750	78,210		80,060	8,006	98,066
	2nd Draft AEIS	20	20	20	16	4	80	7,440	200	150	150	100	500	26,923		28,023	2,802	38,265
4.2.2	Draft EIS	20	20	20	16	4	80	7,440	100	150	100	200	250	12,550		13,350	1,335	22,125
4.2.3	Final EIR																	
	Administrative Draft FEIS	20	40	20	0	4 #	84	8,500	200	150	100	100	750	26,650		27,950	2,795	39,245
	FEIR Preparation	8	16	0	0	2	26	2,820	0	15	50	50	500	13,092		13,707	1,371	17,898
	Landfill Permitting															**Subtotal, Task 3.2:**		**$215,599**
4.3.0	Incorporate EIS into Permit Process	8	20	20	8	8	64	5,560	50	50	100	100	500			800	80	6,440
	Agency Approval of SWFP	16	40	40	16	8	120	10,720	50	50	50	25	50			225	23	10,968
																Subtotal, Task 3.3:		**$17,408**
	SCS Hours:	188	388	420	172	90	1,258											
	SCS Rate ($/hr):	130	105	75	65	50												
	Amount ($):	$24,440	$40,740	$31,500	$11,180	$4,500			$1,400	$965	$975	$800	$3,400	$157,425	$31,896			

Subtotal, SCS Labor: **$ 112,360**

Subtotal ODC/Subcontractors:	**$196,861**
Subtotal Admin:	**$19,686**
Total Budget Allocation:	**$328,907**

See attached worsheets for details on labor effort and costs for SCS subcontractors - EDAW and Kleinfelder.

FEE ESTIMATE
EDAW, INC

FINK ROAD LANDFILL PROJECT
EIR REVISIONS AND EIS PREPARATION

LABOR

Tasks	Alling Proj Dir/ PIC $ 140	Brown Project Manager $ 105	Env Planner $ 75	Env. Analyst $ 70	Senior Biologist $ 105	Wildlife Biologist $ 80	Field Biologists (2) $ 70	GIS Specialist $ 70	Noise/Air Specialist $ 75	Graphic Artist $ 60	Admin. Asst. $ 55	Word Processing $ 65	*Total Hours*	*Total Dollars*
EIR REVISIONS	10	24	12						45	4	2	30	127	$ 10,495
1ST ADMINISTRATIVE DRAFT EIS	60	160	170	130	12	40	32	32	90	60	16	120	922	$ 75,020
2ND ADMINISTRATIVE DRAFT EIS	18	46	60	50	4	16		8	10	20	4	60	296	$ 23,680
DRAFT EIS	8	24	24	16	2	12		4	4	8	2	30	134	$ 10,850
ADMINISTRATIVE FINAL EIS	16	60	80	30	4	24			20	20	4	50	308	$ 25,150
FINAL EIS AND RECORD OF DECISION	6	36	40	20	2	6			4	12	2	32	160	$ 12,920
TOTAL Hours	**118**	**350**	**386**	**246**	**24**	**98**	**32**	**44**	**173**	**124**	**30**	**322**	**1947**	
TOTAL Dollars	**$ 16,520**	**$ 36,750**	**$ 28,950**	**$ 17,220**	**$ 2,520**	**$ 7,840**	**$ 2,240**	**$ 3,080**	**$ 12,975**	**$ 7,440**	**$ 1,650**	**$ 20,330**		**$ 158,115**

DIRECT COSTS	
1. Reproduction (estimate)	
5 ADEIS, 5 2nd ADEIS, 50 DEIS, 5 AFEIS, 50 FEIS, and team copies	$ 4,500
Misc. copying	$ 1,500
2. Mileage	$ 1,000
3. Maps/Supplies/Misc	$ 2,500
4. Photowork	$ 300
5. Lodging/Meals (incl. Field Biologists)	$ 300
TOTAL DIRECT COSTS	$ 10,100
TOTAL ESTIMATED FEES	$ 168,215

OFF-SITE PROJECT ALTERNATIVE COST ESTIMATE
FINK ROAD LANDFILL EXPANSION AREA
STANISLAUS COUNTY, CALIFORNIA

Version 1, 8/29/00

Rate Table = Z98

Activity	Senior P6 $ 130	Project P3 $ 115	Staff P2 $ 95	Prof. P1 $ 75	Tech. T1 $ 64	Data Entry A1 $ 55	Drafting C1 $ 65	Word P. A1 $ 55	Sub's	Materials & Supplies	Total
Planning and Coordination											$1,040
Planning and Coordination	8										$1,040
Task 1 - Refine Existing Geologic Map											$2,950
Pre-field Mobe	2		4								$640
Field Recon.			10							$200	$1,150
Demobe / organize data			4				12				$1,160
Task 2 - Borings											$7,216
Health & Safety Plan			2								$190
Mobilization		2									$230
Drilling & Sampling			20							$3,000	$4,900
Physical Soil Testing			2							$ 526.00	$716
Data interp. & Draft Boring Logs		8					4				$1,180
Task 3 - Groundwater Monitoring											$4,690
Mobilization			2								$190
Well Permitting			6							$400	$970
Installation of 2" wells		6								$2,000	$2,690
Well Development					10					$200	$840
Task 4 - Trenching											$6,600
Mobilization		2									$230
Trench Logging & Sampling		16									$1,840
Physical Soils testing			2							$ 3,360.00	$3,550
Data interp. & Draft trench logs		4					8				$980
Task 5 - Report Preparation											$9,400
Prepare Report	30	16	20	8			8	8		$200	$9,400
										TOTAL	$31,896

ADDITIONAL TASK NO. 4

Environmental Consultants

3050 Fite Circle
Suite 101
Sacramento, California 95827-1808

916 361-1297
FAX 916 361-1299
www.scsengineers.com

SCS ENGINEERS

May 21, 2001
File No. 03196022.16

Mr. David Nordell
County of Stanislaus
Department of Public Works
1716 Morgan Road
Modesto, California 95358

Subject: Budget Request
Incorporate Bioreactor and Power into EIR
Fink Road Landfill Expansion
Crows Landing, California

Dear Dave:

As requested at our meeting of May 2, 2001, SCS Engineers (SCS) has determined the effort needed to incorporate bioreactor operation and power generation into the Fink Road Landfill Expansion (Fink Road) environmental impact statement (EIR). A spreadsheet showing our existing task budgets and the needed increases is attached. The revised EIR schedule is also attached, which has a completion date of November 30, 2001.

INCREASE IN SCOPE

The increased effort will be needed in five areas including air quality modeling, landfill slope stability analysis, leachate estimates, revisions to the text of the Administrative Draft EIR/Draft Joint Technical Document, and responses to comments. Each of these is discussed in the following paragraphs.

Air Quality Modeling

We have identified additional modeling and analyses associated with air quality emissions and landfill gas generation that will be needed to support bioreactor operation and power generation for the Fink Road Landfill Expansion. The include:

1. Landfill gas modeling for a bioreactor landfill is different than for a Subtitle D Landfill. Because bioreactors generate landfill gas (LFG) rapidly, the standard US EPA Model for gas generation is not a good predictor of generation rates unless it is modified. SCS has performed modeling runs and is in the process of modifying the use of the EPA Model for Fink Road.

2. Revised emission estimates for the bioreactor and power generation will need to be prepared for these conditions.

   - Landfill emission estimates for "worst case" and "reasonable estimates"
   - Emissions from LFG to energy facility over its life
   - Offset emissions from natural gas fired power plant in California
   - Diesel exhaust emissions and toxics

3. Risk assessment will be needed for these conditions.

   - Qualitative assessment for diesel exhaust
   - Risks for "worst-case" and "reasonable estimate" landfill emissions
   - Generalized isopletes instead of receptor/location-specific values

4. Preparation of revisions to the text of the 2nd Administrative Draft EIR (ADEIR).

Landfill Slope Stability Analysis

The internal strength and moisture content of waste inside a bioreactor are different than a Subtitle D landfill. It will be necessary to evaluate the effects of these differences on the interim and final slope stability of the bioreactor to demonstrate that it will have an adequate factor of safety for the site geologic and seismic conditions at Fink Road.

Leachate Estimates

Bioreactors require a waste moisture content near Field Capacity (47%±) in order to operate efficiently. The method of raising the moisture content to create a bioreactor environment is to apply liquid from re-circulated leachate and additional water as necessary to achieve the target moisture. Estimates of additional water requirements will be based on revised leachate generation estimates. The source of additional water will also need to be identified and described in the ADEIR.

Revisions to the ADEIR Text

Revisions will be made to the text of the ADEIR to describe the bioreactor operation and power generation at Fink Road. In addition, new data will be generated from the air quality and slope stability work previously described. A more specific discussion of the changes to the text is contained in the attached letter prepared by EDAW, Inc.

Responses to Comments

We anticipate that there will be an increase in the number of comments on the Draft EIR that are related to bioreactor operation and power generation. Some additional man hours have been included in this request to respond to the comments.

SCHEDULE

Our revised EIR schedule is attached. The additional items of work described in this letter have been factored into the schedule assuming a quick verbal approval to perform the bioreactor/power revisions described in this letter. A completion date of November 30, 2001 is estimated.

SCS FEES

The additional fees for SCS, EDAW, and Kleinfelder to perform this scope are summarized on Table 1, attached. The combined total for this request is $78,500.

SCS appreciates the opportunity to provide continued services to you on the Fink Road Landfill project. Please call if there are questions or you would like to discuss this request.

Very truly yours,

Ambrose A. McCready, P.E.
Project Manager
SCS ENGINEERS

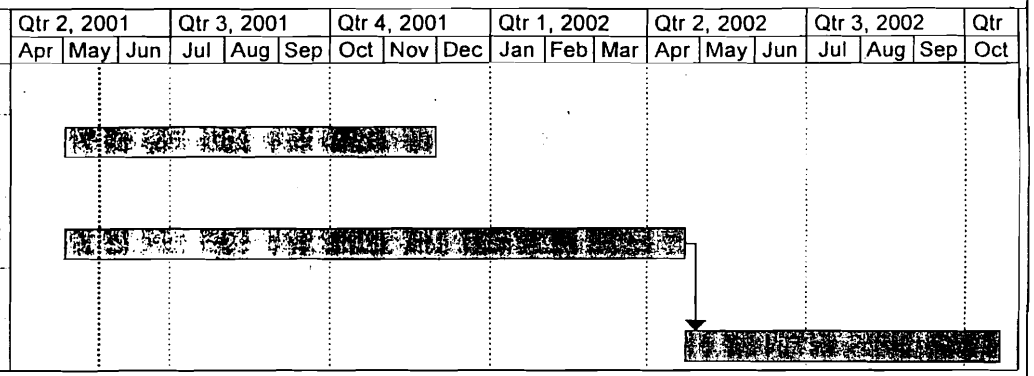
Attachments

TABLE 1
FINK EXPANSION PROJECT NO. 03196022.16
INCORPORATE BIOREACTOR AND POWER INTO EIR

TASK	NAME	BUDGET	SCS	EDAW	KLEINFELDER	NEW BUDGET
20	Dev Max Landfill	$ 18,915.00				$18,915.00
22	Field Invest.	$ 600,135.00			$10,000.00	$610,135.00
23	Surface Water	$ 31,568.00	$ 2,500.00			$34,068.00
24	Leachate	$ 24,528.00	$ 5,000.00			$29,528.00
25	LFG Manage	$ 25,898.00				$25,898.00
26	Site Plans	$ 67,870.00	$10,000.00			$77,870.00
27	Proj. Descrip.	$ 33,140.00	$ 3,000.00			$36,140.00
28	Environ Initiation	$ 16,325.00				$16,325.00
29	Constraints	$ 18,378.00				$18,378.00
30	Draft ADEIR	$ 301,208.00				$301,208.00
30	2nd Draft ADEIR	$ 59,806.71	$16,000.00	$22,000.00		$97,806.71
31	Draft EIR	$ 61,487.29	$ 5,000.00			$66,487.29
32	Final EIR	$ 70,000.00				$70,000.00
33	Mitigation Plan	$ 12,886.00				$12,886.00
34	Wetlands Permit	$ 58,231.00				$58,231.00
35	Meetings	$ 60,033.00				$60,033.00
36	CEQA Review	$ 45,399.00				$45,399.00
37	JTD/CPCMP	$ 120,055.00	$ 5,000.00			$125,055.00
38	Permits	$ 12,343.00				$12,343.00
39	SWFP Approve	$ 12,830.00				$12,830.00
	TOTALS	$ 1,651,036.00	$46,500.00	$22,000.00	$10,000.00	$1,729,536.00

FINK ROAD LANDFILL EXPANSION
COMBINED EIR, EIS, AND PERMITTING SCHEDULES

ID	Task Name	Duration	Start	Finish
1				
2	Complete EIR Review Process	153 days	Wed 5/2/01	Fri 11/30/01
3				
4	Conduct EIS Review Process	254 days	Wed 5/2/01	Mon 4/22/02
5				
6	SWFP Permit Process	130 days	Tue 4/23/02	Mon 10/21/02

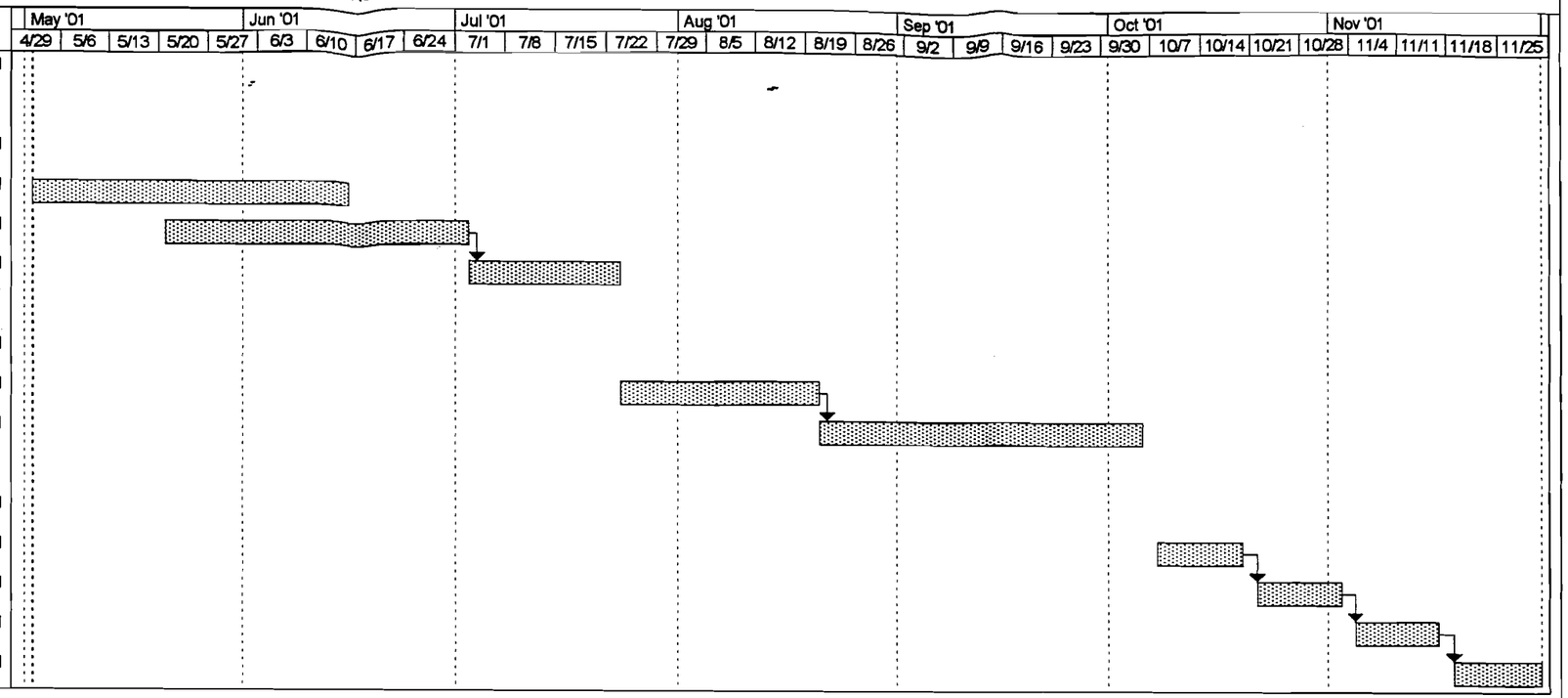


Project: FinkRoadCombinedSch0420C
Date: Mon 5/21/01

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary

FINK ROAD LANDFILL
ENVIRONMENTAL IMPACT REPORT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	ENVIRONMENTAL IMPACT REPORT	1 day	Wed 5/2/01	Wed 5/2/01
2				
3	Task 3.2.3 Administrative Draft	1 day	Wed 5/2/01	Wed 5/2/01
4	Revisions to Air Quality	33 days	Wed 5/2/01	Fri 6/15/01
5	Second Administrative Draft	31 days	Mon 5/21/01	Mon 7/2/01
6	County Review	15 days	Tue 7/3/01	Mon 7/23/01
7				
8	Task 3.2.4 Draft EIR	1 day	Tue 7/24/01	Tue 7/24/01
9	Draft EIR	20 days	Tue 7/24/01	Mon 8/20/01
10	Public Review & Hearing-45 days	34 days	Tue 8/21/01	Fri 10/5/01
11				
12	Task 3.2.5 Final EIR	1 day	Mon 10/8/01	Mon 10/8/01
13	Administrative Final EIR	10 days	Mon 10/8/01	Fri 10/19/01
14	Comments on Administrative Final	10 days	Mon 10/22/01	Fri 11/2/01
15	Final EIR	10 days	Mon 11/5/01	Fri 11/16/01
16	Public Hearing on Final EIR-10 days	10 days	Mon 11/19/01	Fri 11/30/01

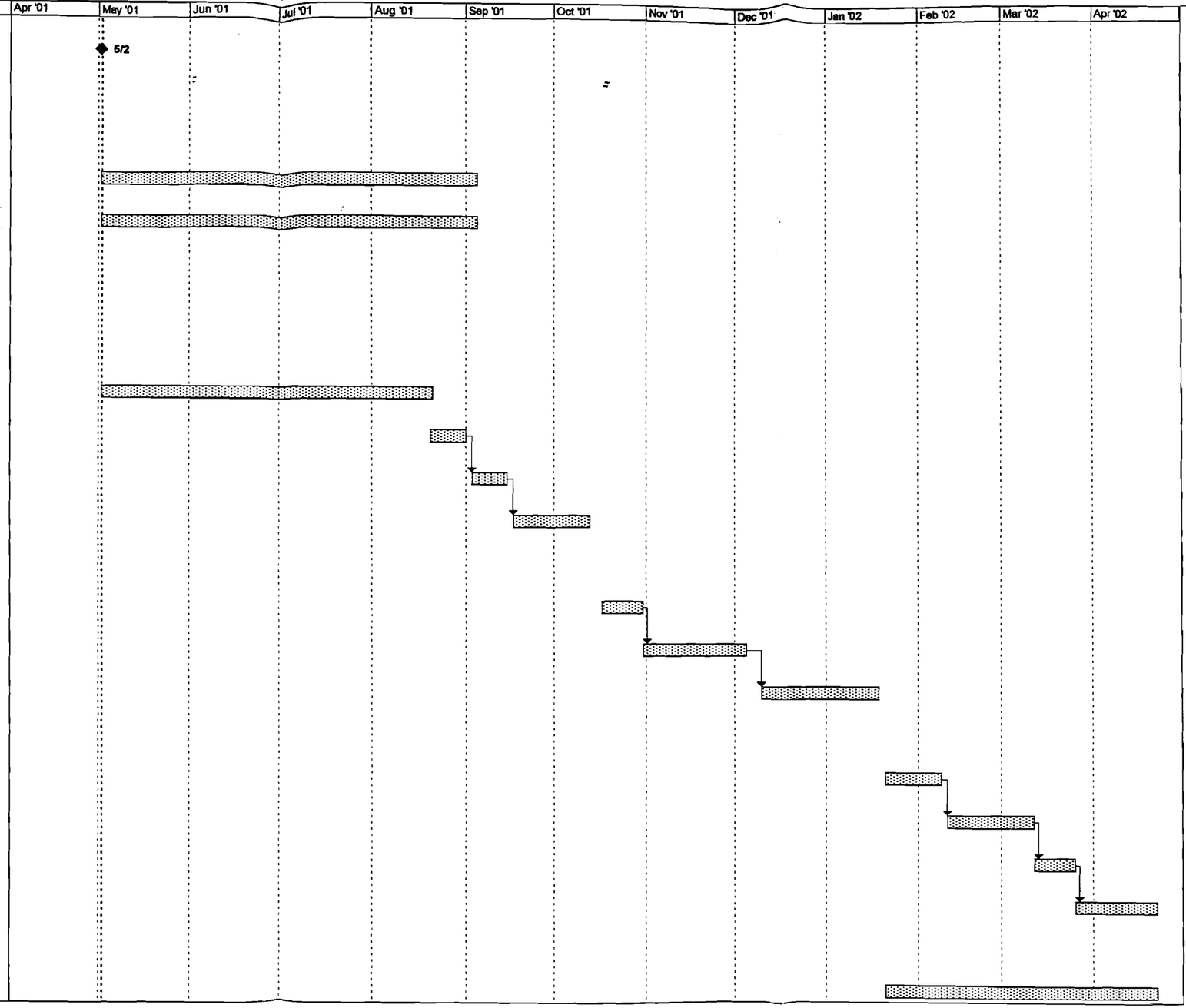


Project: FinkRoadEIRsch042001
Date: Wed 5/2/01

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks

FINK ROAD LANDFILL
ENVIRONMENTAL IMPACT STATEMENT SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecessors
1					
2	Notice to Proceed	0 days	Wed 5/2/01	Wed 5/2/01	
3					
4	PLANNING & ENGINEERING	1 day	Wed 5/2/01	Wed 5/2/01	
5					
6	Task 4.1 - Landfill Alternatives Analysis	1 day	Wed 5/2/01	Wed 5/2/01	
7					
8	Subtask 4.1.1 - Canyon Landfill	90 days	Wed 5/2/01	Tue 9/4/01	
9					
10	Subtask 4.1.2 - Adjacent Site	90 days	Wed 5/2/01	Tue 9/4/01	
11					
12	ENVIRONMENTAL IMPACT STATEMENT	1 day	Wed 5/2/01	Wed 5/2/01	
13					
14	Task 4.2 - Environmental Review Process	1 day	Wed 5/2/01	Wed 5/2/01	
15					
16	Subtask 4.2.1 Administrative Draft EIS	1 day	Wed 5/2/01	Wed 5/2/01	
17					
18	1st Administrative Draft	79 days	Wed 5/2/01	Mon 8/20/01	
19					
20	County/USFWLS Review and Comment	10 days	Mon 8/20/01	Fri 8/31/01	
21					
22	2nd Administrative Draft EIS	10 days	Mon 9/3/01	Fri 9/14/01	20
23					
24	County/USFWLS Review and Comment	20 days	Mon 9/17/01	Fri 10/12/01	22
25					
26	Task 4.2.2 - Prepare Draft EIS	1 day	Wed 10/17/01	Wed 10/17/01	
27					
28	Draft EIS	10 days	Wed 10/17/01	Tue 10/30/01	
29					
30	County/USFWLS Review and Comment	25 days	Wed 10/31/01	Tue 12/4/01	28
31					
32	Public Review and Hearing	30 days	Mon 12/10/01	Fri 1/18/02	30
33					
34	Task 4.2.3 - Prepare Final EIS	1 day	Mon 1/21/02	Mon 1/21/02	
35					
36	Administrative Draft EIS	15 days	Mon 1/21/02	Fri 2/8/02	
37					
38	County/USFWLS Review and Comment	21 days	Mon 2/11/02	Mon 3/11/02	36
39					
40	Final EIS & Record of Decision	10 days	Tue 3/12/02	Mon 3/25/02	38
41					
42	Public Review Period	20 days	Tue 3/26/02	Mon 4/22/02	40
43					
44	LANDFILL PERMITTING	1 day	Mon 4/22/02	Mon 4/22/02	
45					
46	Task 4.3 - Incorporate EIS into Permit Process	66 days	Mon 1/21/02	Mon 4/22/02	



Project: FinkRoadSchEIS042001
Date: Wed 5/2/01

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks

EDAW

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May 18, 2001

Mr. Ambrose McCready
SCS Engineers
3050 Fite Circle, Suite 101
Sacramento, CA 95827

SUBJECT: Changes to the Fink Road Landfill Administrative Draft EIR Necessary to Incorporate Bioreactor Technology and a New Power-Generating Facility

Dear Ambrose:

Based on our conversation on Tuesday, we have identified a number of changes to the first Administrative Draft EIR for the Fink Road Landfill Expansion that would be necessary with the implementation of bioreactor technology and the construction/operation of a new power-generating facility at the site. These changes include incorporating revised information into the project description regarding future landfill operations and conducting additional impact analysis for the individual resource categories. These changes were not included in the original scope of work for the EIR. The following summarizes the sections of the first Administrative Draft EIR that will be revised and the associated costs.

Executive Summary

The changes in impact conclusions and mitigation measures associated with the use of bioreactor technology and the operation of a new power-generating facility would require that the Executive Summary table and text be revised. This includes revising the project description summary, the description of discretionary actions and project approvals, the discussion of areas of controversy, and the project alternatives. The cost to complete these changes is estimated to be $1,500.

Project Description

The Project Description would be revised to incorporate the changes in landfill operations associated with bioreactor technology and the operation of a new power-generating facility. The cost to complete these changes is estimated to be $2,000.

Earth Resources

The discussion of slope stability included in the Earth Resources section would be revised based on the potential for the higher water volumes within the

bioreactor waste cells to affect slope stability. EDAW assumes that SCS Engineers will provide a revised slope stability analysis that EDAW will integrate into the Earth Resources section of the Draft EIR. Additionally, the potential earth resource impacts associated with siting a new power-generating facility at the landfill will be described. The cost to complete these changes is estimated to be $2,500.

Hydrology and Water Quality

The discussion of leachate generation and handling included in the Hydrology and Water Quality section will be revised based on changes anticipated with a bioreactor landfill. Also, the hydrology and water quality impacts associated with siting a new power-generating facility will be discussed. The cost to complete these changes is estimated to be $2,000.

Biological Resources

The Biological Resources section will be revised based on changes associated with the construction and operation of a new power-generating facility. If cooling ponds for the power-generating facility are necessary on the site or new power lines are installed, local biological resources could be affected. The cost to complete these changes is estimated to be $2,000.

Noise

The Noise section will be revised to assess the impacts associated with a new power-generating facility. This includes revising the noise calculations for the nearest rural residential uses. The cost to complete these changes is estimated to be $3,000.

Air Quality

The Air Quality section will be revised to integrate changes in air quality impact conclusions being prepared by SCS Engineers. The cost to complete these changes is estimated to be $1,500.

Public Services

The discussion of water supply included in the Public Services section will be revised to include an assessment of the increased demand for water associated with a bioreactor landfill and a new power-generating facility. Additionally, the project's impacts on energy supply and demand will be described. The cost to complete these changes is estimated to be $2,500.

Public Health and Safety

The Public Health and Safety section will be revised to incorporate an assessment of bioreactor technology and the construction/operation of a new power-generating facility on public health. The cost to complete these changes is estimated to be $2,000.

Visual Resources

The discussion of aesthetic impacts included in the Visual Resources section will be revised to include the effects of a new power-generating facility on the site. However, no changes in the existing visual simulations are proposed. The cost to complete these changes is estimated to be $1,500.

Alternatives

The Alternatives analysis will be revised to include a new alternative. The new alternative will include landfill operations without the use of bioreactor technology. The intent of this alternative is to provide an option for the County if it decides that bioreactor technology will not be implemented at the site. The cost to complete these changes is estimated to be $2,000.

The total cost to revise the first Administrative Draft EIR in order to incorporate bioreactor technology and the construction/operation of a new power-generating facility is $22,500. If you have any questions regarding this letter, please give me a call.

Sincerely,

Douglas Brown
Project Manager

FAX COVER

TO:

DATE:	May 29, 2001
NAME:	David Nordell
COMPANY NAME:	County of Stanislaus
FAX NUMBER:	(209) 525-4115
PHONE NUMBER:	(209) 525-4130

SCS ENGINEERS

Environmental Consultants

3050 Fite circle
Suite 101
Sacramento, California 95827

Phone 916 361-1297
FAX 916 361-1299

FROM: Ambrose A. McCready, P.E.

JOB/OVERHEAD NUMBER:

NUMBER OF PAGES: 11 (including cover)

COMMENTS:

Attached is a copy of the Budget Request that was sent to your office on May 21, 2001.