MEJIA, BALTAZAR

From:	Barry Nerhus <bnerhus@endemicenvironmental.net>
Sent:	Friday, August 21, 2015 4:18 PM
To:	MEJIA, BALTAZAR
Subject:	Fwd: Fairview Park Multipurpose Trail PES
Attachments:	6A-PES Form Fairview Park-2.pdf; CML 5312 096 SIGNED PES.PDF; Fairview Park CAGN RPT 30 Jun 2014.pdf; Multipurpose Trail Wetland Delineation Technical Study Report.pdf

---------- Forwarded message ----------
From: **Barry Nerhus** <bnerhus@endemicenvironmental.net>
Date: Wed, Oct 15, 2014 at 10:27 PM
Subject: Fwd: Fairview Park Multipurpose Trail PES
To: monroe.johnson@dot.ca.gov

Hello Monroe,

I sent this to Chris Waterston. I am a consulting biologist working with the City of Costa Mesa on the Multipurpose Trail Project at Fairview Park.

Please see attached studies including a Presence/Absence California Gnatcatcher Survey and a Wetland Delineation Technical Report.

Let me know if you have any questions.

Thanks,

Barry

---------- Forwarded message ----------
From: **Barry Nerhus** <bnerhus@endemicenvironmental.net>
Date: Mon, Sep 22, 2014 at 11:41 AM
Subject: Fwd: Fairview Park Multipurpose Trail PES
To: "Waterston, Chris@DOT" <chris.waterston@dot.ca.gov>

Good Morning Chris,

I am submitting a PES document for the multipurpose trail project at Fairview Park in Costa Mesa. I also conducted a California gnatcatcher presence/absence survey since there is suitable habitat and sightings of California gnatcatchers in the area.

Please let me know what other documents you would like or additional information. What are the next steps moving forward?

Thanks,

Barry Nerhus
(714) 393-6249

From: STAPLES, ROBERT
Sent: Monday, August 24, 2015 9:36 AM
To: FAZELI, FARIBA
Subject: FW: Fairview Park Multipurpose Trail PES
Attachments: 6A-PES Form Fairview Park-2.pdf; CML 5312 096 SIGNED PES.PDF; Fairview Park CAGN RPT 30 Jun 2014.pdf; Multipurpose Trail Wetland Delineation Technical Study Report.pdf

From: Barry Nerhus [mailto:bnerhus@endemicenvironmental.net]
Sent: Monday, August 24, 2015 9:34 AM
To: STAPLES, ROBERT <ROBERT.STAPLES@costamesaca.gov>
Subject: Fwd: Fairview Park Multipurpose Trail PES

---------- Forwarded message ----------
From: **Barry Nerhus** <bnerhus@endemicenvironmental.net>
Date: Saturday, August 22, 2015
Subject: Fairview Park Multipurpose Trail PES
To: "MEJIA, BALTAZAR" <baltazar.mejia@costamesaca.gov>

---------- Forwarded message ----------
From: **Barry Nerhus** <bnerhus@endemicenvironmental.net>
Date: Wed, Oct 15, 2014 at 10:27 PM
Subject: Fwd: Fairview Park Multipurpose Trail PES
To: monroe.johnson@dot.ca.gov

Hello Monroe,

I sent this to Chris Waterston. I am a consulting biologist working with the City of Costa Mesa on the Multipurpose Trail Project at Fairview Park.

Please see attached studies including a Presence/Absence California Gnatcatcher Survey and a Wetland Delineation Technical Report.

Let me know if you have any questions.

Thanks,

Barry

---------- Forwarded message ----------
From: **Barry Nerhus** <bnerhus@endemicenvironmental.net>
Date: Mon, Sep 22, 2014 at 11:41 AM

Subject: Fwd: Fairview Park Multipurpose Trail PES
To: "Waterston, Chris@DOT" <chris.waterston@dot.ca.gov>

Good Morning Chris,

I am submitting a PES document for the multipurpose trail project at Fairview Park in Costa Mesa. I also conducted a California gnatcatcher presence/absence survey since there is suitable habitat and sightings of California gnatcatchers in the area.

Please let me know what other documents you would like or additional information. What are the next steps moving forward?

Thanks,

Barry Nerhus
(714) 393-6249

EXHIBIT 6-A PRELIMINARY ENVIRONMENTAL STUDY (PES)

Federal Project No.: CML-5312 (096) *(Federal Program Prefix-Project No., Agreement No.)*

Final Design: May 15, 2015 *(Expected Start Date)*

To: Mr. Jim Kaufman *(District Local Assistance Engineer)*
District 12 *(District)*
3347 Michelson Drive, Suite 100, Irvine CA 92612-8894 *(Address)*
Jim_kaufman@dot.ca.gov *(Email Address)*

From: City of Costa Mesa *(Local Agency)*
Mr. Baltazar Mejia (714) 754-5291 *(Project Manager's Name and Telephone No.)*
77 Fair Drive, Costa Mesa, CA 92628-1200 *(Address)*
baltazar.mejia@Costamesaca.gov *(Email Address)*

Is this Project "ON" the State Highway System? ☐ Yes ☒ No

IF YES, STOP HERE and contact the District Local Assistance Engineer regarding the completion of other environmental documentation.

Federal State Transportation Improvement Program (FSTIP) http://www.dot.ca.gov/hq/transprog/fedpgm.htm: 4/25/2013 *(Currently Adopted Plan Date)* FTIP Amd. #13-08 Page 2 *(Page No.___ attach to this form)*
http://www.dot.ca.gov/hq/transprog/oftmp.htm

Programming for FSTIP:

Preliminary Engineering		Right of Way		Construction	
(Fiscal Year)	$ 0 *(Dollars)*	*(Fiscal Year)*	$ 0 *(Dollars)*	*(Fiscal Year)*	$ 1,247 *(Dollars)*

Project Description as Shown in RTP and FSTIP: Fairview Multipurpose Trail in Costa Mesa The proposed project includes design and construction of a new eight-foot wide, concrete Class I multipurpose trail facility for a length of approximately 5,300 feet within the limits of Fairview Park.

Detailed Project Description: *(Describe the following, as applicable: purpose and need, project location and limits, required right of way acquisition, proposed facilities, staging areas, disposal and borrow sites, construction activities, and construction access.)*
Fairview Park is located in the City of Costa Mesa and is bordered by a residential neighborhood and Fairview Channel to the north, and connecting with the Santa Ana River Regional Bicycle Trail and Talbert Nature Preserve to the west, Placentia Avenue to the east and Canyon Drive and Estancia High School to the south (see attached site plan and photos). Presently it consists of asphalt paved pedestrian trails that are approximately 5,300 feet of existing trail into a new, eight-foot wide, concrete Class I multipurpose trail facility. The proposed trail alignment is part of the City's Master Plan of Bikeways for a Class I facility. Presently, there is no convenient bicycle trail connection from Placentia Avenue and Fairview Park to Santa Ana River Regional Trail. The main purpose of the project is to rehabilitate the existing deteriorated asphalt trail. The project will connect the City's bicycle lane to County of Orange's Santa Ana River Regional Trail with an all-weather trail that complies with standards as shown in the highway design manual.

(Continue description on "Notes" sheet, last page of this Exhibit, if necessary)

Preliminary Design Information:
Does the project involve any of the following? Please check the appropriate boxes and delineate on an attached map, plan, or layout including any additional pertinent information.

Yes	No		Yes	No		Yes	No	
☐	☒	Widen existing roadway	☒	☐	Ground disturbance	☐	☒	Easements
☐	☒	Increase number of through lanes	☒	☐	Road cut/fill	☐	☒	Equipment staging
☐	☒	New alignment	☒	☐	Excavation: anticipated maximum depth 0.83 ft	☐	☒	Temporary access road/detour
☐	☒	Capacity increasing—other (e.g., channelization)				☐	☒	Utility relocation
			☐	☒	Drainage/culverts	☐	☒	Right of way acquisition (if yes, attach map with APN)
☐	☒	Realignment	☐	☒	Flooding protection			
☐	☒	Ramp or street closure	☐	☒	Stream channel work	☐	☒	Disposal/borrow sites
☐	☒	Bridge work						

☐ ☒ Vegetation removal
☐ ☒ Tree removal
☐ ☒ Pile driving
☐ ☒ Demolition
☐ ☒ Part of larger adjacent project
☐ ☒ Railroad

Required Attachments:

☒ Regional map ☒ Project location map ☐ Project footprint map (existing/proposed right of way)
☒ Engineering drawings (existing and proposed cross sections), if available ☐ Borrow/disposal site location map, if applicable
(Note: all maps (except project location map and regional maps) should be consistent with the project description (minimum scale: 1" = 200').)
☒ Notes to support the conclusions of this checklist/project description continuation page (attached)

Examine the project for potential effects on the environment, direct or indirect and answer the following questions. The "construction area," as specified below, includes all areas of ground disturbance associated with the project, including staging and stockpiling areas and temporary access roads.

Each answer must be briefly documented on the "Notes" pages at the end of the PES Form.

A. Potential Environmental Effects	Yes	To Be Determined	No
General			
1. Will the project require future construction to fully utilize the design capabilities included in the proposed project?	☐	☐	☒
2. Will the project generate public controversy?	☐	☐	☒
Noise			
3. Is the project a Type I project as defined in 23 CFR 772.5(h); "construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes"?	☐	☐	☒
4. Does the project have the potential for adverse construction-related noise impact (such as related to pile driving)?	☐	☐	☒
Air Quality			
5. Is the project in a NAAQS non-attainment or maintenance area?	☒	☐	☐
6. Is the project exempt from the requirement that a conformity determination be made? (If "Yes," state which conformity exemption in 40 CFR 93.126, Table 2 applies): Air Quality Bicycle and Pedestrian Facilities	☒	☐	☐
7. Is the project exempt from regional conformity? (If "Yes," state which conformity exemption in 40 CFR 93.127, Table 3 applies): Bicycle and Pedestrian Facilities.	☒	☐	☐
8. If project is not exempt from regional conformity, (If "No" on Question #7)			
Is project in a metropolitan non-attainment/maintenance area?	☐	☐	☐
Is project in an isolated rural non-attainment area?	☐	☐	☐
Is project in a CO, PM10 and/or PM2.5 non-attainment/maintenance area?	☐	☐	☐
Hazardous Materials/Hazardous Waste			
9. Is there potential for hazardous materials (including underground or aboveground tanks, etc.) or hazardous waste (including oil/water separators, waste oil, asbestos-containing material, lead-based paint, ADL, etc.) within or immediately adjacent to the construction area?	☐	☐	☒
Water Quality/Resources			
10. Does the project have the potential to impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?	☒	☐	☐
11. Is the project within a designated sole-source aquifer?	☐	☐	☒
Coastal Zone			
12. Is the project within the State Coastal Zone, San Francisco Bay, or Suisun Marsh?	☐	☐	☒
Floodplain			
13. Is the construction area located within a regulatory floodway or within the base floodplain (100-year) elevation of a watercourse or lake?	☒	☐	☐

Wild and Scenic Rivers			
14. Is the project within or immediately adjacent to a Wild and Scenic River System?	☐	☐	☒
Biological Resources			
15. Is there a potential for federally listed threatened or endangered species, or their critical habitat or essential fish habitat to occur within or adjacent to the construction area?	☐	☐	☒
16. Does the project have the potential to directly or indirectly affect migratory birds, or their nests or eggs (such as vegetation removal, box culvert replacement/repair, bridge work, etc.)?	☐	☐	☒
17. Is there a potential for wetlands to occur within or adjacent to the construction area?	☒	☐	☐
18. Is there a potential for agricultural wetlands to occur within or adjacent to the construction area?	☐	☐	☒
19. Is there a potential for the introduction or spread of invasive plant species?	☐	☐	☒
Sections 4(f) and 6(f)			
20. Are there any historic sites or publicly owned public parks, recreation areas, wildlife or waterfowl refuges (Section 4[f]) within or immediately adjacent to the construction area?	☒	☐	☐
21. Does the project have the potential to affect properties acquired or improved with Land and Water Conservation Fund Act (Section 6[f]) funds?	☒	☐	☐
Visual Resources			
22. Does the project have the potential to affect any visual or scenic resources?	☐	☐	☒
Relocation Impacts			
23. Will the project require the relocation of residential or business properties?	☐	☐	☒
Land Use, Community, and Farmland Impacts			
24. Will the project require any right of way, including partial or full takes? Consider construction easements and utility relocations.	☐	☐	☒
25. Is the project inconsistent with plans and goals adopted by the community?	☐	☐	☒
26. Does the project have the potential to divide or disrupt neighborhoods/communities?	☐	☐	☒
27. Does the project have the potential to disproportionately affect low-income and minority populations?	☐	☐	☒
28. Will the project require the relocation of public utilities?	☐	☐	☒
29. Will the project affect access to properties or roadways?	☐	☐	☒
30. Will the project involve changes in access control to the State Highway System (SHS)?	☐	☐	☒
31. Will the project involve the use of a temporary road, detour, or ramp closure?	☐	☐	☒
32. Will the project reduce available parking?	☐	☐	☒
33. Will the project construction encroach on state or federal lands?	☐	☐	☒
34. Will the project convert any farmland to a different use or impact any farmlands?	☐	☐	☒
Cultural Resources			
35. Is there National Register listed, or potentially eligible historic properties, or archaeological resources within or immediately adjacent to the construction area? *(Note: Caltrans PQS answers question #35)*	☐	☐	☐
36. Is the project adjacent to, or would it encroach on Tribal land?	☐	☐	☒

For Sections B, C, and D, check appropriate box to indicate required technical studies, coordination, permits, or approvals.

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
☐ **Traffic**		
Check one:		
☐ Traffic Study	☐ Caltrans	☐ Approval
☐ Technical Memorandum	☐ Caltrans	☐ Approval

	☐ Discussion in ED Only	☐ Caltrans	☐ Approval
☐	**Noise** ***Check as applicable:*** ☐ Traffic Related ☐ Construction Related ***Check one:***		
	☐ Noise Study Report	☐ Caltrans	☐ Approval
	☐ NADR	☐ Caltrans	☐ Approval
	☐ Technical Memorandum	☐ Caltrans	☐ Approval
	☐ Discussion in ED Only	☐ Caltrans	☐ Approval
☐	**Air Quality** ***Check as applicable:*** ☐ Traffic Related ☐ Construction Related ***Check one:***		
	☐ Air Quality Report	☐ Caltrans	☐ Approval
	☐ Technical Memorandum	☐ Caltrans	☐ Approval
	☐ Discussion in ED Only	☐ Caltrans	☐ Approval
		☐ FHWA	☐ Conformity Finding (23 USC 327 CEs, EAs, EISs)
		☐ Caltrans	☐ Conformity Finding (23 USC 326 CEs)
		☐ Regional Agency	☐ PM10/PM2.5 Interagency Consultation
☐	**Hazardous Materials/ Hazardous Waste** ***Check as applicable:*** ☐ Initial Site Assessment (Phase 1)	☐ Caltrans	☐ Approval
	☐ Preliminary Site Assessment (Phase 2)	☐ Caltrans	☐ Approval
	☐ Discussion in ED Only	☐ Caltrans	☐ Approval
		☐ Cal EPA DTSC	☐ Review Database
		☐ Local Agency	☐ Review Database
☒	**Water Quality/Resources** ***Check as applicable:*** ☐ Water Quality Assess. Report	☐ Caltrans	☐ Approval
	☒ Technical Memorandum	☒ Caltrans	☒ Approval
	☐ Discussion in ED Only	☐ Caltrans	☐ Approval
☐	**Sole-Source Aquifer (Districts 5, 6 and 11)**	☐ EPA (S.F. Regional Office)	☐ Approval of Analysis in ED
☐	**Coastal Zone**	☐ CCC	☐ Coastal Zone Consistency Determination

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
☒ **Floodplain**		
Check as applicable:		
☐ Location Hydraulic Study	☐ Caltrans	☐ Approval
☐ Floodplain Evaluation Report	☐ Caltrans	☐ Approval
☐ Summary Floodplain Encroachment Report	☐ Caltrans	☐ Approval
	☐ Caltrans	☐ Only Practicable Alternative Finding
	☐ FHWA	☐ Approves significant encroachments and concurs in Only Practicable Alternative Findings
☐ **Wild and Scenic Rivers**	☐ River Managing Agency	☐ Wild and Scenic Rivers Determination
☒ **Biological Resources**		
Check as applicable:		
☐ NES, Minimal Impact	☐ Caltrans	☐ Approval
☒ NES		
☐ BA	☐ Caltrans	☐ Approves for Consultation
	☒ USFWS ☐ NOAA Fisheries	☒ Section 7 Informal/Formal Consultation
☐ EFH Evaluation	☐ NOAA Fisheries	☐ MSA Consultation
☐ Bio-Acoustic Evaluation	☐ NOAA Fisheries	☐ Approval
☐ Technical Memorandum	☐ Caltrans	☐ Approval
☐ **Wetlands**		
Check as applicable:		
☒ WD and Assessment	☒ Caltrans	☐ Approval
	☒ ACOE	☐ Wetland Verification
	☐ NRCS	☐ Agricultural Wetland Verification
	☐ Caltrans	☒ Wetlands Only Practicable Alternative Finding
☐ **Invasive Plants**		
☐ Discussion in ED Only	☐ Caltrans	☐ Approval
☒ **Section 4(f)**		
Check as applicable:	☐ Caltrans	☐ Determine Temporary Occupancy
☐ De minimis	☐ Caltrans	☐ De minimis finding
☒ Programmatic 4(f) Evaluation Type: Bikeway or Walkway Construction	☐ Caltrans	☐ Approval
☐ Individual 4(f) Evaluation	☐ Caltrans	☐ Approval
	☐ Agency with Jurisdiction ☐ SHPO ☐ DOI ☐ HUD ☐ USDA	

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
☒ **Section 6(f)**	☒ Agency with Jurisdiction ☒ NPS	☐ Determines Consistency with Long-Term Management Plan
	☐ NPS	☒ Approves Conversion
☐ **Visual Resources**		
☐ Technical Memorandum	☐ Caltrans	☐ Approval
☐ Minor VIA	☐ Caltrans	☐ Approval
☐ Moderate VIA	☐ Caltrans	☐ Approval
☐ Advance/Complex VIA	☐ Caltrans	☐ Approval
☐ **Relocation Impacts**		
Check one:		
☐ Relocation Impact Memo	☐ Caltrans	☐ Approval
☐ Relocation Impact Study	☐ Caltrans	☐ Approval
☐ Relocation Impact Report	☐ Caltrans	☐ Approval
☐ **Land Use and Community Impacts**		
Check one:		
☐ CIA	☐ Caltrans	☐ Approval
☐ Technical Memorandum	☐ Caltrans	☐ Approval
☐ Discussion in ED Only	☐ Caltrans	☐ Approval
☐ **Construction/Encroachment on State Lands**		
Check as applicable:		
☐ SLC Jurisdiction	☐ SLC	☐ SLC Lease
☐ Caltrans Jurisdiction	☐ Caltrans	☐ Encroachment Permit
☐ SP Jurisdiction	☐ SP	☐ Encroachment Permit
☐ **Construction/Encroachment on Federal Lands**	☐ Federal Agency with Jurisdiction	☐ Encroachment Permit
☐ **Construction/Encroachment On Indian Trust Lands**	☐ Bureau of Indian Affairs	☐ Right of Way Permit
☐ **Farmlands**		
Check one:		
☐ CIA	☐ Caltrans	☐ Approval
☐ Technical Memorandum	☐ Caltrans	☐ Approval
☐ Discussion in ED Only	☐ Caltrans	☐ Approval
Check as applicable:		
☐ Form AD 1006	☐ NRCS	☐ Approves Conversion
	☐ CDOC	☐ Approves Conversion
☐ Conversion to Non-Agri Use	☐ ACOE	

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/ Approvals
☒ **Cultural Resources** (PQS completes this section) ***Check as applicable:***	☐ Caltrans PQS	☐ Screened Undertaking
☐ APE Map	☐ Caltrans PQS and DLAE	☐ Approves APE Map
	☐ Local Preservation Groups and/or Native American Tribes	☐ Provides Comments Regarding Concerns with Project
☒ HPSR ☐ ASR ☐ HRER	☒ Caltrans	☒ Approves for Consultation
☒ Finding of Effect Report	☐ Caltrans	☐ Concurs on No Effect, No Adverse Effect with Standard Conditions
	☐ SHPO	☐ Letter of Concurrence on Eligibility, No Adverse Effect without Standard
☐ MOA	☐ Caltrans	☐ Approves MOA
	☐ SHPO	☐ Approves MOA
	☐ ACHP (if requested)	☐ Approves MOA
☐ **Permits** Copies of permits and a list of mitigation commitments are mandatory submittals following NEPA approval.	☐ ACOE	☐ Section 404 Nationwide Permit
	☐ ACOE	☐ Section 404 Individual Permit
	☐ Caltrans/ACOE/EPA ☐ USFWS ☐ NOAA Fisheries	☐ NEPA/404 Integration MOU
	☐ ACOE	☐ Rivers and Harbors Act Section 10 Permit
	☐ USCG	☐ USCG Bridge Permit
	☐ RWQCB	☐ Section 401 Water Quality Certification
	☐ CDFG	☐ Section 1602 Streambed Alteration Agreement
	☐ RWQCB	☐ NPDES Permit
	☐ CCC ☐ Local Agency	☐ Coastal Zone Permit
	☐ BCDC	☐ BCDC Permit

Notes: Additional studies may be required for other federal agencies.

ACHP = Advisory Council on Historic Preservation
ACOE = U.S. Army Corps of Engineers
ADL = Aerially Deposited Lead
APE = Area of Potential Effect
APN = Assessor Parcel Number
ASR = Archaeological Survey Report
BA = Biological Assessment
BCDC = Bay Conservation and Development Commission
BE = Biological Evaluation
BO = Biological Opinion
Cal EPA = California Environmental Protection Agency
CCC = California Coastal Commission
CDFG = California Department of Fish and Game
CDOC = California Department of Conservation
CE = Categorical Exclusion
CIA = Community Impact Assessment
CWA = Clean Water Act
DLAE = District Local Assistance Engineer
DOI = U.S. Department of Interior
DTSC = Department of Toxic Substances Control
EA = Environmental Assessment
ED = Environmental Document
EFH = Essential Fish Habitat
EIS = Environmental Impact Statement
EPA = U.S. Environmental Protection Agency
FEMA = Federal Emergency Management Agency
FHWA = Federal Highway Administration
FONSI = Finding of No Significant Impacted
FTIP = Federal Transportation Improvement Program
HPSR = Historic Property Survey Report
HRER = Historical Resources Evaluation Report
HUD = U.S. Housing and Urban Development
MOA = Memorandum of Agreement
MSA = Magnuson-Stevens Fishery Conservation and Management Act
NEPA = National Environmental Policy Act
NADR = Noise Abatement Decision Report
NES = Natural Environment Study
NHPA = National Historic Preservation Act
NOAA = National Oceanic and Atmospheric Administration
NMFS National Marine Fisheries Service
NPDES = National Pollutant Discharge Elimination System
NPS = National Park Service
NRCS = Natural Resources Conservation Service
PM10 = Particulate Matter 10 Microns in Diameter or Less
PM2.5 = Particulate Matter 2.5 Microns in Diameter or Less
PMP = Project Management Plan
PQS = Professionally Qualified Staff
ROD = Record of Decision
RTIP = Regional Transportation Improvement Program
RTP = Regional Transportation Plan
RWQCB = Regional Water Quality Control Board
SER = Standard Environmental Reference
SEP = Senior Environmental Planner
SHPO = State Historic Preservation Officer
SLC = State Lands Commission
SP = State Parks
TIP = Transportation Improvement Program
USCG = U.S. Coast Guard
USDA = U.S. Department of Agriculture
USFWS = U.S. Fish and Wildlife Service
WD = Wetland Delineation

E. Preliminary Environmental Document Classification (NEPA)

Based on the evaluation of the project, the environmental document to be developed should be:

Check one:

- ☐ Environmental Impact Statement (*Note: Engagement with participating agencies in accordance with 23 USC 139 required)*
  - ☐ Compliance with 23 USC 139 regarding Participating Agencies required
- ☐ Complex Environmental Assessment
- ☐ Routine Environmental Assessment
- ☐ Categorical Exclusion without required technical studies.
- ☒ Categorical Exclusion with required technical studies

  (if Categorical Exclusion is selected, check one of the following):
  - ☒ Section 23 USC 326
    - ☒ 23 CFR 771 activity (c)(3)
    - ☐ 23 CFR 771 activity (d) (_____)
    - ☐ Activity _____ listed in the Section 23 USC 326
  - ☐ Section 23 USC 327

F. Public Availability and Public Hearing

Check as applicable:

- ☒ Not Required
- ☐ Notice of Availability of Environmental Document
- ☐ Public Meeting
- ☐ Notice of Opportunity for a Public Hearing
- ☐ Public Hearing Required

G. Signatures

Local Agency Staff and/or Consultant Signature

_____	_____	(714) 533-3050
(Signature of Preparer)	*(Date)*	*(Telephone No.)*

Justin Smeets
(Name)

Local Agency Project Engineer Signature

This document was prepared under my supervision, according to the *Local Assistance Procedures Manual,* Exhibit 6-B, "Instructions for Completing the Preliminary Environmental Study Form."

_____	_____	_____
(Signature of Local Agency)	*(Date)*	*(Telephone No.)*

Caltrans District Professionally Qualified Staff (PQS) Signature

☐ Project does not meet definition of an "undertaking"; no further review is necessary under Section 106 ("No" Section A, #35).

☐ Project is limited to the type of activity listed in Attachment 2 of the Section 106 PA and based on the information provided in the PES Form, the project does not have the potential to affect historic properties ("No" Section A, #35).

☐ Project is limited to the type of activity listed in Attachment 2 of the Section 106 PA, but the following additional procedures or information is needed to determine the potential for effect ("To Be Determined" Section A, #35):
☐ Records Search ☐ _____ ☐ _____ ☐ _____

☐ Project meets the definition of an "undertaking"; all properties in the project area are exempt from evaluation per Attachment 4 of the Section 106 PA ("No" Section A, #35).

☐ The proposed undertaking is considered to have the potential to affect historic properties; further studies for 106 compliance are indicated in Sections B, C, and D of this PES Form ("Yes" Section A, #35).

_____ _____ _____
(Signature of Professionally Qualified Staff) *(Date)* *(Telephone No.)*

The following signatures are required for all CEs, routine and complex EAs, and EISs:

Caltrans District Senior Environmental Planner (or Designee) and DLAE Signatures

I have reviewed this Preliminary Environmental Study (PES) Form and determined that the submittal is complete and sufficient. I concur with the studies to be performed and the recommended NEPA Class of Action.

_____ _____ _____
(Signature of Senior Environmental Planner or Designee) *(Date)* *(Telephone No.)*

_____
(Name)

_____ _____ _____
(Signature of District Local Assistance Engineer or Designee) *(Date)* *(Telephone No.)*

_____
(Name)

☐ HQ DEA Environmental Coordinator concurrence _____. Email concurrence attached.
(date)

Preliminary Environmental Investigation

Notes to Support the Conclusions of the PES Form

(May Also Include Continuation of Detailed Project Description)

Brief Explanation of How Project Complies, or Will Comply with Applicable Federal Mandate (Part A):

1. Presently, there is no convenient bicycle trail connection from Placentia Avenue and Fairview Park to Santa Ana River Regional Trail. The current access is by using pedestrian trails in Fairview Park that are severely damaged and constantly flooded even in light rain conditions. The proposed improvements will connect to Canyon Drive to the south, Placentia Avenue to the east, and Talbert Nature Preserve and Santa Ana River Regional Bicycle Trail to the west. The proposed trail alignment is part of the City's Master Plan of Bikeways for a Class I facility. No future construction is necessary to fully utilize the proposed trail.

2. No. Fairview Park Citizens Advisory Committee meets monthly and is involved in the development of the proposed park improvements. There has been no major public controversy.

3. This project is not a Type I project as defined in CFR 772.5(h) The project is for bicycle facilities and will only require minimal construction activities along existing trail.

4. No major construction related noise is anticipated. The only construction noises anticipated is related to machinery used to prepare the site for construction of the multipurpose trail and the hauling of the PCC to the site.

5. This project is located in the City of Costa Mesa which is in the Los Angeles South Coast Air Basin, and is therefore a NAAQS maintenance area.

6. This project falls under Bicycle and Pedestrian facilities and is therefore exempt.

7. The project is exempt based on question 6, conformity exemption is for bicycle and pedestrian facilities.

8. The project is exempt based on question #6 and does not require project level conformity.

9. A Section 106 Study was performed in April of 2007. This report was conducted for improvements at the north end of the park but included a detailed history of the subject area identified in the report as "CA-ORA-58." The findings indicate that the area has never been developed. The project area does not contain any hazardous materials or wastes within the limits according to the geotracker list and map of hazardous facilities and underground tanks.

10. Yes. Project is adjacent to the Santa Ana River, and includes soil disturbance. Therefore the potential to impact water resources exist. A technical memo will be prepared in accordance with the guidelines set forth in the SER, chapter 9, "Hydrology, Water Quality and Stormwater."

11. This project is not in any of the counties listed as having locations with Sole-Source Aquifers.

12. This project is located approximately 2 miles from the mean high tide line as defined in the state coastal zone boundaries definitions. It is therefore not within the State Coastal Zone. See Attachment 13 for the City of Newport Beach Coastal Zone map. Fairview Park is located in the very upper left corner of the map.

13. Yes. Approximately 400 feet of the trail at the very north west connection to the Santa Ana River is within Zone A of the Flood Plain Map (see attachment 2). This proposed trail is connecting to the existing bicycle trail within the flood plain.

    Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. Federal financial assistance and/or issuance of a federal permit(s) required for a proposed state/local project constitute federal support and/or allowing actions. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A. In order to comply with 23 CFR 650 Subpart A and determine if an encroachment itself is "minimal," or "significant," the following must be analyzed:

    - ☐ The Practicability of alternatives to any longitudinal encroachments
    - ☐ Risks of the action (to life and property)
    - ☐ Impacts to natural and beneficial floodplain values
    - ☐ Support of incompatible floodplain development (inconsistencies with existing watershed and floodplain management programs.
    - ☐ Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

    The project is to improve an existing recreational bicycle facility which lies longitudinally on the inside edge of a 100 yr floodplain. The improvements to the existing bicycle facility does not introduce any additional fill material to the floodplain or in any other fashion changes the current hydrology or storm flows of the floodplain. The project's construction, nor long term operation/maintenance does not impact or influence storm water flows. The project does not cross any roadways, therefore no school bus, postal vehicles, law enforcement/fire/emergency vehicles, supply vehicles or any other motorized vehicle access/egress routes will be impacted. The natural and beneficial floodplain value will be enhanced by the recreational improvements the project provides. The project is in accordance with existing general plans and other floodplain management programs. The project does not create a new longitudinal encroachment, there is no risk to life and/or property, the floodplain's natural and beneficial values are being improved, and the project does not support incompatible floodplain development. The project is the only practicable alternative, and the impacts to the floodplain are minimal. Therefore, a Location Hydraulic Study (LHS) is not required

14. According to the National and Scenic River list, this project is not located anywhere near a wild and scenic river. The Wild and Scenic Rivers.
    http://www.dot.ca.gov/ser/vol1/sec3/special/ch19wsrivers/chap19.htm#CWSRShttp://www.dot.ca.gov/ser/vol1/sec3/special/ch19wsrivers/chap19.htm#CWSRS

15. The 2006 Biological Study by LSA identifies a list of plants and animal species of Special Interest. The Study also delineates the path of the existing trail as "Disturbed or Barren (Figure 2)." With the proposed footprint solely within the limits of the disturbed boundaries it is presumed there is no potential for impacts. A field check has determined that the proposed trail is within the footprint of the existing asphalt trail and no species or habitats exist within the limits of construction.

16. Proposed improvements involve the reconstruction within the alignment of existing non-paved trails protecting the existing vegetation. No migratory birds will be affected.

17. Yes. According to the National Wetland Inventory map, a "Freshwater Emergent Wetland" has been identified adjacent to the proposed trail south west of the existing parking lot and north east from the elementary School. According to the Orange County Hydrology Manual, the soil in Fairview Park is Class D and according to the USDA Soil Map, the soil is primarily Clay and Sandy Loam. (See Attachment 3 and Attachment 8)

18. No Agricultural Wetlands occur within or adjacent to the project site. Fairview Park is a city owned public park and all work is to be done within the park.

19. No. this project will not involve the construction of vegetation or landscaping activities that use known invasive plant species.

20. **Yes.** Project limits are within the City of Costa Mesa's Fairview Park. The proposed trail will be an independent walkway and bikeway construction project and therefore will follow the programmatic section 4(F) evaluation procedures. The project will temporarily impact recreational users along the trail.

21. **Yes**, Part of Fairview Park was built or improved using Land & Water Conservation Funds. See Attachment 5 - Page 52 Grant ID & Element "1595-XXXX" Type "D." The project will temporarily impact recreational users along the trail.

22. No. The Visual Impact Assessment determination score was 7, which means that there is no noticeable physical changes to the environment. See Attachment 6 for the Visual Impact Assessment.

23. No. Fairview Park is a city owned public park and all work is to be done within the park and will not require the relocation of residential or business property.

24. No. This project will not involve the acquisition of any right of way, or construction easements or utility relocations. This project and the work involved will all occur within Fairview Park, which is a city owned public park and all work is to be done within the park.

25. No. The project is not inconsistent with the Fairview Park Master Plan, approved in 1998 and revised in 2002.

26. No. this project improves bicycle facilities and closes a route gap, which improves transportation along the corridor. This in turn will have a positive effect on and not disrupt or divide the neighborhood and communities.

27. No. This project is within Fairview Park, and does not run through any "minority" or "low income" tracts.

28. No. The proposed improvements do not affect existing utilities

29. No. Construction will not affect any access to properties. There are no driveways or access points along Fairview Park that will be blocked during or after construction.

30. No. This project is well off the State Highway System. This project is approximately 2 miles north of Pacific Coast Highway.

31. No, All work for this project will occur on the limits of the existing multi-purpose trail and not require any detours or closures.

32. No, this project will not reduce available parking.

33. No. there are no Federal or State lands encroached upon. All work is within the City's Fairview Park.

34. No. Fairview Park is a city owned public park and all work is to be done within the park. All land surrounding the project is commercial and/or residential. No farmland is located within the vicinity. See Attachment 7 for the Farmland Map of Orange County and Attachment 4 for Land Use.

35. To be completed by Caltrans PQS.

36. No. There are no tribal lands within or adjacent to the project vicinity.

Distribution 1) Original - DLAE, 2) Local Agency Project Manager, 3) DLA Environmental Coordinator
4) Senior Environmental Planner (or designee), 5) District PQS

Updated: 05/15/08

CML 5312(096)

Caltrans District Professionally Qualified Staff (PQS) Signature

☐ Project does not meet definition of an "undertaking"; no further review is necessary under Section 106 ("No" Section A, #35).

☐ Project is limited to the type of activity listed in Attachment 2 of the Section 106 PA and based on the information provided in the PES Form, the project does not have the potential to affect historic properties ("No" Section A, #35).

☐ Project is limited to the type of activity listed in Attachment 2 of the Section 106 PA, but the following additional procedures or information is needed to determine the potential for effect ("To Be Determined" Section A, #35):
☐ Records Search ☐ _____ ☐ _____ ☐ _____

☐ Project meets the definition of an "undertaking"; all properties in the project area are exempt from evaluation per Attachment 4 of the Section 106 PA ("No" Section A, #35).

☑ The proposed undertaking is considered to have the potential to affect historic properties; further studies for 106 compliance are indicated in Sections B, C, and D of this PES Form ("Yes" Section A, #35).

Jonathan [illegible] — *(Signature of Professionally Qualified Staff)* 11/13/2013 *(Date)* 949-724-2880 *(Telephone No.)*

5312(096)

The following signatures are required for all CEs, routine and complex EAs, and EISs:

Caltrans District Senior Environmental Planner (or Designee) and DLAE Signatures

I have reviewed this Preliminary Environmental Study (PES) Form and determined that the submittal is complete and sufficient. I concur with the studies to be performed and the recommended NEPA Class of Action.

Chas Baker — *(Signature of Senior Environmental Planner or Designee)* 1-13-14 *(Date)* 949-724-2252 *(Telephone No.)*

Charles Baker
(Name)

[illegible] — *(Signature of District Local Assistance Engineer or Designee)* 1/13/14 *(Date)* (949) 756 4953 *(Telephone No.)*

SAMIR SOLIMAN for Jim Kautman
(Name)

☐ HQ DEA Environmental Coordinator concurrence _____. Email concurrence attached.
(date)

June 30, 2014

Ms. Stacy Love
U.S. Fish and Wildlife Service
2177 Salk Ave
Carlsbad, California 92008

RE: RESULTS OF FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS FOR THE PROPOSED MULTI-PURPOSE TRAIL PROJECT AT FAIRVIEW PARK, CITY OF COSTA MESA, CALIFORNIA

Dear Ms. Love:

This report is being submitted in compliance with the conditions of U.S. Fish and Wildlife Service (USFWS) authorized permit issued to biologist Barry Nerhus (TE067347-4) for the performance of coastal California gnatcatcher (*Polioptila californica californica*) (CAGN) surveys in accordance with USFWS survey guidelines. As such, this letter report describes the methodology and findings of surveys conducted for this species on the multi-purpose trail project at Fairview Park, City of Costa Mesa, California (Figure 1, *Regional Map*, attached).

The "study area" totaled approximately 40 acres, which included the proposed multi-purpose trail and a 500-foot buffer. Approximately 27 acres of potentially suitable CAGN habitat occurs within the study area in the form of California sagebrush alliance.

STUDY AREA LOCATION AND EXISTING CONDITIONS

Location

The study area is located at Fairview Park, 2525 Placentia Ave, Costa Mesa, California 92626. Specifically, the study area is located bewtween the Santa Ana River Channel and Placentia Ave. The study area can be found within the Newport Beach U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map, as shown in Figure 2, *Vicinity Map*, attached. Topography of the study area is gentle slopes into the Santa Ana flood plain. Elevation of the study area is approximately 65 feet above mean sea level (MSL). Surrounding land uses immediately adjacent to the study area include open space and passive use trails.

Table 1
Survey Data

Date	Time	Wind (mph) (Start/End)	Temperature (F) (Start/End)	Weather (Start/End)	Results	Surveyor(s)
April 10, 2014	0830-1015	0-1/0-1	60°-63°	0%-0% cc	1 Male CAGN	BN
April 17, 2014	0830-1130	0-1/0-1	60°-65°	100%-100% cc	No CAGN observed	BN
April 24, 2014	0800-1030	0-1/0-1	60°-68°	0%-0% cloud cover	1 Male CAGN	BN
May 01, 2014	0815-1045	0-1/0-1	60°-62°	50%–0% cloud cover	No CAGN observed	BN
May 08, 2014	0800-1030	0-1/0-1	59°-62°	0%-0% cloud cover	No CAGN observed	BN
May 15, 2014	0845-1015	0-1/0-1	60°-64°	0%–0% cloud cover	No CAGN observed	BN

Source: Barry Nerhus, 2014

METHODOLOGY

Methods employed were in conformance with USFWS Coastal California Gnatcatcher Presence/Absence Survey Guidelines, issued July 28, 1997. Accordingly, six (6) diurnal surveys were conducted during the breeding season, at least one (1) week apart. Surveys were conducted between the hours of 6:00 A.M. and 12:00 P.M. within all portions of the study area supporting potentially suitable habitat. The permitted biologist slowly walked through the study area while visually examining the area for CAGN and stopping at appropriate intervals, uttering pishing sounds, and/or playing a digital recording of CAGN vocalizations. The audio was played for several seconds at each interval, followed by a brief pause to listen for a response. The location(s), age, sex, and breeding status of CAGN observations (if any) were mapped on a 1:24,000 scale aerial photo. No nest searches were preformed.

RESULTS

Permitted biologist Barry Nerhus (TE067347-4) conducted the focused surveys for the CAGN. Surveys were conducted a total of six times between April 10 to May 15, 2014. Surveys were conducted between the hours of 8:00 A.M. and 11:30 A.M., with approximately 3.5 acres being surveyed per hour along the survey route, as shown in Figure 3, *Vegetation Map and Survey Route*. Temperatures during surveys ranged between 59 and 68 degrees Fahrenheit. Weather conditions were suitable for surveys, with skies ranging from clear to 100 percent overcast, and winds below one (1) mile per hour (mph). Survey details can also be found listed in Table 1, *Survey Data*, above.

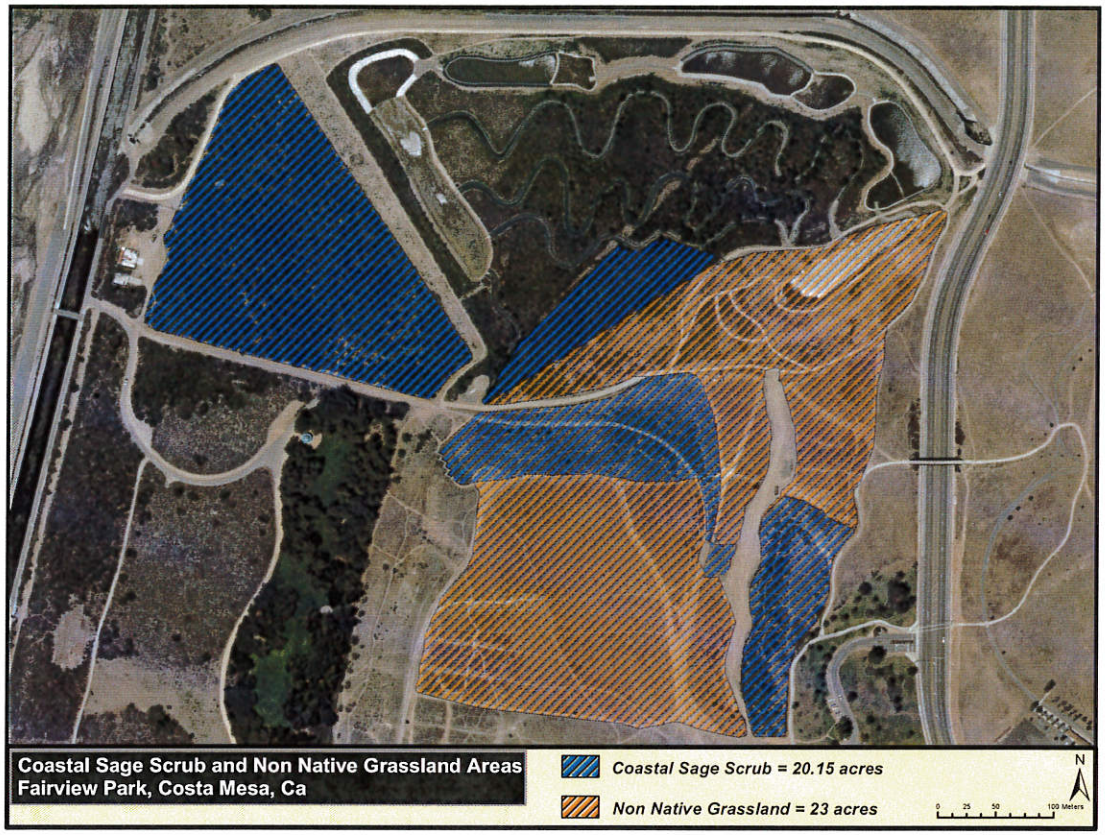
One male CAGN was observed during surveys 1 and 3 conducted within the study area. No female CAGN or nesting behavior was observed. Brown-headed cowbirds (*Molothrus ater*) were observed during the surveys. A list of all avian species observed within the study area during surveys is included in the *Avian Compendium*, attached.

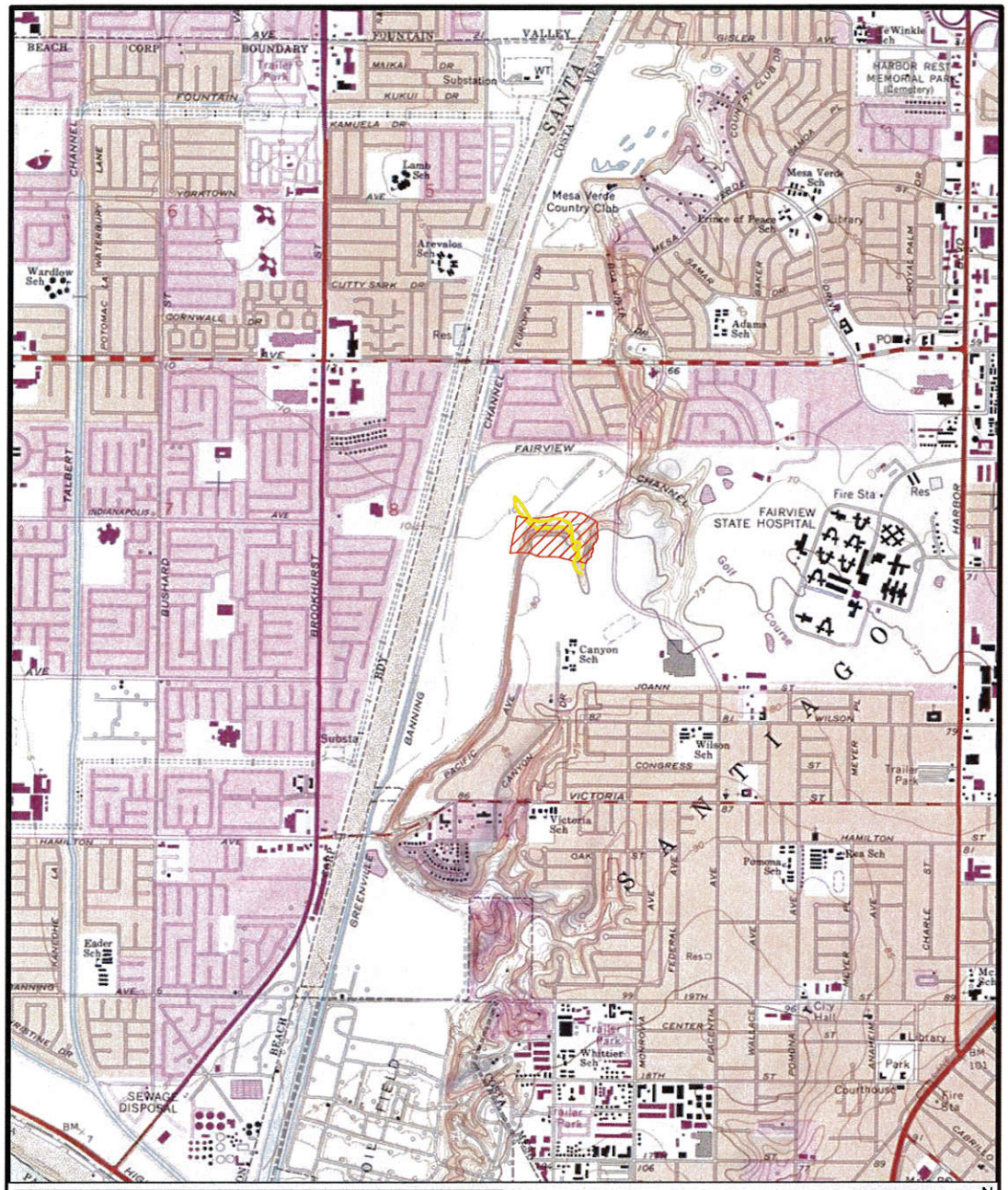
I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Should you have any questions regarding the methodology or findings in this report, please do not hesitate to contact Barry Nerhus at (714) 393-6249 or by e-mail at bnerhus@gmail.com

Sincerely,

Barry Nerhus
Biologist
TE-067347-4

Attachments
Vegetation Map
Survey Area Map 1
Survey Area Map 2


Coastal Sage Scrub and Non Native Grassland Areas
Fairview Park, Costa Mesa, Ca
Coastal Sage Scrub = 20.15 acres
Non Native Grassland = 23 acres
N
0 25 50 100 Meters



California Gnatcatcher Survey Area
Fairview Park, Costa Mesa, Ca

Survey Area

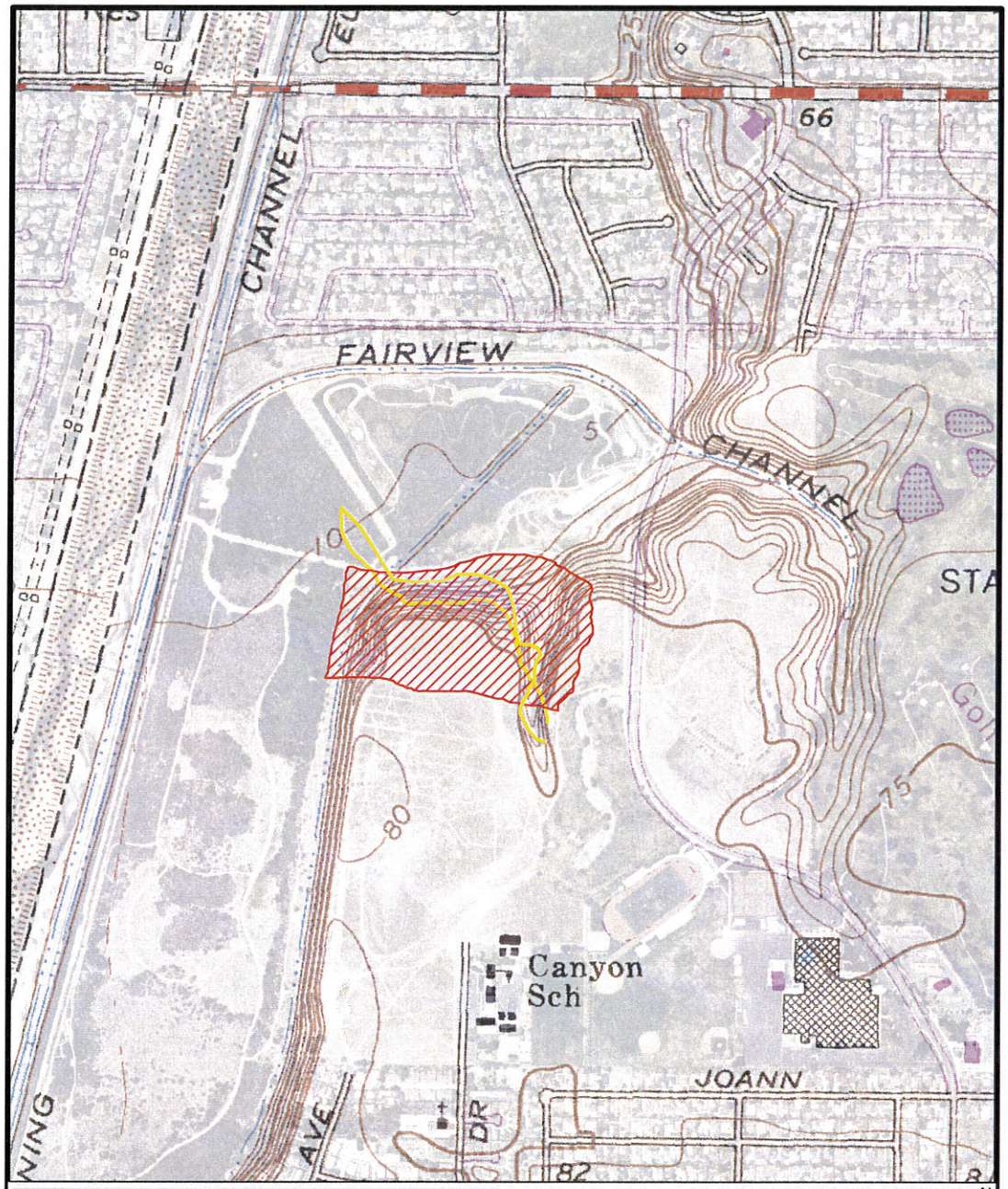
Flight Range

Scale
1:24,000
USGS 7.5 min quad

N

0 250 500 1,000 Meters

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed



California Gnatcatcher Survey Area
Fairview Park, Costa Mesa, Ca

Service Layer Credits:

Survey Area

Flight Range

Scale
1:24,000
USGS 7.5 min quad
1 inch = 200 meters

N

Multi-Purpose Trail Wetland Delineation Study for Fairview Park, Costa Mesa, California

Introduction

The purpose of this report is to delineate the vernal pools and surrounding watersheds that are adjacent to the proposed alignment of the multipurpose trail at Fairview Park in Costa Mesa, California, 2525 Placentia Avenue, Costa Mesa, California 92626. The wetland delineation was conducted for the City of Costa Mesa as a requirement as a technical study in the environmental checklist for the Preliminary Environmental Study (PES). The wetland delineation was conducted on September 1st 2014. The survey area consisted of the upper mesa of Fairveiw Park. There are well known vernal pools that have been well defined and delineated. Endemic Environmental Services, Inc. biologists surveyed the area to verify the watersheds and determine if the proposed trail will impact any vernal pools or watersheds.

Methodology

The survey consisted of utilizing maps from the City of Costa Mesa of the vernal pools as well as the alignment of the proposed trail. The watersheds were assessed by reviewing the contouring of the watershed slopes of any vernal pools that are within the area of the proposed trail. Since the vernal pools are already well documented and are known to contain the sensitive species, there was minimal surveying at the depression basins areas.

Results

The vegetation consisted of sparse non-native grassland and bare ground from heavy foot-traffic and bicycle use. The non-native grassland consisted of dead stalks of black mustard (*Brassica nigra*), field mustard (*Brassica rapa*), false brome (*Brachypodium distachyon*), and fascicled tarweed (*Deinandra fasciculata*). There were also a few shrubs within the area of coast goldenbush (*Isocoma menziesii*) and coyote bush (*Baccharis pilularis*). The watersheds of two vernal pools were outside of the proposed trail area and sloped away. The watershed line was based upon the contouring off the area during the field survey.

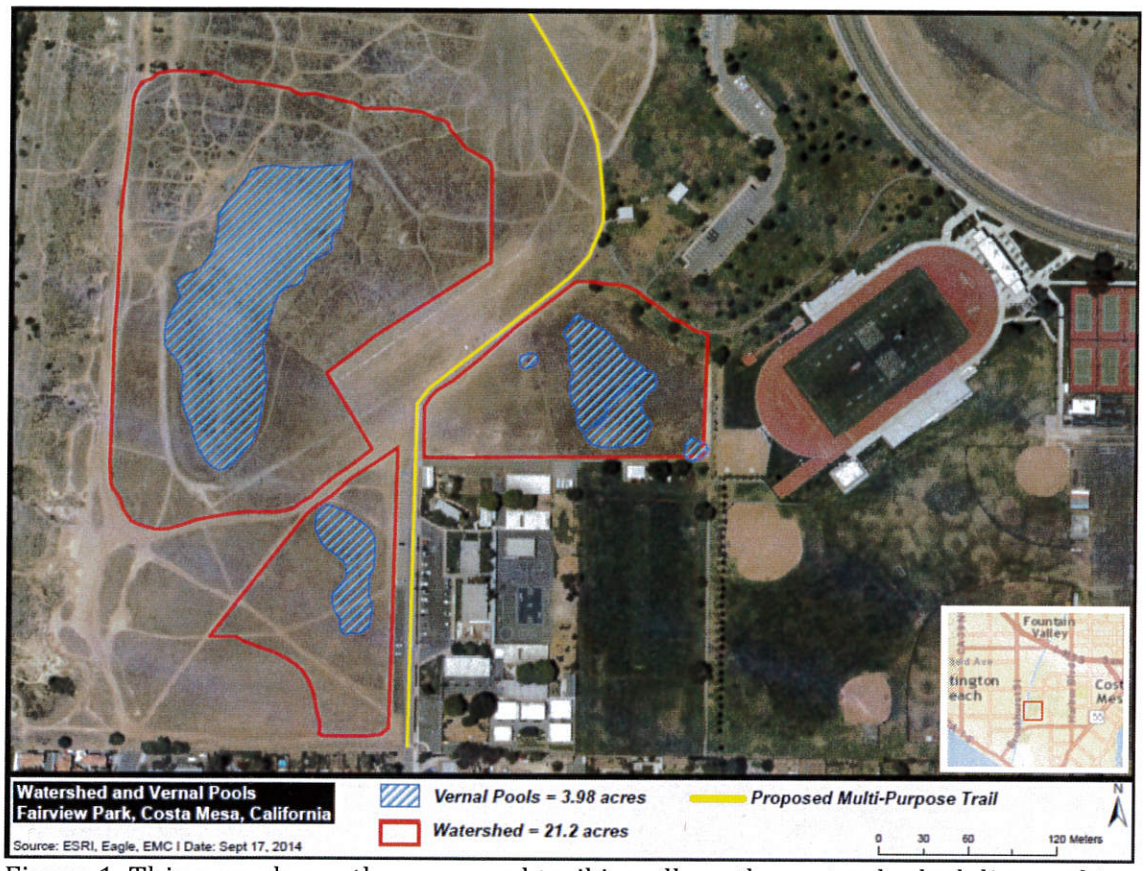


Figure 1. This map shows the proposed trail in yellow, the watersheds delineated in red, and the blue shaded areas are the vernal pool basins.

If there are any questions, comments, or concerns, please feel free to contact me.

Sincerely,

Barry Nerhus
Ecologist
Endemic Environmental Services, Inc.
O: 714-842-4328
C: 714-393-6249
bnerhus@endemicenvironmental.net

CITY OF COSTA MESA

Department of Public Services

INTER-OFFICE MEMORANDUM

To: Rob Sharpnack, Chief of Police
Dan Stefano, Fire Chief
Claire Flynn, Assistant Development Services Director
Fariba Fazeli, City Engineer
Raja Sethuraman, Transportation Services Manager

From: Bart Mejia, Acting City Engineer BM

Date: August 14, 2015

Subject: IMPLEMENTATION OF PARK IMPROVEMENT PROJECTS CONSISTENT WITH THE FAIRVIEW PARK MASTER PLAN

RECOMMENDATION

Review the proposed realignment of the trail from the upper mesa to Talbert Nature Preserve in Fairview Park (Attachment 1) and determine if the project is consistent with the Fairview Park Master Plan per Council Policy 500-11, Implementation Procedures for the Fairview Park Master Plan (Attachment 2).

BACKGROUND

The Fairview Park Master Plan (Attachment 3) was originally approved in March of 1998 and was revised in February 2001, and again in November 2002. The Master Plan provides a framework for future park improvements which can be constructed in an orderly and consistent manner and provides written information and graphic presentations which document the materials gathered, and illustrates the policies to be implemented.

ANALYSIS

The existing paved trail that connects the upper mesa of Fairview Park to Talbert Nature Preserve and the network of trails along the Santa Ana River and Greenville-Banning Channel was constructed in 1988. The downhill segment at the north bluff is experiencing significant soil settlement and is causing major cracks along its length. In addition, the vertical alignment along the same segment exceeds the maximum grade for multipurpose trails.

In order to properly re-engineer the slope and reconfigure the grade of the existing trail to be less than 5%, retaining walls need to be constructed which require extensive excavation. This excavation encroaches into a federally-listed archaeological site.

The proposed new alignment (Attachment 1) follows a path that requires minimal grading, does not disturb any restored areas, is located outside the core area of the archaeological site and provides a better connection to Lower Fairview Park trails and amenities.

To process the proposed project, the Public Services Department requests that your department provide code requirements, concerns, and comments regarding the realignment of the existing trail from the Fairview Park upper mesa to Talbert Nature Preserve. Your requirements and comments will be included in a staff report to the Parks and Recreation Commission for review.

Per Council Policy 500-11, all requests to review projects associated with the Fairview Park Master Plan must be submitted to the Public Services Department. The Public Services Department has reviewed the request and finds that it is consistent with the Master Plan since it proposes to utilize a user-defined trail that was previously approved as a formal pedestrian trail.

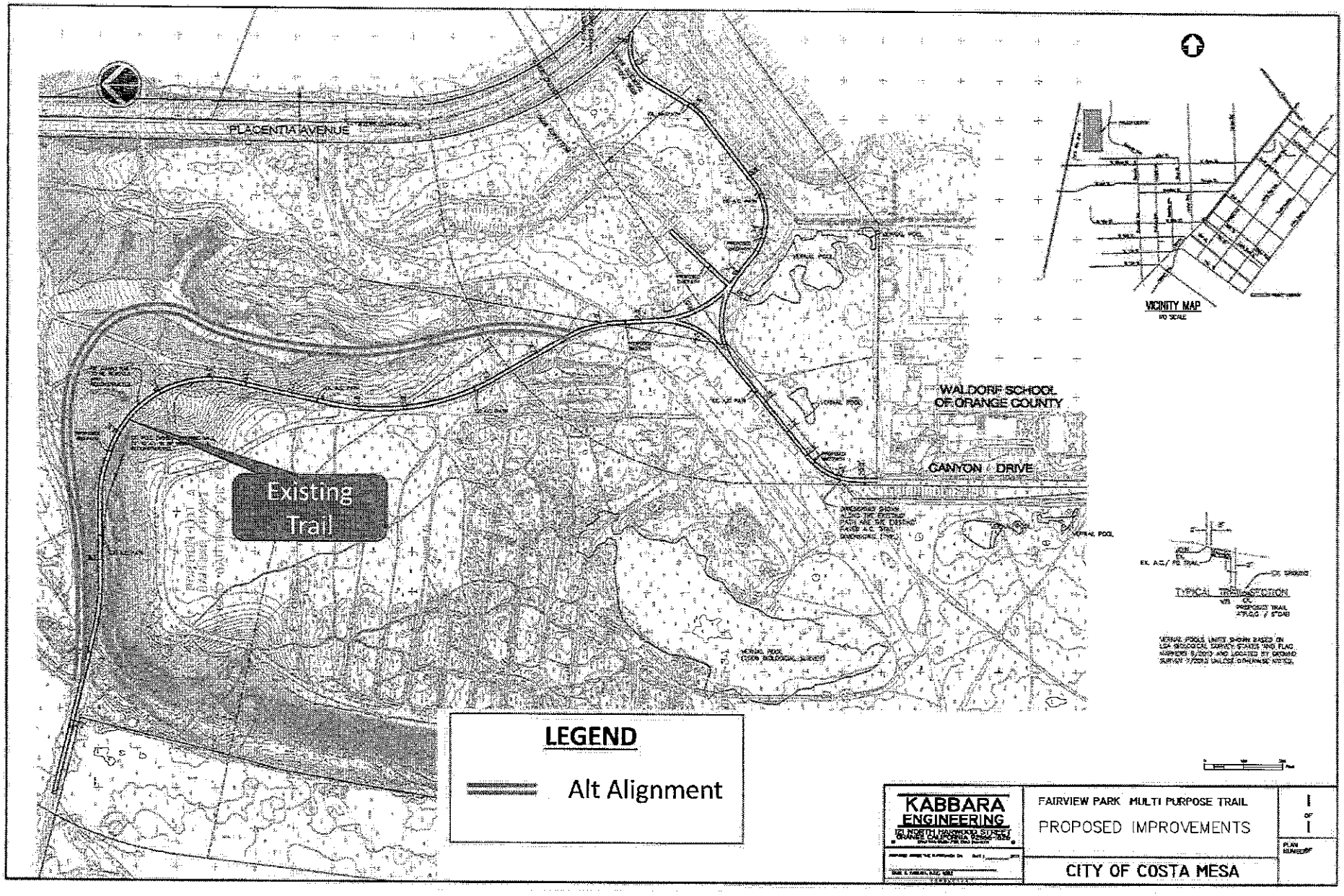
CONCLUSION

It is requested that you review the request to realign the existing trail described above and determine if this project is consistent with the Fairview Park Master Plan per City Council Policy 500-11.

Please respond to me with your comments by August 21, 2015.

Attachments:
1. Location Plan
2. Council Policy 500-11
3. Fairview Park Master Plan

c: Ernesto Munoz, Public Services Director
Bruce Hartley, Maintenance Services Manager



Attachment 1

CITY OF COSTA MESA, CALIFORNIA
COUNCIL POLICY

SUBJECT	POLICY NUMBER	EFFECTIVE DATE	PAGE
IMPLEMENTATION PROCEDURES FOR THE FAIRVIEW PARK MASTER PLAN	500-11	7-17-2000 REV. 1/21/03	1 OF 4

BACKGROUND

The City Council approved the Fairview Park Master Plan in December 1997. In February 1998, City Council, recognizing the unique qualities of the park, directed staff to prepare a policy for implementing the Master Plan.

PURPOSE

The purpose of this policy is to establish a process for review and approval of the elements of the Fairview Park Master Plan, as well as any amendments to the Plan that may be proposed. It is the intent of this Policy to ensure both thorough and expeditious review of Fairview Park projects. For this reason, time limits have been included for staff and committee review.

PROCEDURE

The intent of the following procedure is to build upon the existing Municipal Code Sections which relate to processing for master plans but which are silent on how to implement a complicated and phased project such as Fairview Park. Costa Mesa Municipal Code (CMMC) Sections 13-28(f) and 13-29(f) describe the process for new master plans, minor amendments to master plans, and substantial amendments to master plans. In addition to these requirements, the following procedure shall be followed for implementation of and amendment to the Fairview Park Master Plan.

A. **City Council Review**

Due to the increased workload on staff, the Parks and Recreation Commission, the Planning Commission, and the City Council associated with the processing of Fairview Park Master Plan amendments, the City Council shall review all applications prior to staff initiating the review process.

All proposals shall initially be submitted to the Public Services Department. The Public Services Department shall submit the proposals to the City Council which shall review the applications for amendment of the Fairview Park Master Plan and direct staff to either proceed with processing the application or to return all materials to the applicant.

B. **Lead Department**

The Public Services Department is the lead department for processing phases, projects or plans. The Parks Project Manager and the Fairview Park Plan Administrator shall oversee and coordinate all activities related to implementation of the Fairview Park Master Plan and upon direction from the City Council shall process proposals as per the following procedure:

C. Processing

1. All Projects

All proposals shall be submitted to or originate from the Public Services Department. Upon direction from the City Council to proceed with processing a proposal, the Public Services Department shall present the proposal in writing to the Development Services Department, Engineering and Transportation Services Divisions, Police Department and Fire Prevention Division who shall determine whether the proposal is:

a. consistent with the Master Plan;

b. generally consistent but has minor amendments; or

c. inconsistent with the Master Plan.

These Departments shall recommend refinements to the project, if necessary, to meet code requirements, mitigation measures or other requirements. All recommendations shall be returned to Public Services within 7 days.

2. Projects Consistent with the Master Plan

Projects consistent with the Master Plan might include but not be limited to: restoration plans for the habitat areas, construction of trails, installation of utilities, construction of the bridge over Placentia Avenue, installation of the botanical garden, construction of picnic and restroom facilities, etc.

a. Projects shall be submitted to various City departments as described in Section 13.11.

b. All projects shall be forwarded to the Parks and Recreation Commission for comments regarding consistency with the Master Plan and refining the scope of work. Review of each project shall be limited to one Commission meeting. The Public Services Department shall consider the Commission's comments and make refinements to the project, if deemed necessary.

c. The Fairview Park Citizens' Advisory Committee shall be restructured as an ad hoc committee. The City Council may call upon the committee's expertise when reviewing plans, specifications, ideas, and changes to Fairview Park, on an as needed basis.

d. Consultant contracts and budget requests shall be approved in accordance with purchasing policy. Project plans do not require Council approval.

e. The Public Services Department is responsible for monitoring compliance with all mitigation measures approved as part of the Master Plan. The mitigation monitoring reports shall be kept up to date at least annually and made available for public review.

f. If conflicts arise between staff and the Parks and Recreation Commission, the issue shall be clarified by City Council.

3. Projects with Minor Amendments to the Master Plan

a. Projects shall be submitted to various City departments as described in section C.1.

b. Minor changes in a master plan are defined in CMMC section 13-28(f). Projects which may involve minor amendments shall be forwarded to the Planning Division for initial review for compliance with provisions of section 13-28(f). Plans and the findings of the various City departments shall be forwarded to the Parks and Recreation Commission for comments regarding whether the changes requested are actually minor as defined by Code and for refining the scope of work, if necessary. Review of each project shall be limited to one Commission meeting. The Public Services Department shall consider the Commission's comments and make refinements to the project, if necessary.

c. Requirements described in sections 2(c), (d), and (e) above also apply.

4. Projects Inconsistent with the Master Plan

a. Projects shall be submitted to various City departments as described in Section 13.1.

b. Substantial amendments to a master plan are described in CMMC Section 13-28(f) and normally require only Planning Commission review and approval. However, amendments to the Fairview Park Master Plan shall first be forwarded to the Parks and Recreation Commission (one meeting) for review and recommendation. The Planning Commission shall consider these recommendations and forward its recommendations to City Council for final action.

c. Requirements described in sections 2(c), (d), and (e) above also apply.

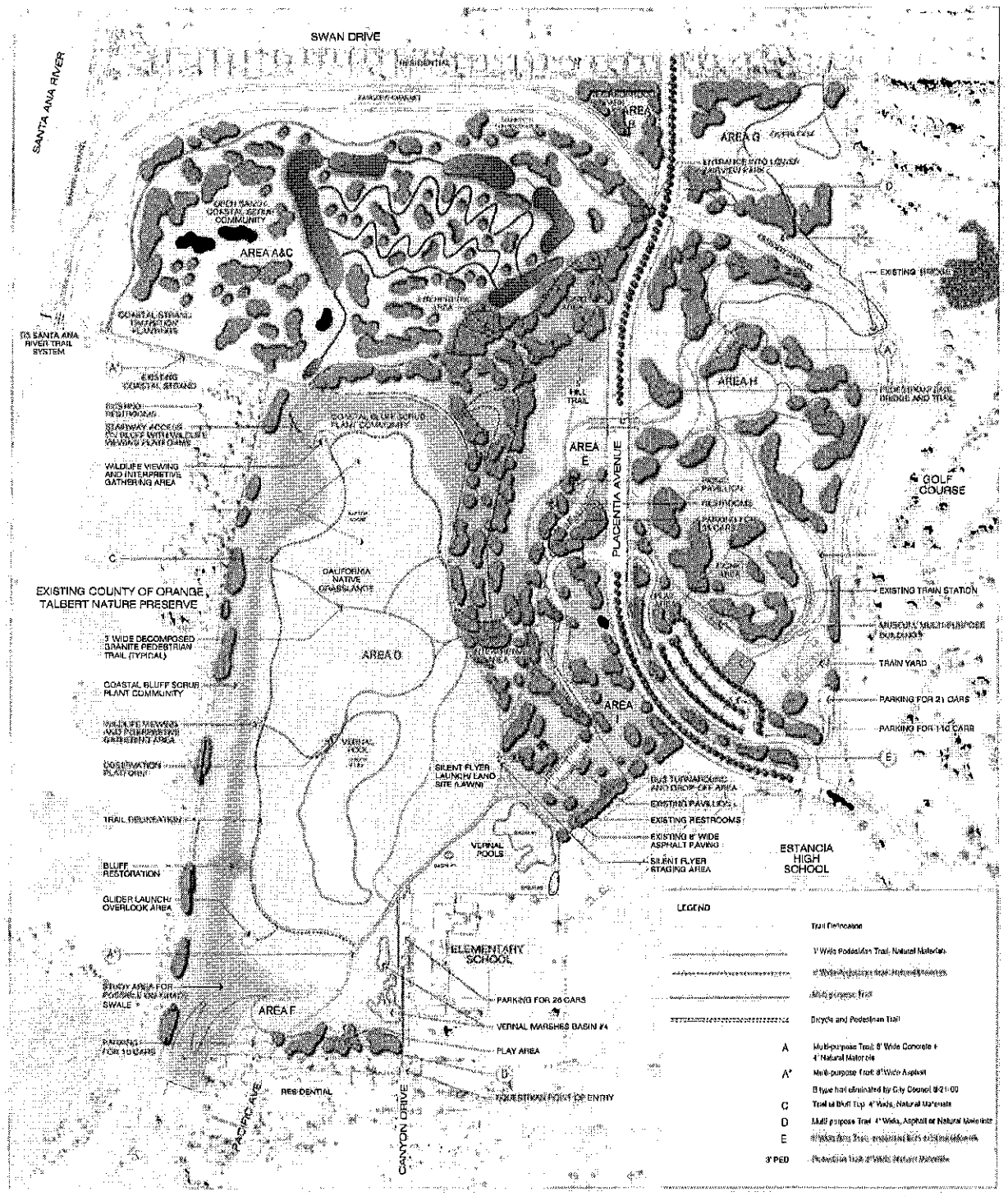
5. Request for Changes to the Fairview Park Master Plan

Staff and members of the public may, from time to time, request changes, additions, or deletions to the Fairview Park Master Plan. These requests must be submitted to the City's Parks Project Manager or Fairview Park Plan Administrator in writing, along with supporting evidence to substantiate the request(s). A map showing the proposed change should accompany the request(s). The item shall then be agendized for the next available Parks and Recreation Commission meeting for review prior to staff initiating the formal review process. The Parks and Recreation Commission shall review the request for amendment to the Fairview Park Master Plan, along with staff's recommendation, and direct staff to either proceed with processing the request in accordance with section 4 (above) or to deny the request(s) and return all material to the applicant.

Requests for a particular change, addition, or deletion will be addressed no more than once in a twelve (12) month period.

D. <u>Annual Report</u>

In December of each year, the Public Services Department shall send an annual report to the Parks and Recreation Commission describing the progress that has been made on implementation of the Fairview Park Master Plan. The report shall also describe efforts to be undertaken for the next year.



MASTER PLAN

Approved by City Council March 1994
Revised February 2001
Revised again November 2002

FAIRVIEW PARK
CITY OF COSTA MESA

April 23, 2003

MEJIA, BALTAZAR

From: FLYNN, CLAIRE
Sent: Friday, August 14, 2015 3:34 PM
To: GARCIA, IRMA; SHARPNACK, ROBERT; STEFANO, DAN; FAZELI, FARIBA; SETHURAMAN, RAJA
Cc: MUNOZ, ERNESTO; HARTLEY, BRUCE; MEJIA, BALTAZAR
Subject: RE: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan

Dear Bart:

The proposed re-alignment of the existing trail in the Fairview Park upper mesa is intended to avoid disruption to the archaeological resources, at a minimum. The realignment is considered a "minor amendment" of the Fairview Park Master Plan and appears consistent with the purpose and intent of the currently established trail. However, as this is a minor amendment to the Master Plan, you may need to Parks&Recreation Commission action on an official determination of consistency.

Please let me know if you need anything else from Planning staff.

Thanks.

Claire L. Flynn AICP
Asst. Development Services Director
(714) 754-5278

From: GARCIA, IRMA
Sent: Friday, August 14, 2015 10:26 AM
To: SHARPNACK, ROBERT <RSHARPNACK@costamesaca.gov>; STEFANO, DAN <Dan.Stefano@costamesaca.gov>; FLYNN, CLAIRE <CLAIRE.FLYNN@costamesaca.gov>; FAZELI, FARIBA <FARIBA.FAZELI@costamesaca.gov>; SETHURAMAN, RAJA <RAJA.SETHURAMAN@costamesaca.gov>
Cc: MUNOZ, ERNESTO <ERNESTO.MUNOZ@costamesaca.gov>; HARTLEY, BRUCE <BRUCE.HARTLEY@costamesaca.gov>; MEJIA, BALTAZAR <BALTAZAR.MEJIA@costamesaca.gov>
Subject: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan

<< File: MemoTrailRealigFP.pdf >>
Hard copy of memorandum to follow.

Thanks!

MEJIA, BALTAZAR

From: SHARPNACK, ROBERT
Sent: Wednesday, August 19, 2015 10:04 AM
To: MEJIA, BALTAZAR
Subject: Fwd: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan

Hi Bart,

We support the plan.

Thanks,

Rob Sharpnack

Sent from my iPhone

Begin forwarded message:

> **From:** "MANLEY, MARK" <MMANLEY@costamesaca.gov>
> **Date:** August 19, 2015 at 9:59:15 AM PDT
> **To:** "SHARPNACK, ROBERT" <RSHARPNACK@costamesaca.gov>
> **Subject: RE: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan**
>
> Rob,
>
> Thank you for the opportunity to review. I see no issue with the proposed trail realignment. This should not impact park ranger or police officer operations. In fact, it appears it may give us a better perspective and deeper view into the west side of Fairview Park.
>
> Thanks,
>
> **MARK M. MANLEY | CAPTAIN**
> City of Costa Mesa | Police Department
> Phone 714.754.5043 | Fax 714.754.5002
>
> ---
>
> **From:** SHARPNACK, ROBERT
> **Sent:** Tuesday, August 18, 2015 3:13 PM
> **To:** MANLEY, MARK
> **Subject:** FW: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan
>
> Mark,

I missed covering this in our meeting this morning. Can you and/or staff please review and let me know your thoughts?

I did not see any concerns, but I want to be sure. I also called Bart and advised we would have an answer by tomorrow.

Thanks,

Robert N. Sharpnack | Chief of Police
City of Costa Mesa | Police Department
Phone 714.754.5117 I Fax 714.754.5002
rsharpnack@costamesaca.gov

This e-mail transmission, as well as any attached documents, is intended for the exclusive use of the individual or entity to whom it is addressed and may contain confidential information that is covered by the Electronic Communications Privacy Act (18 USC Sections 2510-2521). If you are not the intended recipient (or an employee or agent responsible for delivering this e-mail to the intended recipient), you are hereby notified that any copying, disclosure or distribution of this information is strictly prohibited.

From: GARCIA, IRMA
Sent: Friday, August 14, 2015 10:26 AM
To: SHARPNACK, ROBERT; STEFANO, DAN; FLYNN, CLAIRE; FAZELI, FARIBA; SETHURAMAN, RAJA
Cc: MUNOZ, ERNESTO; HARTLEY, BRUCE; MEJIA, BALTAZAR
Subject: Memorandum re: Implementation of park improvement projects consistent with the Fairview Park Master Plan

<< File: MemoTrailRealigFP.pdf >>
Hard copy of memorandum to follow.

Thanks!

Thank you.

From: MUNOZ, ERNESTO
Sent: Monday, August 24, 2015 8:58 AM
To: GENIS, SANDRA
Cc: MEJIA, BALTAZAR; LETOURNEAU, TAMARA; SHELTON, KELLY
Subject: FW: Fairview Park trail

Sandy,

We will have copies of the completed documents to you this week and copies will be made available for the public. Some documents may not be available to protect cultural resources. Caltrans is the lead agency on this one.

Ernesto Munoz, P.E.
Public Services Director
City of Costa Mesa
714-754-5343
ernesto.munoz@costamesaca.gov

-------- Original message --------
From: "GENIS, SANDRA" <SANDRA.GENIS@costamesaca.gov>
Date: 08/21/2015 6:13 PM (GMT-08:00)
To: "MUNOZ, ERNESTO" <ERNESTO.MUNOZ@costamesaca.gov>
Cc: "SHELTON, KELLY" <KELLY.SHELTON@costamesaca.gov>, "MEJIA, BALTAZAR" <BALTAZAR.MEJIA@costamesaca.gov>, "LETOURNEAU, TAMARA" <TAMARA.LETOURNEAU@costamesaca.gov>
Subject: RE: Fairview Park trail

If we are going to address this at our September 15 meeting then the environmental document should be available for public review now. Can I please have a copy? Do we have copies readily available for the public? What notices have been published? Are we the lead agency or is Caltrans?

From: MUNOZ, ERNESTO
Sent: Friday, August 21, 2015 4:46 PM
To: GENIS, SANDRA
Cc: SHELTON, KELLY; MEJIA, BALTAZAR; LETOURNEAU, TAMARA
Subject: FW: Fairview Park trail

Sandy,

As you know, this project is partially funded by a federal grant which requires that we comply with NEPA and CEQA though Caltrans' Environmental Division. A PES has already been submitted to Caltrans and we are now addressing the technical studies. We have also met with Caltrans' archaeologists and Native American Representatives to discuss in detail the scope of the work.

REDACTED

resources. We are finalizing these technical studies and have submitted a report on the California Gnatcatcher (copy attached).

[redacted] REDACTED

The Parks and Recreation Commission has been asked to review the proposed alignment and to provide comments as an amendment to the Fairview Park Master Plan. Prior to this action, we have circulated the details of the proposed alignment to the various City Departments as per City Council Policy 500-11. The proposed new alignment for the existing multipurpose trail and the comments received from the Parks and Recreation Commission will be forwarded to the City Council to consider its approval as an amendment to the Fairview Park Master plan at the regular City Council meeting of September 15, 2015

Please let us know if you have additional questions or concerns on this item.

Ernesto Munoz, P.E.
Public Services Director
City of Costa Mesa
714-754-5343
ernesto.munoz@costamesaca.gov

From: GENIS, SANDRA
Sent: Friday, August 21, 2015 1:58 PM
To: MEJIA, BALTAZAR <BALTAZAR.MEJIA@costamesaca.gov>; MUNOZ, ERNESTO <ERNESTO.MUNOZ@costamesaca.gov>
Cc: LETOURNEAU, TAMARA <TAMARA.LETOURNEAU@costamesaca.gov>
Subject: Fairview Park trail

HAve been contacted by several residents about the item on Park Commission agenda re trail re-alignment at Fairview Park. What environmental review has been conducted for this project? Gnatcatchers have been observed in that area.

This alignment appears to differ significantly from that shown on the master plan. Will staff be bringing forward a request for an amendment? What is the time frame for that?

Thanks.

MEJIA, BALTAZAR

From: Leah Kabbara <leah@kabbara.net>
Sent: Monday, June 01, 2015 9:26 AM
To: MEJIA, BALTAZAR
Cc: Bill Kabbara
Subject: RE: Project Status

Importance: High

Good Morning Bart,

The current status of the project is as follows:

1. Per our field meeting on 5/21/15 we are in receipt of the as-built irrigation plans as required to complete the preliminary irrigation ps&e for the project by Kobata Associates.
2. We will have the cross section required by SRS for environmental purposes completed by end of this week.
3. We anticipate completion of preliminary PS&E July 6th.

Thank you and please call if you have questions.

Leah Kabbara, P.E.
Principal Engineer
leah@kabbara.net

KABBARA ENGINEERING
CIVIL ENGINEERS • LAND SURVEYORS

121 NORTH HARWOOD STREET, ORANGE CA 92866-1808
TEL (714) 744-9400 FAX (714) 744-9771

From: MEJIA, BALTAZAR [mailto:BALTAZAR.MEJIA@costamesaca.gov]
Sent: Friday, May 29, 2015 4:33 PM
To: Leah Kabbara
Subject: Project Status

Leah,

Will it be possible to get a status update by 9:30 am, Monday for a meeting at 10 am?

Thanks,

Baltazar Mejia, P.E.
Senior Engineer
714-754-5291

MEJIA, BALTAZAR

From: Bill Kabbara <bill@kabbara.net>
Sent: Thursday, June 11, 2015 4:38 PM
To: MEJIA, BALTAZAR
Cc: 'Leah Kabbara'
Subject: Fairview Park Bike Trail
Attachments: base-RET-SECTIONS.pdf; index map-retwall.pdf

Hi Bart,

Thank for taking the time to discuss the following issues on the Fairview Park Bike trail.

Enclosed for your review and comments are the preliminary proposed cross sections that were reviewed by the soil's engineer.

The replacement of the power pole retaining wall with a vertical wall will yield the least impact on the existing slope at the northerly portion of the bike trail. I just spoke with Roger Kobata about some planting to screen the walls. Roger suggested planting the top of wall would work.

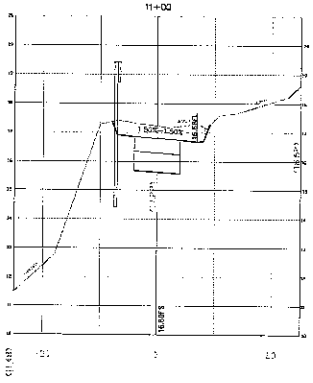
If you have any questions please inform me at your earliest convenience.

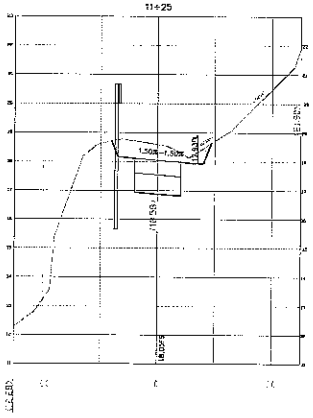
Sincerely,

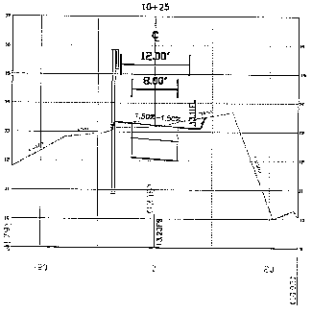
Bill Kabbara, P.E., P.L.S.
Principal Engineer
(714) 744-9400 Ext 23
Fax (714) 744-9771

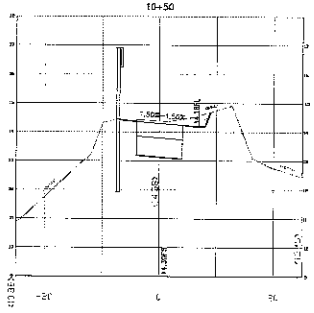
KABBARA ENGINEERING
CIVIL ENGINEERS • LAND SURVEYORS

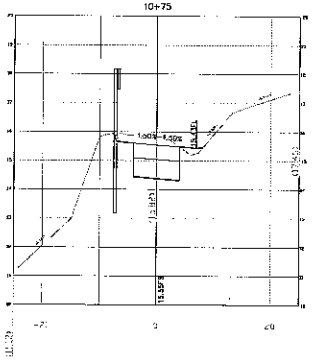
131 NORTH HARWOOD STREET, ORANGE CA 92866-1628
TEL (714) 744-9400 FAX (714) 744-9771











REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

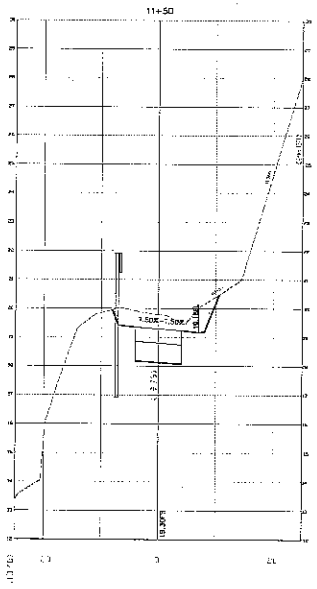
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

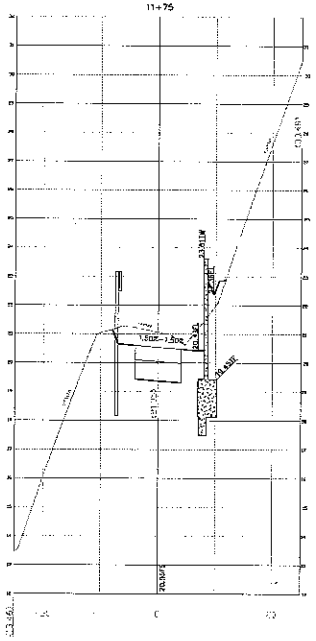
P. E. SEAL

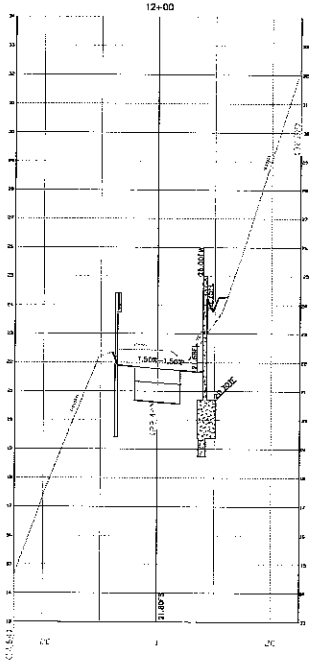
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA

PLAN NUMBER 1 OF 22







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR UC #

DATE OF CONSTRUCTION

BEGIN END

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

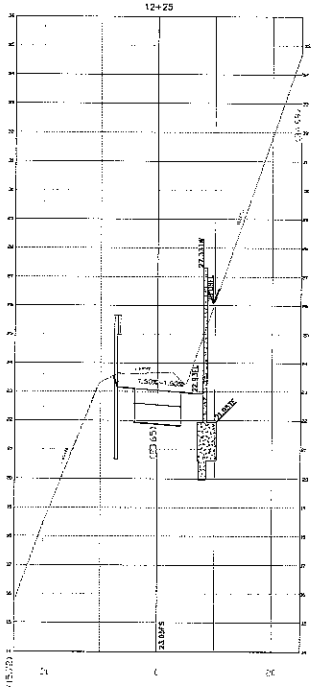
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

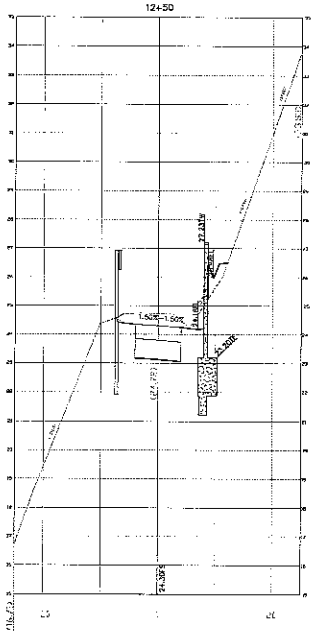
P. E. SEAL

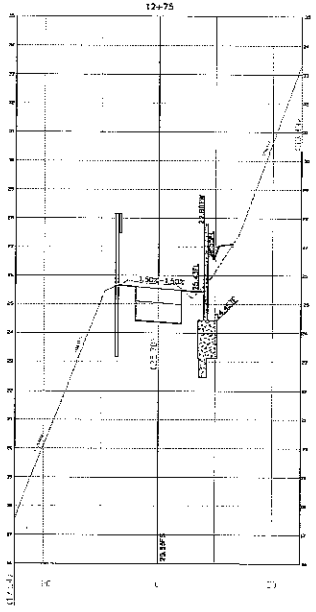
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA

PLAN NUMBER







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

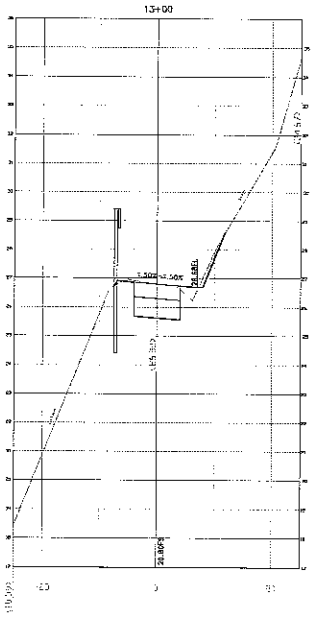
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

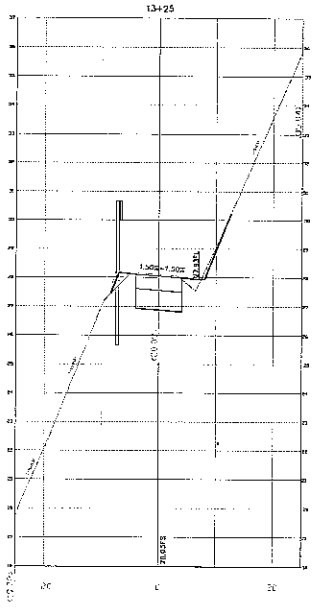
P. E. SEAL

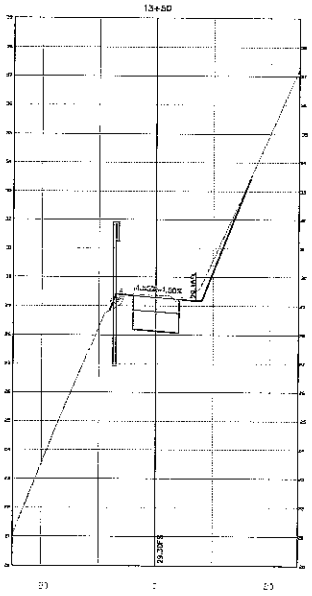
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA

PLAN NUMBER







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

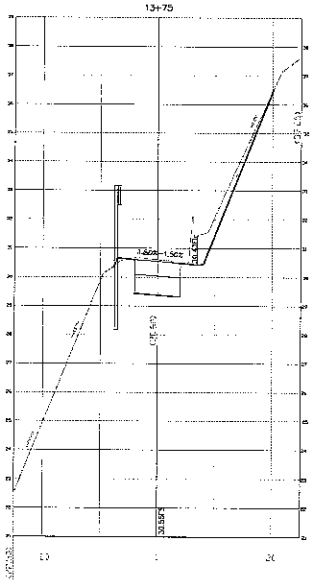
REFERENCES

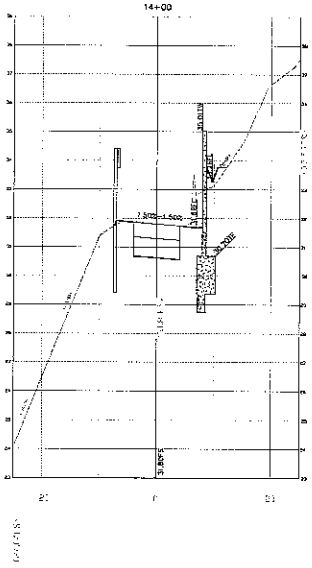
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

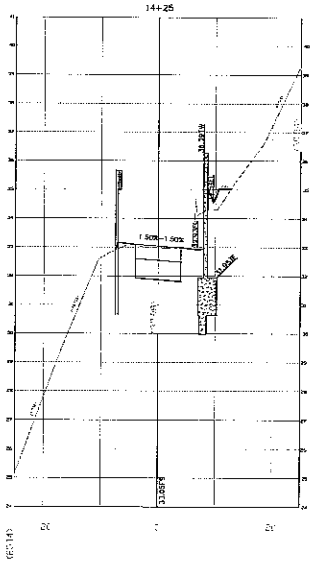
P. E. SEAL

FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: R.K.	DATE
DRAWN BY: R.K.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

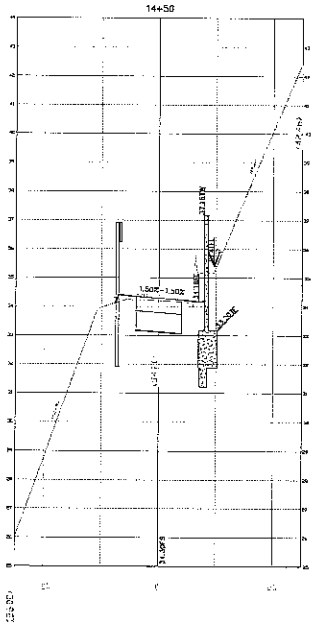
P. E. SEAL

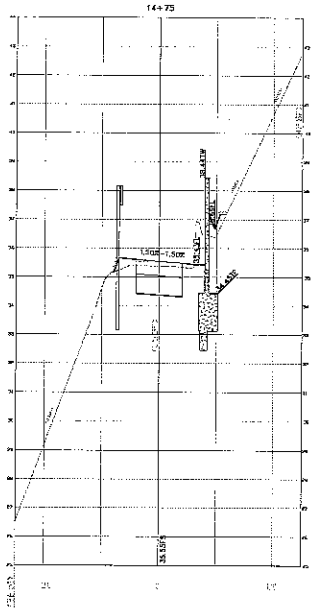
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

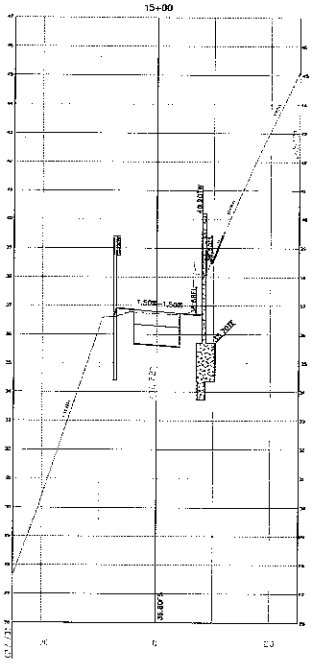
CITY OF COSTA MESA

5 OF 22

PLAN NUMBER







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR UC #

DATE OF CONSTRUCTION

BEG. ____ END. ____

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

P. E. SEAL

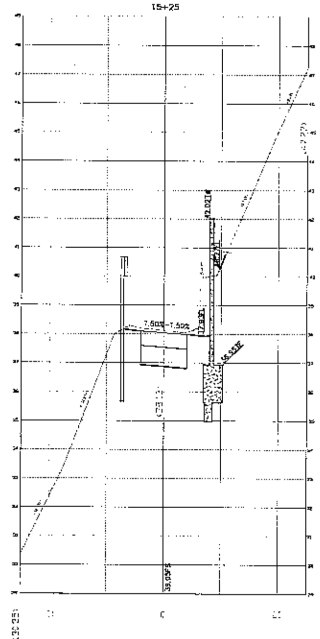
FAIRVIEW PARK CLASS I BIKKEWAY

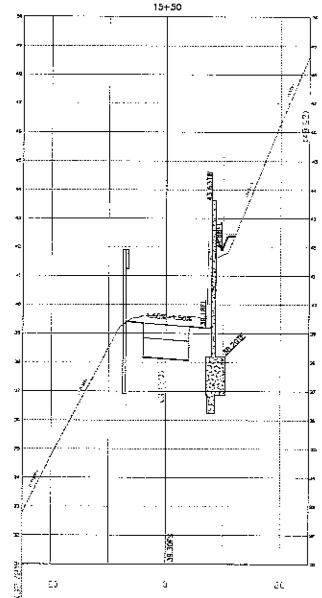
CROSS SECTIONS

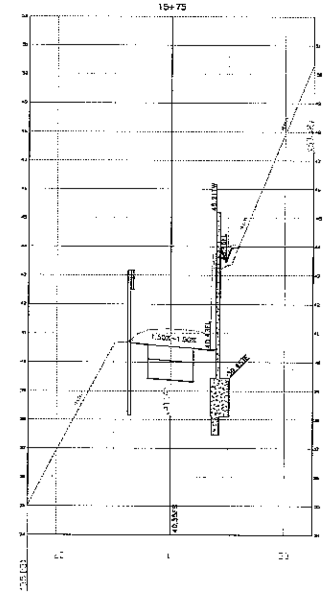
CITY OF COSTA MESA

6 OF 22

PLAN NUMBER







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

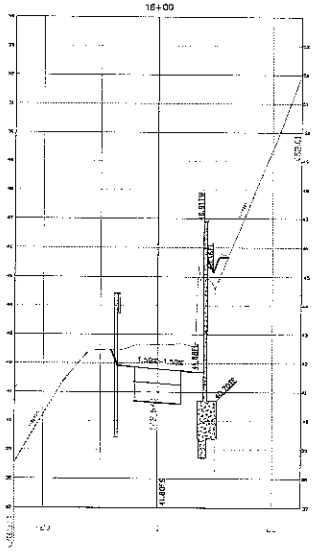
P. E. SEAL

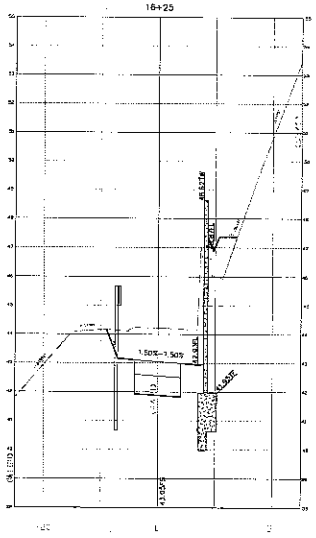
FAIRVIEW PARK CLASS I BIKKEWAY

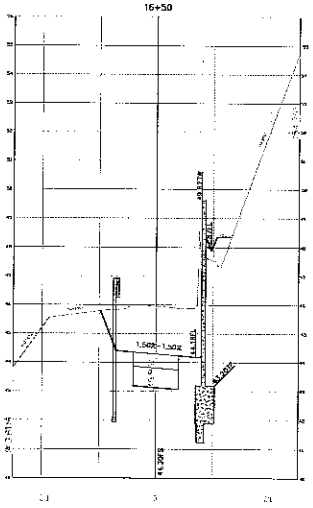
CROSS SECTIONS

CITY OF COSTA MESA

PLAN NUMBER 7 OF 22







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC. #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

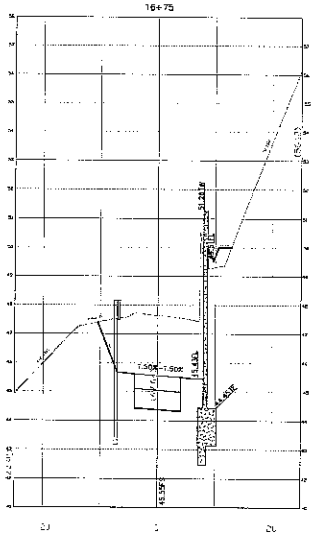
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

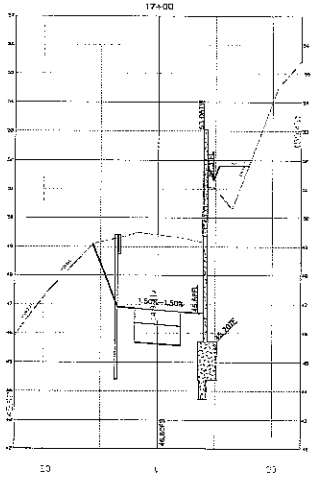
P. E. SEAL

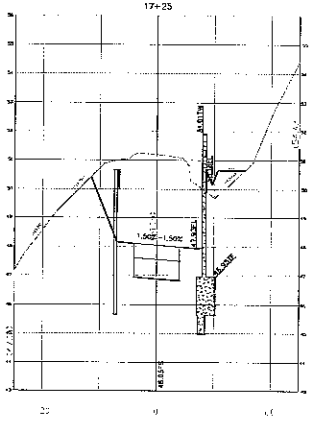
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA

PLAN NUMBER 8 OF 22







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

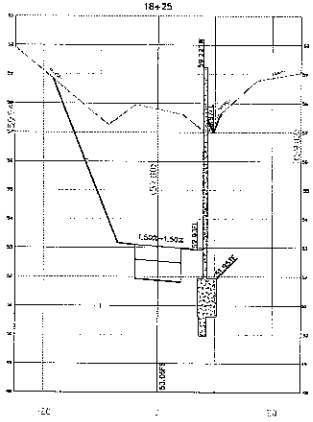
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

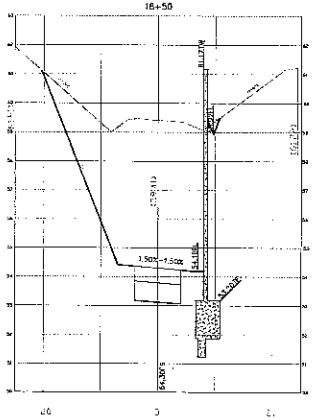
P. E. SEAL

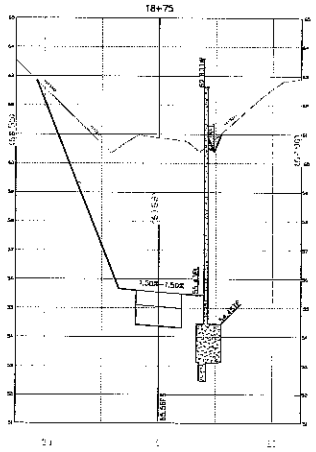
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

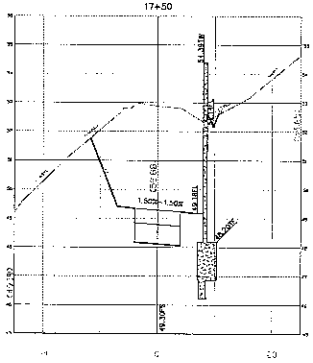
CITY OF COSTA MESA

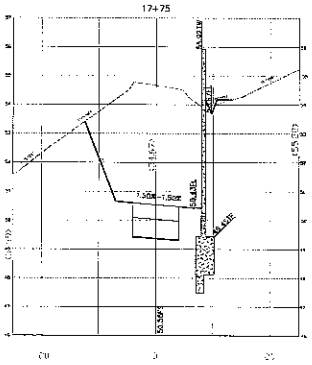
PLAN NUMBER

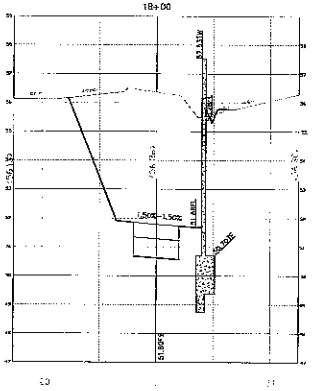












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR UC #

DATE OF CONSTRUCTION

BEG. ENG.

DATE ACCEPTED BY CITY COUNCIL

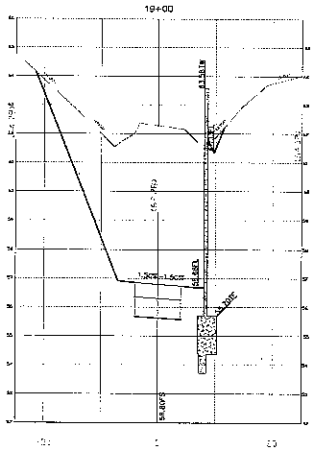
REFERENCES

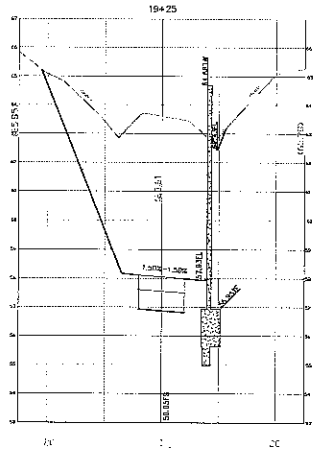
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

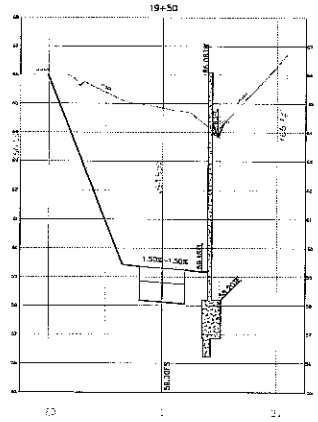
P. E. SEAL

FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA







REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR

UC #

DATE OF CONSTRUCTION

BEG. ENGL.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

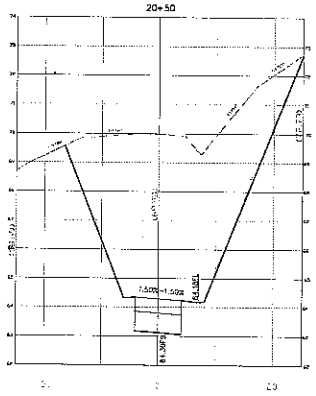
P. E. SEAL

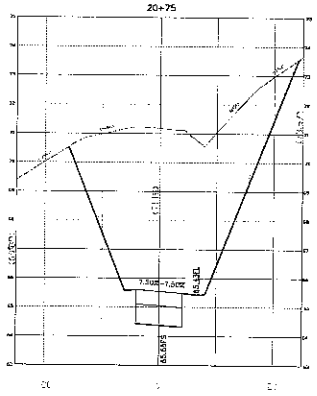
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

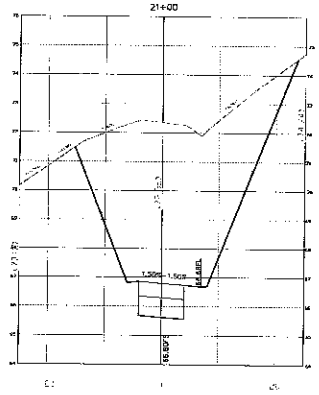
CITY OF COSTA MESA

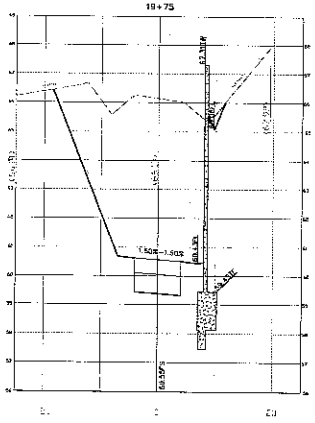
11 OF 22

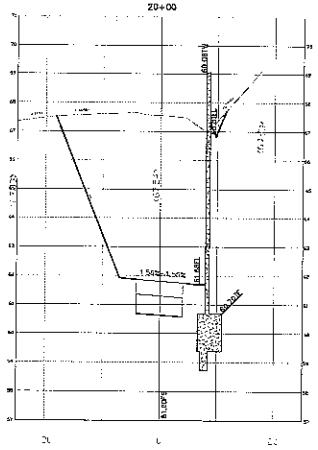
PLAN NUMBER

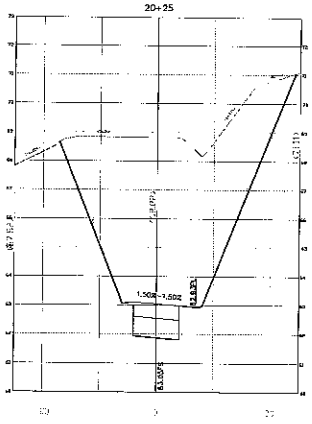












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR UC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

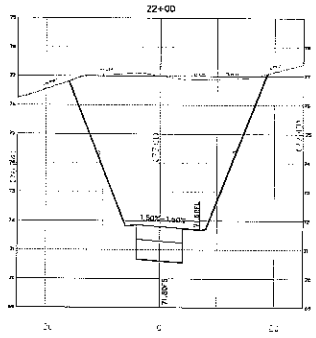
DESIGNED BY: L.C.	DATE	CHECKED BY: Z.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

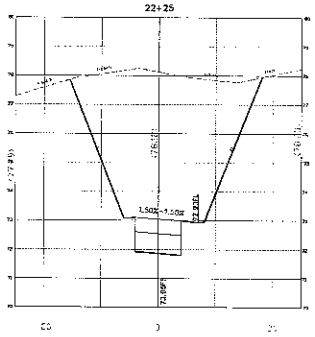
P. E. SEAL

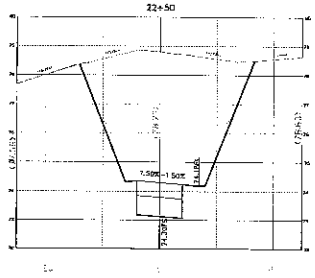
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

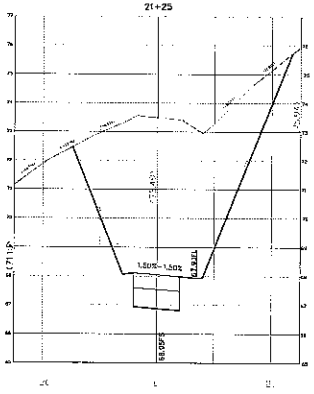
CITY OF COSTA MESA

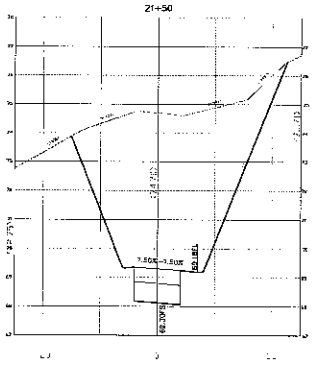
PLAN NUMBER

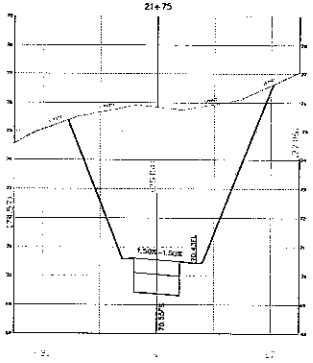












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

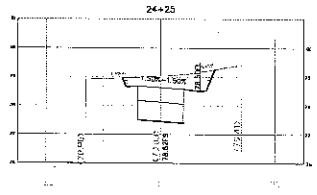
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

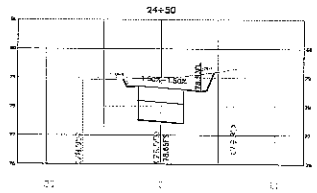
P. E. SEAL

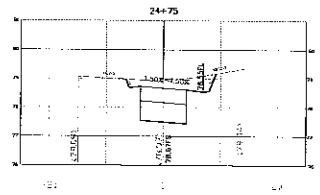
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

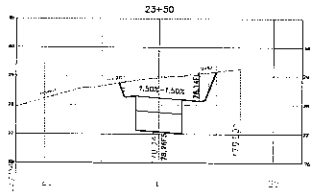
CITY OF COSTA MESA

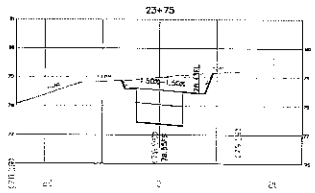
PLAN NUMBER

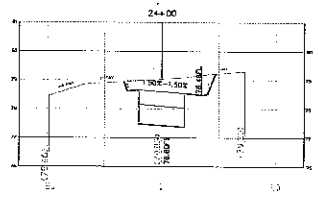


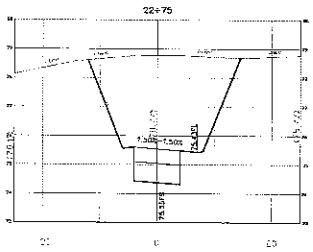


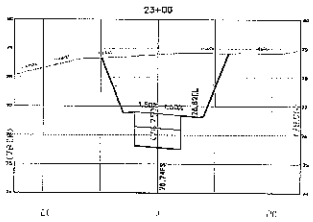


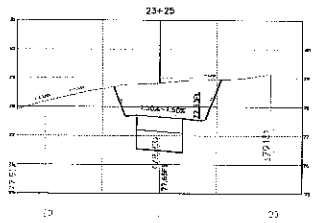












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

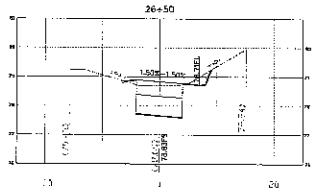
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

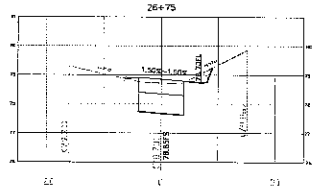
P. E. SEAL

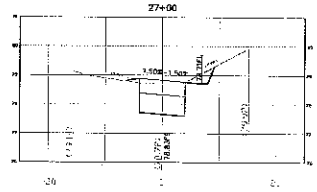
FAIRVIEW PARK CLASS I BIKKEWAY CROSS SECTIONS

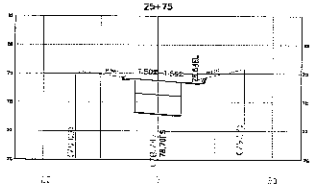
CITY OF COSTA MESA

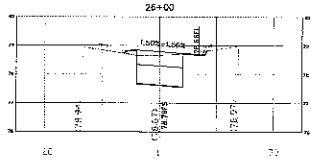
PLAN NUMBER 14 OF 22

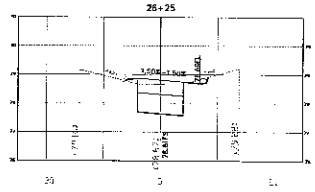


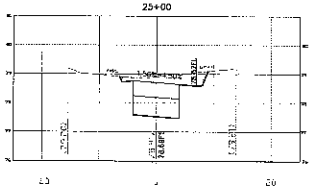


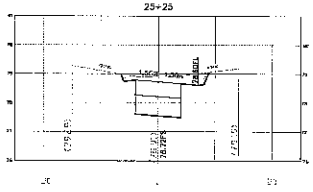


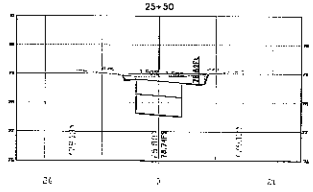












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR UC II

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.M.		APPROVED BY:	
RECOMENDED BY:		REC. BY:	
APPROVED BY:			

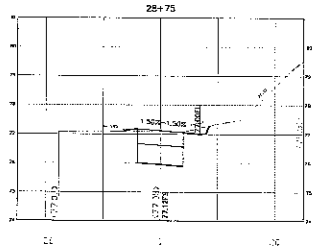
P. E. SEAL

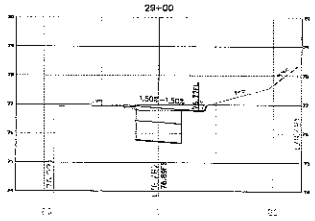
FAIRVIEW PARK CLASS I BIKKEWAY CROSS SECTIONS

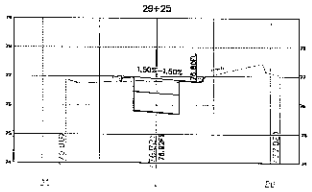
CITY OF COSTA MESA

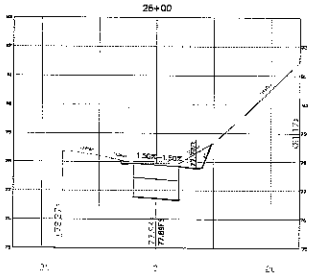
15 OF 22

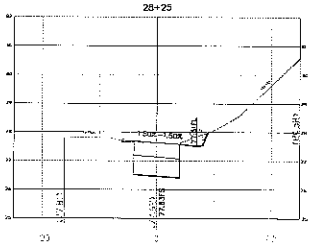
PLAN NUMBER

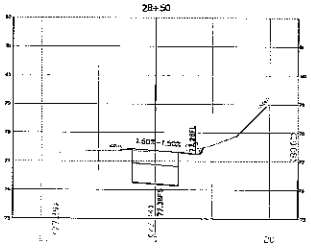


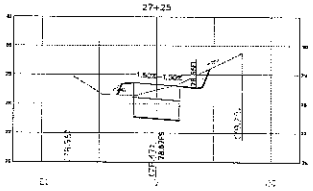


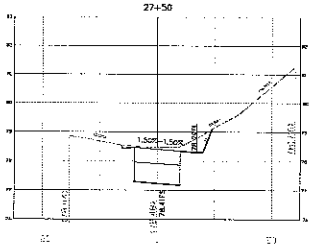


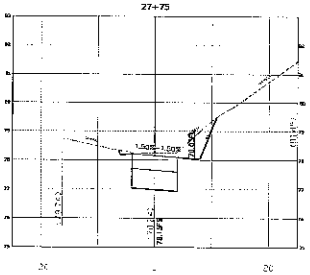












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR: UC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

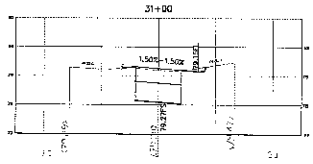
DESIGNED BY: L.C.	DATE	CHECKED BY: J.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

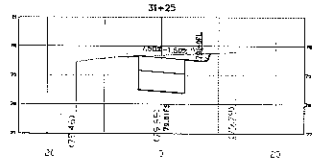
P. E. SEAL

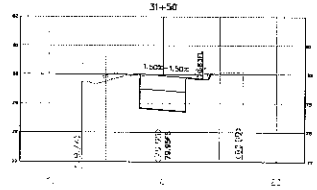
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

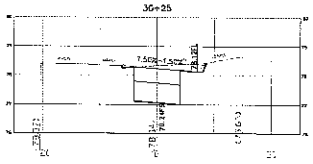
CITY OF COSTA MESA

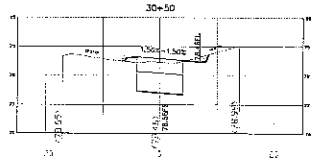
PLAN NUMBER

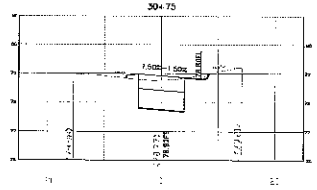


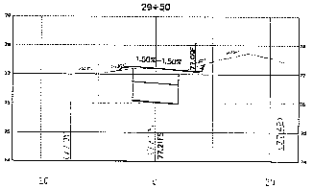


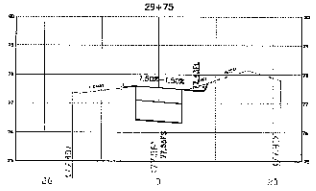


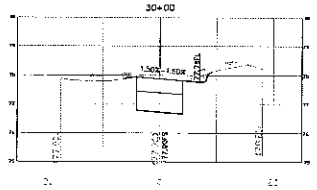












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ADOPTED BY CITY COUNCIL

REFERENCES

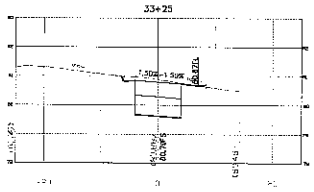
DESIGNED BY: L.C.	DATE	CHECKED BY: S.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

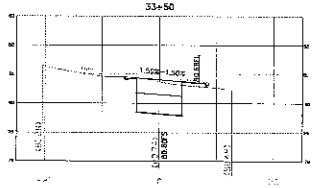
P. E. SEAL

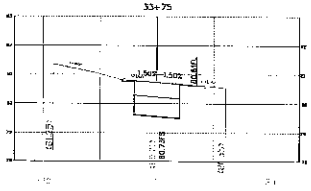
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

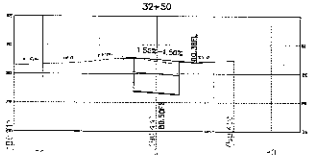
CITY OF COSTA MESA

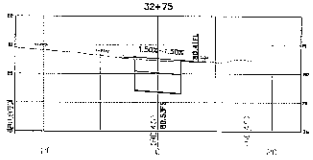
PLAN NUMBER

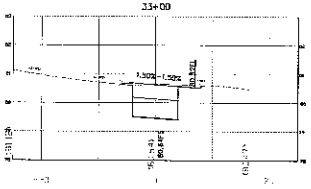


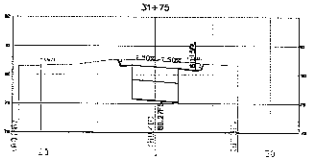


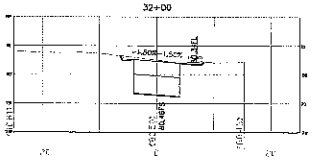


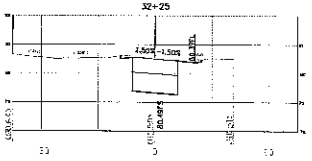












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

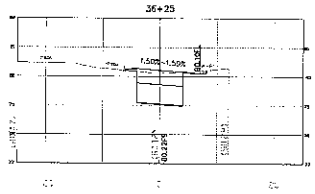
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

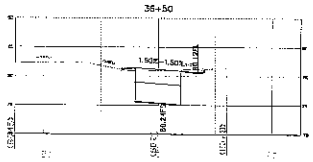
P. E. SEAL

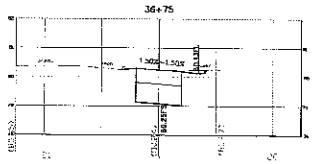
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

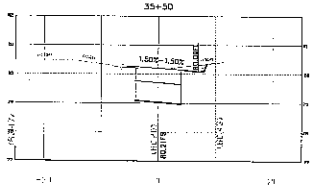
CITY OF COSTA MESA

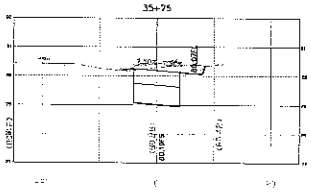
PLAN NUMBER

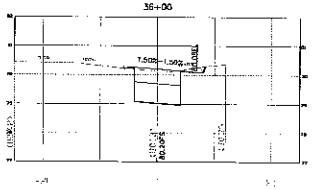


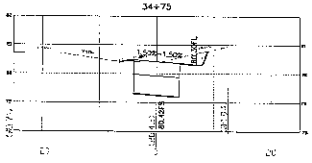


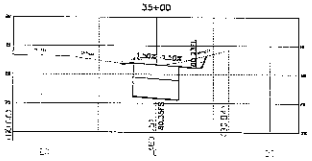


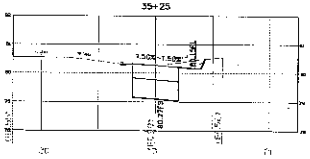


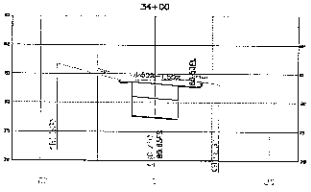


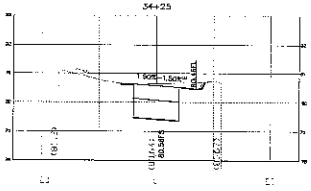


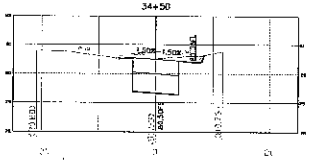












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR U/C #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

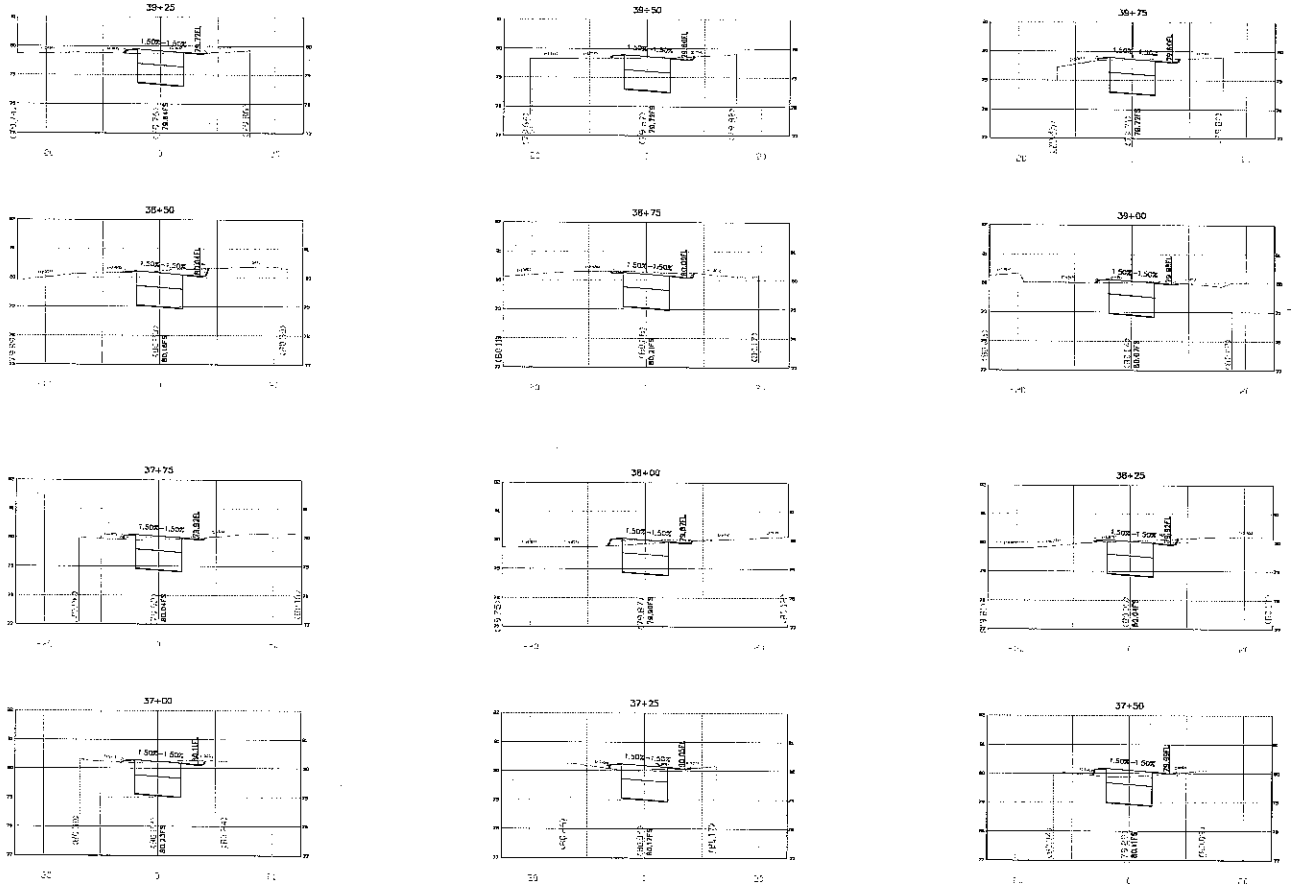
REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

P. E. SEAL

FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA



REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR — UC #

DATE OF CONSTRUCTION

BEG. — END.

DATE ACCEPTED BY CITY COUNCIL

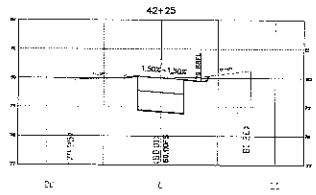
REFERENCES

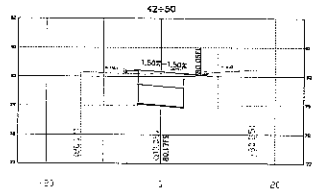
DESIGNED BY: L.C.	DATE	CHECKED BY: S.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

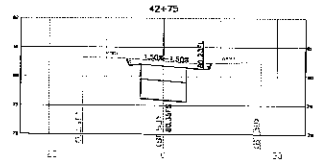
P. E. SEAL

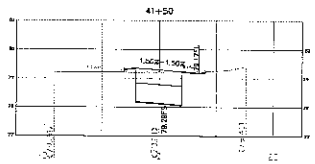
FAIRVIEW PARK CLASS I BIKKEWAY CROSS SECTIONS

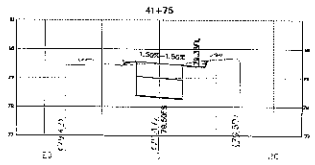
CITY OF COSTA MESA

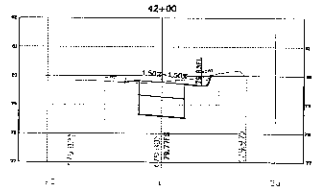


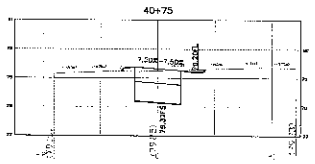


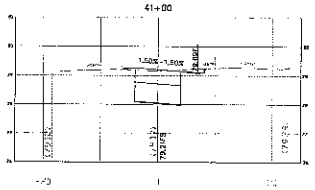


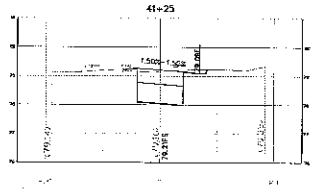


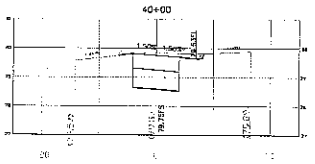


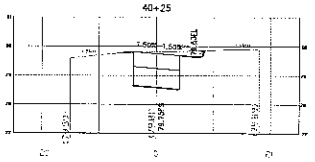


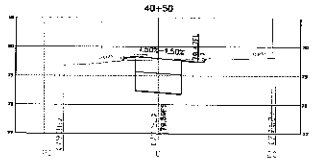












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

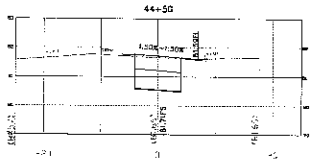
DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

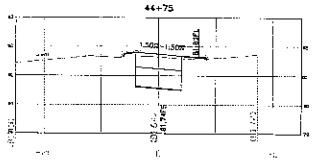
P. E. SEAL

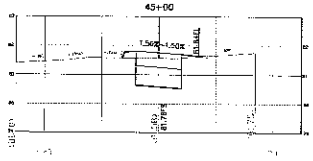
FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

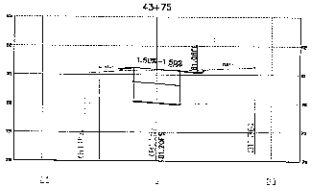
CITY OF COSTA MESA

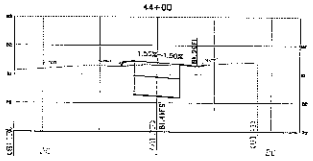
PLAN NUMBER

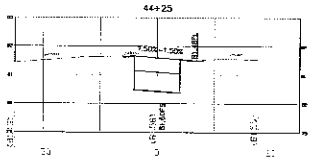


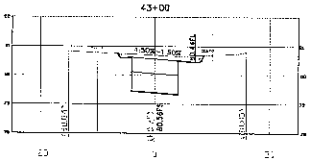


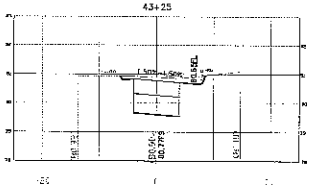


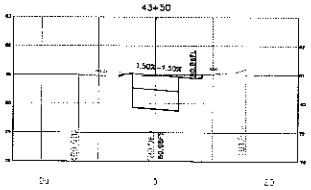












REVISIONS			
NO.	DATE	DESCRIPTION	APP.

CONTRACTOR L.C. #

DATE OF CONSTRUCTION

BEG. END.

DATE ACCEPTED BY CITY COUNCIL

REFERENCES

DESIGNED BY: L.C.	DATE	CHECKED BY: B.K.	DATE
DRAWN BY: R.H.		APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

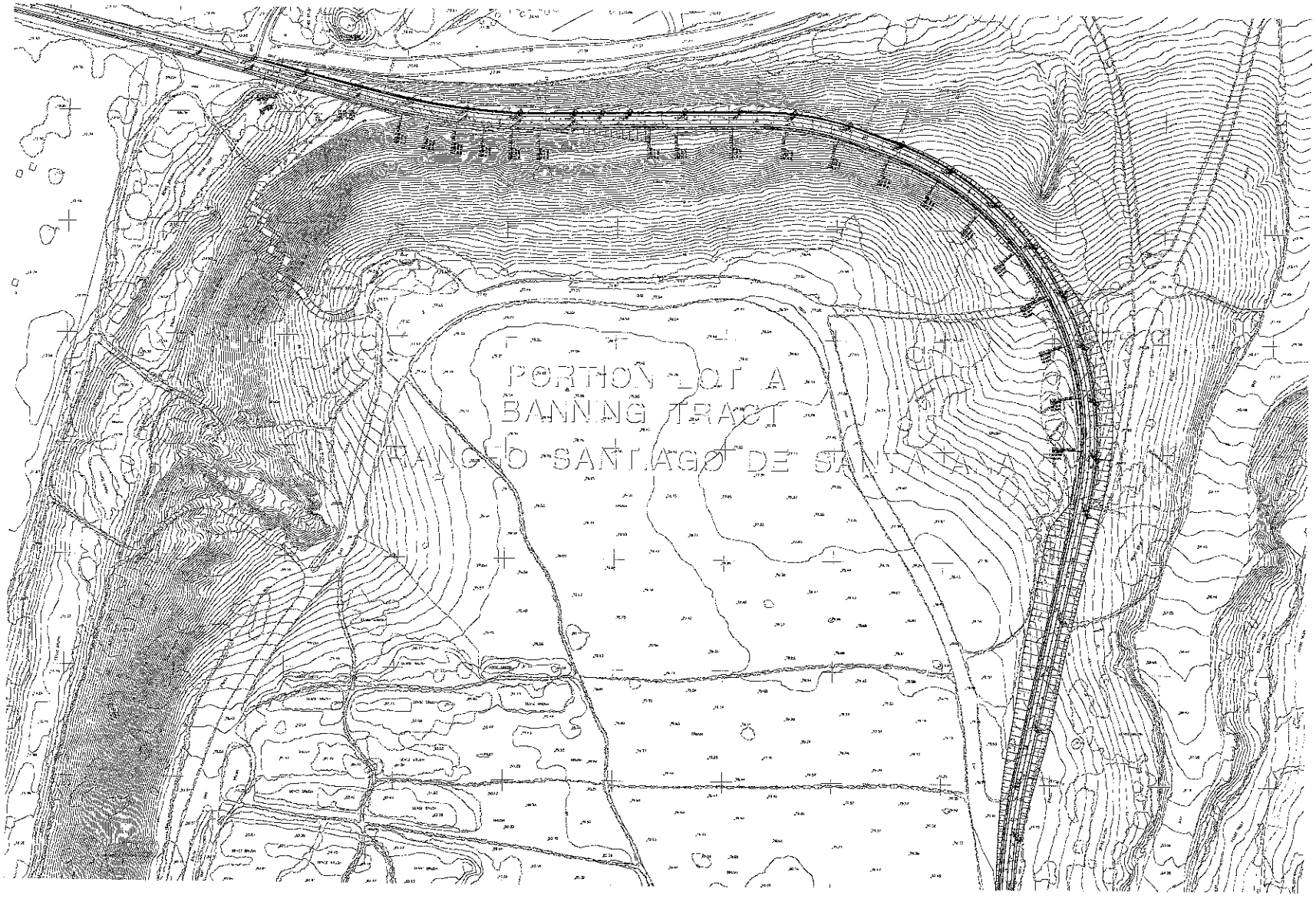
P. E. SEAL

FAIRVIEW PARK CLASS I BIKKEWAY
CROSS SECTIONS

CITY OF COSTA MESA

22 OF 22

PLAN NUMBER


PORTION LOT A
BANNING TRACT
RANCHO SANTIAGO DE SANTA ANA

From: STAPLES, ROBERT
Sent: Friday, August 21, 2015 4:43 PM
To: FAZELI, FARIBA
Cc: MEJIA, BALTAZAR
Subject: RE: Grant Money for Fairview Park
Attachments: Fairview Park Grant Funded Projects Completed.docx

Fariba,

See attached regarding grants received for Fairview Park and completed in response to Kim Hendricks email.

Robert Staples
City of Costa Mesa
Contract Administrator
714.754.5303

From: MEJIA, BALTAZAR
Sent: Friday, August 21, 2015 4:21 PM
To: STAPLES, ROBERT <ROBERT.STAPLES@costamesaca.gov>
Cc: FAZELI, FARIBA <FARIBA.FAZELI@costamesaca.gov>
Subject: FW: Grant Money for Fairview Park

Robert,

Please provide a response for Fariba's review and approval.

Baltazar Mejia, P.E.
Acting Principal Engineer
714-754-5291

From: Ian Hendricks [mailto:[redacted]]
Sent: Friday, August 21, 2015 1:27 PM
To: PARKS COMMISSION <PARKSCOMMISSION@costamesaca.gov>
Subject: Grant Money for Fairview Park

Greetings Commissioners,

As a long-time resident of Costa Mesa and lover of Fairview Park, I am wondering what grant money has the Parks and Rec. department asked Public Services to go after for Fairview Park? Any grants for restoring it? i am aware that the Fairview Park Master Plan over and over again with outlined plans, that restoration and preservation are a high priority for Costa Mesa.

I don't see that in the city's behavior with Fairview Park.

What grants have you directed Public Services to go after, in general, for Fairview Park?

Most of us residents would like to see Fairview Park restored instead of cemented and destroyed.
Thank you,
Kim Hendricks

Fairview Park Grant Funded Projects Completed

- State of California, Recreational Trails Grant, City of Costa Mesa, $256,000, development of a multi-purpose trail in Fairview Park.

- Habitat Conservation Fund, State of California, $230,000, 17-acre riparian habitat creation in Fairview Park.

- California Department of Parks and Recreation LWCF Program- nature trails, interpretive center, vernal pool observation decks, $225,000, Area D Fairview Park.

- Headlands LLC Mitigation Funding, 11 acres Coastal Sage Scrub restoration, Fairview Park, $1,000,000.

- OCTA M2 Mitigation Funding, $2,000,000-development of constructed wetlands and 23 acres of native habitat, Fairview Park.

- Miocean Foundation, $350,000 development of constructed wetlands and 23 acres of native habitat, Fairview Park.

- OCTA FTA Grant, $500,000- construction of a multipurpose trail, Fairview Park.

- Southern California Wetlands Recovery Project, $8,500-Restore Vernal Pool #1 at Fairview Park, install educational signage.

- Habitat Conservation Fund, State of California, $225,000, Fairview Park, 10-acre native habitat restoration.

Total Grant Awards: **$4,794,500**

Fairview Park Grant Funded Projects Pending

- Habitat Conservation Fund, State of California, $200,000, Coastal Sage scrub restoration and development of a ½ mile trail. Received grant in 3/14.

MEJIA, BALTAZAR

From: John Manly[redacted]
Sent: Thursday, September 03, 2015 11:14 AM
To: MEJIA, BALTAZAR
Subject: RE: [BULK] FAIRVIEW PARK-REROUTING THE TRAIL DOWN HILL TO TALBERT RESERVE

Thank you for your response.
John Manly
JSM Sales
PH: 714-957-3977
FX: 714-549-7204
jsmanly@roadrunner.com

From: MEJIA, BALTAZAR [mailto:BALTAZAR.MEJIA@costamesaca.gov]
Sent: Wednesday, September 02, 2015 5:07 PM
To: John Manly
Cc: 'Dave Kinkade'; 'Larry Courter'; FAZELI, FARIBA; MUNOZ, ERNESTO
Subject: RE: [BULK] FAIRVIEW PARK-REROUTING THE TRAIL DOWN HILL TO TALBERT RESERVE

John,

Sorry for the late response – I was off for a few days and I am now catching up. Please see below for responses to your questions.

Baltazar Mejia, P.E.
Acting Principal Engineer
714-754-5291

From: John Manly [mailto:[redacted]]
Sent: Sunday, August 23, 2015 10:40 AM
To: MEJIA, BALTAZAR <BALTAZAR.MEJIA@costamesaca.gov>
Cc: 'Dave Kinkade' <[redacted]>; 'Larry Courter' [redacted]
Subject: [BULK] FAIRVIEW PARK-REROUTING THE TRAIL DOWN HILL TO TALBERT RESERVE
Importance: Low

Bart –If the trail route is adopted, would the existing trail be shut down/erased after the new trail has been installed? Yes, we are proposing, as a future project and as funding becomes available, the removal of the existing trail and restoration of the area with native plants. Short segments at both ends will need to be converted to 4'-wide pedestrian trails (decomposed granite) to maintain access to the stairs and the upper mesa trails.

With the expected El Niño year approaching, the upper trail that connects up by the football stadium, is always under water in 3-4 places during, and immediately after, rain storms. The low lying ground on each side of the trail becomes a quagmire. I hope there is a plan to do some sort of elevation, or install more efficient draining, of this portion of the trail at the same as work is being done the bottom end. This condition has been reported to the City over a period of 5-7 years with the response that...."not to worry, we are going to fix this soon"- so far, nothing has been done. Our consultant is designing improvements to address these issues – we just need to get this project past environmental to move to the final design phase and then to construction. Unfortunately, we won't be able to get to the construction phase until mid to late 2016.

Regards,
John Manly

JSM Sales
PH: [redacted]
FX: [redacted]
[redacted]

ADDITIONAL DOCUMENTS CC-3

Additional Warrant Info for 9-15-15

Payment Ref.	Date	Remittance to:	Remittance ID:	Payment Amount	Explanation of payment
0191155	8/28/15	Coastal Finishing	23848	$1,518.48	What is this? Human Resources/Benefits/Special Events Folders – 1,000 custom folders.
0191201	8/28/15	Midori Gardens Inc.	17059	$6,813.86	What does Midori do for us on this specific task? Fairview Park Wetlands Maintenance - Trimming of mustard on all trails at Fairview Wetlands. FS#3 Renovation of planters – installed planters.

MEJIA, JESSICA

Subject: FW: Fairview Park trail
Attachments: 1231043PN-1R Geotechnical Investigation.pdf

From: MUNOZ, ERNESTO
Sent: Monday, September 14, 2015 2:42 PM
To: GENIS, SANDRA <SANDRA.GENIS@costamesaca.gov>
Cc: HATCH, THOMAS <THOMAS.HATCH@costamesaca.gov>; FOLEY, KATRINA <KATRINA.FOLEY@costamesaca.gov>; MENSINGER, STEPHEN <STEPHEN.MENSINGER@costamesaca.gov>; MONAHAN, GARY <GARY.MONAHAN@costamesaca.gov>; RIGHEIMER, JIM <JIM.RIGHEIMER@costamesaca.gov>; RODELIUS, SHARON <SHARON.RODELIUS@costamesaca.gov>; Gary Monahan [redacted] GREEN, BRENDA <brenda.green@costamesaca.gov>
Subject: FW: Fairview Park trail

Council Member Genis,

As you requested I am attaching a geotechnical report prepared by Southern California Soil & Testing, Inc. which outlines the results of their investigation on the stability of the existing bike trail at Fairview Park. We have no reports on the stability of the canyon where the realigned trail is proposed as its stability has not been in question. However, as part of the design work for the alternate (realigned trail) location, the geotechnical engineer would be asked to review this location as well so we could properly design the trail.

I would be happy to answer any questions you may have relative to this geotechnical report.

Ernesto Munoz, P.E.
Public Services Director
City of Costa Mesa
714-754-5343

From: MUNOZ, ERNESTO
Sent: Thursday, September 10, 2015 10:43 PM
To: GENIS, SANDRA
Cc: HATCH, THOMAS; STAPLES, ROBERT; MEJIA, BALTAZAR
Subject: RE: Fairview PArk trail

Sandy,

We'll provide any available documents regarding the slope stability. As you can see from walking the trail down the slope, it has been repaired several times due to longitudinal tension cracks (tears) which suggest the slope is experiencing settlement in the northerly direction.

Regarding the canyon, I don't believe we would have documents regarding it's stability. This of course would be part of any analysis to construct the trail at this location, but we will look to see it there is anything in the files and be sure to make it available.

Ernesto Munoz, P. E.
Public Services Director
City of Costa Mesa
714-754-5343
ernesto.munoz@costamesaca.gov

-------- Original message --------
From: "GENIS, SANDRA" <SANDRA.GENIS@costamesaca.gov>
Date: 09/10/2015 10:15 PM (GMT-08:00)
To: "MEJIA, BALTAZAR" <BALTAZAR.MEJIA@costamesaca.gov>, "MUNOZ, ERNESTO" <ERNESTO.MUNOZ@costamesaca.gov>, "STAPLES, ROBERT" <ROBERT.STAPLES@costamesaca.gov>, "MUNOZ, ERNESTO" <ERNESTO.MUNOZ@costamesaca.gov>
Cc: "HATCH, THOMAS" <THOMAS.HATCH@costamesaca.gov>
Subject: Fairview PArk trail

Please provide a copy of any studies regarding the stability of the existing asphalt path to be replaced as well as the hill itself. I would also appreciate copies of any studies regarding the stability of the canyon where the new path would be constructed and where fill was placed about a half a dozen years ago. I am copying Mr. Staples as he may be more aware of what older documents exist.

Thank you.

ADDITIONAL DOCUMENTS NB #2

SDVOSB . DVBE . SBE

Corporate Headquarters
6280 Riverdale Street
San Diego, CA 92120
P 619.280.4321
T 877.215.4321
F 619.280.4717
W www.scst.com

GEOTECHNICAL INVESTIGATION
BIKE TRAIL IMPROVEMENTS
FAIRVIEW PARK
CITY OF COSTA MESA, CALIFORNIA

PREPARED FOR:

MS. LEAH KABBARA
KABBARA ENGINEERING
121 NORTH HARWOOD STREET
ORANGE, CALIFORNIA 92866

PREPARED BY:

SOUTHERN CALIFORNIA SOIL & TESTING, INC.
6280 RIVERDALE STREET
SAN DIEGO, CALIFORNIA 92120

Providing Professional Engineering Services Since 1959

SDVOSB . DVBE . SBE

Corporate Headquarters
6280 Riverdale Street
San Diego, CA 92120
P 619.280.4321
T 877.215.4321
F 619.280.4717
W www.scst.com

April 10, 2015

SCST No. 1231043PN
Report No. 1R

Ms. Leah Kabbara
Kabbara Engineering
121 North Harwood Street
Orange, California 92866

Subject: GEOTECHNICAL INVESTIGATION
BIKE TRAIL IMPROVEMENTS
FAIRVIEW PARK
CITY OF COSTA MESA, CALIFORNIA

Dear Ms. Kabbara:

This letter transmits Southern California Soil & Testing, Inc.'s geotechnical report for the subject project. We understand the project will consist of the design and construction of a bike trail and two parking lots. If you have questions concerning this report, please call us at (619) 280-4321.

Respectfully Submitted,
SOUTHERN CALIFORNIA SOIL & TESTING, INC.

Emil Rudolph, GE 2767
Principal Geotechnical Engineer

Andrew K. Neuhaus, CEG 2591
Project Geologist

EL:AKN:vat

(4) Addressee
(1) Addressee via e-mail at leah@kabbara.net

TABLE OF CONTENTS

SECTION **PAGE**

EXECUTIVE SUMMARY I

1. INTRODUCTION 1

1.1 GENERAL 1
1.2 SCOPE OF WORK 1

2. DATA ACQUISITION 1

2.1 FIELD EXPLORATION 1

3. SITE CONDITIONS 1

3.1 SURFACE CONDITIONS 1
3.2 SUBSURFACE CONDITIONS 2
3.3 GROUNDWATER 2
3.4 SEISMIC DESIGN PARAMETERS 2

4. CONCLUSIONS AND RECOMMENDATIONS 3

4.1 GRADING 3
4.1.1 Site Preparation for Bike Trail 3
4.1.2 Site Preparation for Conventional and MSE Walls 4
4.1.3 Site Preparation for Parking Lot Areas 4
4.1.4 Site Excavation Characteristics 4
4.1.5 Temporary Excavation Slopes 5
4.1.6 Imported Soil 5
4.1.7 Surface Drainage 5
4.1.8 Grading Plan Review 5
4.2 RETAINING WALL RECOMMENDATIONS 5
4.2.1 Foundations-Conventional Retaining Wall 5
4.2.2 Foundation Excavation Observations 6
4.2.3 Static Settlement Characteristics 6
4.3 LATERAL EARTH PRESSURES 6
4.3.1 Active Pressure 6
4.3.2 At-Rest Pressure 6
4.3.3 Passive Pressure 6
4.3.4 Seismic Earth Pressure 6
4.3.5 Retaining Wall Backfill 7
4.4 MECHANICALLY STABILIZED EARTHEN (MSE) WALL 7
4.5 PAVEMENT SECTIONS 7
4.5.1 Permeable Pavements 8
4.6 BIKE TRAIL PORTLAND CEMENT CONCRETE SECTIONS 8

5. CLOSURE 9

ATTACHMENTS:

FIGURES

Figure 1 ..... Site Vicinity Map
Figure 2 ..... Subsurface Exploration Map
Figure 3 ..... Cross-Section
Figure 4 ..... Typical Wall Backdrain Detail
Figure 5 ..... Typical MSE Wall Detail

TABLE OF CONTENTS (Continued)

SECTION **PAGE**

APPENDICES

Appendix I ..... Field Investigation
Appendix II ..... Laboratory Test Results

EXECUTIVE SUMMARY

This report presents the results of the geotechnical investigation performed by Southern California Soil and Testing, Inc. (SCST) for the bike trail improvements at Fairview Park in the City of Costa Mesa, California. We understand the project will consist of widening the existing bike trail and the design and construction of 2 parking lots.

An SCST geologist observed the drilling of 5 exploratory test borings drilled using a truck mounted drill rig equipped with a hollow stem auger. The borings extended to depths of between about 10 feet and 20 feet below existing grade. Selected samples from the borings were tested to evaluate pertinent soil classification and engineering properties to assist in the development of geotechnical conclusions and recommendations.

Materials encountered in the borings consist of artificial fill, young alluvial fan deposits, and old paralic deposits. The fill consists of soft sandy clay with gravel and sandy clay. The alluvial fan deposits consist of stiff to very stiff sandy clay and medium dense clayey sand. The old paralic deposits consist of medium dense clayey sandstone, very stiff to hard sandy claystone and very dense silty sandstone. Groundwater was not encountered in the borings.

The main geotechnical considerations affecting the bike trail are the presence of clayey materials, potentially compressible fill or expansive site soils, and steepened slopes. Portions of the slopes along the planned bike trail have experienced slope creep. Alternatives to reduce the potential for future failures of the proposed path consist of re-grading the slope and/or construction of a retaining wall along the top of the slope, or constructing the path away from the outside slope. We understand the existing bike trail will be widened to about 16 feet in width in order to accommodate sidewalks and shoulders. Granular import material with an expansion index of 20 or less may be necessary as fill below pavements for the bike trail and for use as retaining wall backfill. Furthermore, the planned parking areas are underlain by clayey soils with poor pavement support and infiltration characteristics.

1. INTRODUCTION

1.1 GENERAL

This report presents the results of the geotechnical investigation performed by Southern California Soil and Testing, Inc. (SCST) for the slope repair and bike trail improvements at Fairview Park in the City of Costa Mesa, California. We understand the project will consist of widening the existing bike trail with a new concrete surface and decomposed granite walkway and the design and construction of 2 parking lots. Figure 1 presents a site vicinity map. This report presents recommendations to reduce the potential for distress to the future improvements and pavement section recommendations.

1.2 SCOPE OF WORK

The geotechnical study performed by SCST consisted of a surface reconnaissance, subsurface exploration, subsurface sampling, laboratory testing, engineering analyses, development of design recommendations and the preparation of this report. The results of the field exploration and laboratory test programs were evaluated to develop conclusions and recommendations regarding:

1. Subsurface conditions beneath the site;
2. Site preparation;
3. Slope repair alternatives including:
    - Retaining walls
    - Grading
4. Flexible, rigid, and permeable pavement sections.

2. DATA ACQUISITION

2.1 FIELD EXPLORATION

Five exploratory borings were drilled using a truck mounted drill rig equipped with a hollow stem auger. The borings extended to depths of between about 10 feet and 20 feet below existing site grades. An SCST geologist logged the materials encountered in the borings and collected samples for laboratory testing.

The approximate locations of the borings are shown on Figure 2. The test pit logs are presented in Appendix I. Soils are classified according to the Unified Soil Classification System, which is explained in Appendix I.

3. SITE CONDITIONS

3.1 SURFACE CONDITIONS

The existing bike trail is located along a natural slope within the northern portion of the park. The slope descends to the north at an inclination ranging from about 2:1 (horizontal:vertical) above the bike trail to approximately 1½:1 (H:V) below the trail. A total elevation difference from the top of the

slope to the bottom of the slope is about 65 feet. Vegetation in this area consists of shrubs and grasses.

The 2 planned parking lots will be located in undeveloped areas of the park. One parking lot will be located within the northeast portion of the park, north of an existing parking area and west of Placentia Avenue. The other parking lot will be located within the southwest portion of the park at the northern terminus of Pacific Avenue. The 2 parking lot areas are relatively flat with elevation differences of less than 1 foot over a span of about 100 feet. Vegetation in these areas consists of trees and grasses.

3.2 SUBSURFACE CONDITIONS

Materials encountered in the exploratory borings consist of artificial fill, young alluvial fan deposits, and old paralic deposits. Figure 3 presents a geologic Cross-Section.

Artificial Fill (Qaf): Fill was encountered in borings B-1 and B-2. This material consists of soft sandy clay with gravel and sandy clay. The fill extends to a depth of about 4 feet below existing grade.

Young Alluvial Fan Deposits (Qyf): The young alluvial fan deposits were encountered below the fill in borings B-1 and B-2, at the surface in boring B-3 and below the grass and associated topsoil in boring B-4. This material consists of stiff to very stiff sandy clay and medium dense clayey sand that extends to a depth of about 9 feet in boring B-1, about 16 feet in boring B-2, about 19 feet in boring B-3, and about 4 feet in boring B-4.

Old Paralic Deposits (Qop): Old paralic deposits were encountered below the young alluvial fan deposits in borings B-1, B-2, B-3 and B-4 and at the surface in boring B-5. These deposits are comprised of medium dense clayey sandstone, very stiff to hard sandy claystone and very dense silty sandstone. This material extends to the maximum depth explored of 20 feet in borings B-1, B-2 and B-3 and 10 feet in borings B-4 and B-5.

3.3 GROUNDWATER

Groundwater was not encountered in the borings. The groundwater level is expected to be below a depth that will influence planned construction. However, the groundwater level can be expected to vary depending on local irrigation, rainfall, and runoff.

3.4 SEISMIC DESIGN PARAMETERS

A geologic hazard likely to affect the project is groundshaking as a result of movement along an active fault zone in the vicinity of the subject site. The site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters in accordance with the 2013 California Building Code are presented below:

Site Coordinates: Latitude 33.665°
Longitude -117.941°
Site Class: D
Site Coefficient F_a = 1.0
Site Coefficient F_v = 1.5
Spectral Response Acceleration at Short Periods S_s = 1.635 g
Spectral Response Acceleration at 1-Second Period S_1 = 0.605 g
S_{DS}=2/3* S_{MS}=1.090 g
S_{D1}=2/3* S_{M1}=0.605 g

PGA_M=0.653 g

4. CONCLUSIONS AND RECOMMENDATIONS

The main geotechnical considerations affecting the bike trail are the presence of potentially compressible fill and steepened slopes. Portions of the clayey site soils are potentially expansive. Portions of the slopes along the planned bike trail have experienced slope creep. Alternatives to reduce the potential for distress to the planned improvements consist of re-grading the slope and/or construction of a retaining wall along the top of the slope. We understand the existing bike trail will be widened to about 16 feet in width in order to accommodate sidewalks and shoulders. The planned parking areas are underlain by clayey soils with poor pavement support characteristics.

4.1 GRADING

4.1.1 Site Preparation for Bike Trail

Site preparation should begin with the removal of existing improvements, debris, vegetation and deleterious matter. Potentially compressible material should be excavated in its entirety. Excavations of up to 2 feet should be anticipated. An SCST representative should observe conditions exposed in the bottom of the excavation to determine if additional excavation is required. In areas where the bottom of the excavation exposes alluvium or the existing slope is steeper than 2:1(horizontal:vertical) the backfill should be strengthened with reinforcing grids, such as Tensar TX7, placed at 18 inch vertical intervals approximately 6 feet deep up to within 12 inches of the planned subgrade elevation.

The surface exposed by excavation should be scarified to a depth of 6 inches; moisture conditioned to approximately 2 percentage points above optimum moisture content and compacted to at least 90% relative compaction.

Generally, the excavated soil will be suitable for use as newly compacted fill, if needed. To reduce the potential for distress, the areas within 2 feet of the bottom of the concrete portion of the bike trail should be brought to designed finish grades using onsite or imported granular materials with an expansion index of 20 or less. Fill should be placed in lifts 6 inches or less in

loose thickness, moisture conditioned to approximately 2 percentage points above optimum moisture content and compacted to at least 90% relative compaction. The upper 12 inches of subgrade below planned pavements should be compacted to at least 95% relative compaction.

4.1.2 Site Preparation for Conventional and MSE Walls

The fill should be excavated in its entirety where retaining walls will be founded. Excavations of up to 5 feet should be anticipated. An SCST representative should observe conditions exposed in the bottom of the excavation to determine if additional excavation is required.

The surface exposed at the bottom of the excavations should be scarified to a depth of 6 inches, moisture conditioned to between optimum moisture content and 2 percentage points above optimum moisture content and compacted to at least 90% relative compaction. Optimum moisture content and relative compaction should be based on the ASTM D 1557 laboratory test procedure. All references to optimum moisture content and relative compaction in this report are based on these test methods. In areas where the bottom of the excavation exposes alluvium or the existing slope is steeper than 2:1(horizontal:vertical) the backfill should be strengthened with reinforcing grids, such as Tensar TX7, placed at 18 inch vertical intervals approximately 6 feet deep up to within 12 inches of the planned subgrade elevation.

The excavated soil free of trash, construction debris and organics can be placed as fill. Fill should be placed in lifts 6 inches or less in loose thickness, moisture conditioned to between optimum moisture content and 2 percentage points above optimum moisture content and compacted to 90% relative compaction.

4.1.3 Site Preparation for Parking Lot Areas

Site preparation should begin with the removal of existing improvements, debris, vegetation and deleterious matter. An SCST representative should observe conditions exposed in the bottom of the excavation to determine if additional excavation is required.

The surface exposed by excavation should be scarified to a depth of 12 inches moisture conditioned to approximately 2 percentage points above optimum moisture content and compacted to at least 90% relative compaction.

4.1.4 Site Excavation Characteristics

It is anticipated that excavation can be achieved with conventional earthwork equipment in good working order. However, it should be noted that gravel and cobble zones may be encountered during grading.

4.1.5 Temporary Excavation Slopes

Temporary slopes in fill should not be steeper than 1:1 (horizontal:vertical). Temporary slopes in the old paralic deposits should not be steeper than ½:1 (horizontal:vertical) up to 10 feet in height. The faces of temporary slopes should be inspected daily by the contractor's Competent Person before personnel are allowed to enter the excavation. Any zones of potential instability, sloughing or raveling should be brought to the attention of the Engineer and corrective action implemented before personnel begin working in the excavation. Fill alluvium and old paralic deposits should be classified as Type C soils in accordance with CalOSHA guidelines.

4.1.6 Imported Soil

A portion of the clayey soil excavated at the site is not expected to meet the specifications for Caltrans structure backfill. Therefore, import material is anticipated to be needed for use as wall backfill.

4.1.7 Surface Drainage

Final surface grades should be designed to collect and direct surface water away from the tops of slopes toward appropriate drainage facilities. Drainage patterns established at the time of fine grading should be maintained throughout the life of the proposed improvements. Site irrigation should be limited to the minimum necessary to sustain landscape growth. Should excessive irrigation, impaired drainage, or unusually high rainfall occur, saturated zones of perched groundwater can develop.

4.1.8 Grading Plan Review

The grading plans should be submitted to SCST for review to ascertain whether the intent of the recommendations contained in this report have been implemented, and that no revised recommendations are necessary due to changes in the development scheme.

4.2 RETAINING WALL RECOMMENDATIONS

4.2.1 Foundations-Conventional Retaining Wall

Shallow spread footings with bottom levels in young alluvial fan deposits, old paralic deposits or compacted fill can be used to support the planned retaining wall following site preparation recommendations presented in Section 4.1.2 of this report. The footings should extend to a minimum depth of 18 inches below the lowest adjacent elevation. Footings adjacent to slopes should be extended to a depth such that a minimum distance of 7 feet exists between the bottom of the footing and the face of the slope. A minimum width of 18 inches is recommended for continuous footings. A bearing capacity of 2,500 pounds per square foot (psf) can be used. This value can be increased by ⅓ when considering the total of all loads, including wind or seismic forces.

Lateral loads will be resisted by friction between the bottoms of footings and passive pressure on the faces of footings and other structural elements below grade. A friction factor of 0.30 can be used. Passive pressure for the design of retaining walls can be taken as 250 psf per foot of depth. This pressure can be increased by ⅓ for seismic loading.

4.2.2 Foundation Excavation Observations

It is recommended that all foundation excavations be approved by a SCST representative prior to forming or placing reinforcing steel.

4.2.3 Static Settlement Characteristics

Total wall settlements are estimated to be less than 1 inch. Differential settlements are estimated to be less than ½ inch over a span of 20 feet along the wall. Settlements should occur rapidly, and should be completed shortly after structural loads are applied.

4.3 LATERAL EARTH PRESSURES

4.3.1 Active Pressure

The active soil pressure for the design of unrestrained earth retaining structures with level backfills can be taken as equivalent to the pressure of a fluid weighing 40 pounds per cubic foot (pcf). An equivalent fluid pressure weighing 60 pcf can be used for walls with a 2:1 (horizontal: vertical) sloping backfill. If other surcharge loads are anticipated, SCST should be contacted for the necessary increase in soil pressure. A typical wall backdrain detail is shown on Figure 4.

4.3.2 At-Rest Pressure

The at-rest soil pressure for the design of restrained earth retaining structures with level backfills can be taken as equivalent to the pressure of a fluid weighing 60 pcf. A granular and drained backfill condition has been assumed. If any surcharge loads are anticipated, SCST should be contacted for the necessary increase in soil pressure.

4.3.3 Passive Pressure

Passive pressure for the design of retaining walls can be taken as 250 psf per foot of depth. This pressure can be increased by ⅓ for seismic loading. The coefficient of friction can be taken as 0.30. The upper 12 inches of material in front of foundations should not be included in passive pressure calculations unless the surface is covered with pavement.

4.3.4 Seismic Earth Pressure

The seismic earth pressures can be taken as an inverted triangular distribution with a maximum pressure at the top equal to 24H pounds per square foot (with H being the height of the retained earth in feet). This pressure is in addition to the un-factored static design wall load. The allowable

passive pressure and bearing capacity can be increased by ⅓ in determining the stability of the wall.

4.3.5 Retaining Wall Backfill

Retaining wall backfill should consist of granular materials meeting the criteria for Caltrans Structure Backfill. Wall backfill should be placed in lifts 6 inches or less in loose thickness, moisture conditioned to near optimum moisture content and compacted to 90% relative compaction based on the ASTM D 1557 laboratory test method.

4.4 MECHANICALLY STABILIZED EARTHEN (MSE) WALL

The following soil parameters can be used for the design of MSE walls.

Mechanically Stabilized Earth Wall Design Parameters

	Reinforced Soil	Retained Soil	Foundation Soil
Internal Friction Angle (degrees)	32°	25°	25°
Cohesion (pounds per square foot)	0	0	0
Moist Unit Weight (pounds per cubic foot)	125	125	125

MSE walls are expected to range between about 4 feet and 10 feet in total height. A typical MSE wall section detail is shown on Figure 5.

The geotechnical engineer should review project plans and specifications prior to bidding and construction to check that the intent of the recommendations in this report has been incorporated. Observations and tests should be performed during construction. If the conditions encountered during construction differ from those anticipated based on the subsurface exploration program, the presence of the geotechnical engineer during construction will enable an evaluation of the exposed conditions and modifications of the recommendations in this report or development of additional recommendations in a timely manner.

4.5 PAVEMENT SECTIONS

Laboratory R-value test results are less than 5. Alternatives for flexible and rigid pavement structural sections where new pavements will be required are listed below. Final pavement sections may be based on the results of R-value test performed on the materials present when final subgrade elevations are reached.

Flexible Pavement Recommendations

Traffic Index	Asphalt Concrete (inches)	Aggregate Base[1] (inches)	Full Depth Asphalt Concrete (inches)
5.0 (Parking Stalls)	4	8	7.5
7.0 (Driveways)	4	16	12.5

Note 1: **AB shall conform to Class 2 Aggregate Base in Section 26-1.02 of the Standard Specifications of The State of California Department of Transportation or Crushed Miscellaneous Base in accordance with the Standard Specifications for Public Works and City of Solana Beach Standards.**

Portland Cement Concrete Pavement Sections

Traffic Index	JPCP* (inches)	Aggregate Base* (inches)
5.0	7	6
7.0	8	6

***Jointed Plain Concrete Pavement, Type II/V Cement**

The top 12 inches of subgrade should be scarified, moisture conditioned to near optimum moisture content, and compacted to at least 95% relative compaction. Soft or yielding areas should be removed and replaced with compacted fill. The aggregate base material should be compacted to at least 95% relative compaction. Materials and methods of construction should conform to good engineering practices and the minimum standards of the City of Costa Mesa.

4.5.1 Permeable Pavements

We recommend that the structural pavement section for permeable pavement consist of 7 inches of concrete underlain by 6 inches of crushed gravel. The pavement structural section provided is based on the strength of the subgrade soils. If pervious pavements are used at the site, the design may be controlled by water storage capacity and permeability of the subgrade soils. The onsite subgrade soils may be considered to have low infiltration characteristics. To improve water storage capacity, a thicker gravel base section may be used beneath permeable pavements. The water storage and base thickness requirements should be determined by the project civil engineer.

4.6 BIKE TRAIL PORTLAND CEMENT CONCRETE SECTIONS

Portland cement concrete used in the bike trail construction should have a minimum thickness of 4 inches and should be reinforced with at least No. 3 bars at 18 inches on center each way. Additionally, slabs should be underlain by at least 12 inches of granular fill with very low expansion potential. Alternatively, the section can consist of 6 inches of concrete underlain by 8 inches of compacted processed miscellaneous base. Slabs should be provided with weakened plane joints. Joints should be placed in accordance with the American Concrete Institute (ACI) Guidelines Section

3.13, but should generally be 6 feet on center. Alternative patterns consistent with ACI guidelines also can be used. The landscape architect can be consulted in selecting the final joint patterns.

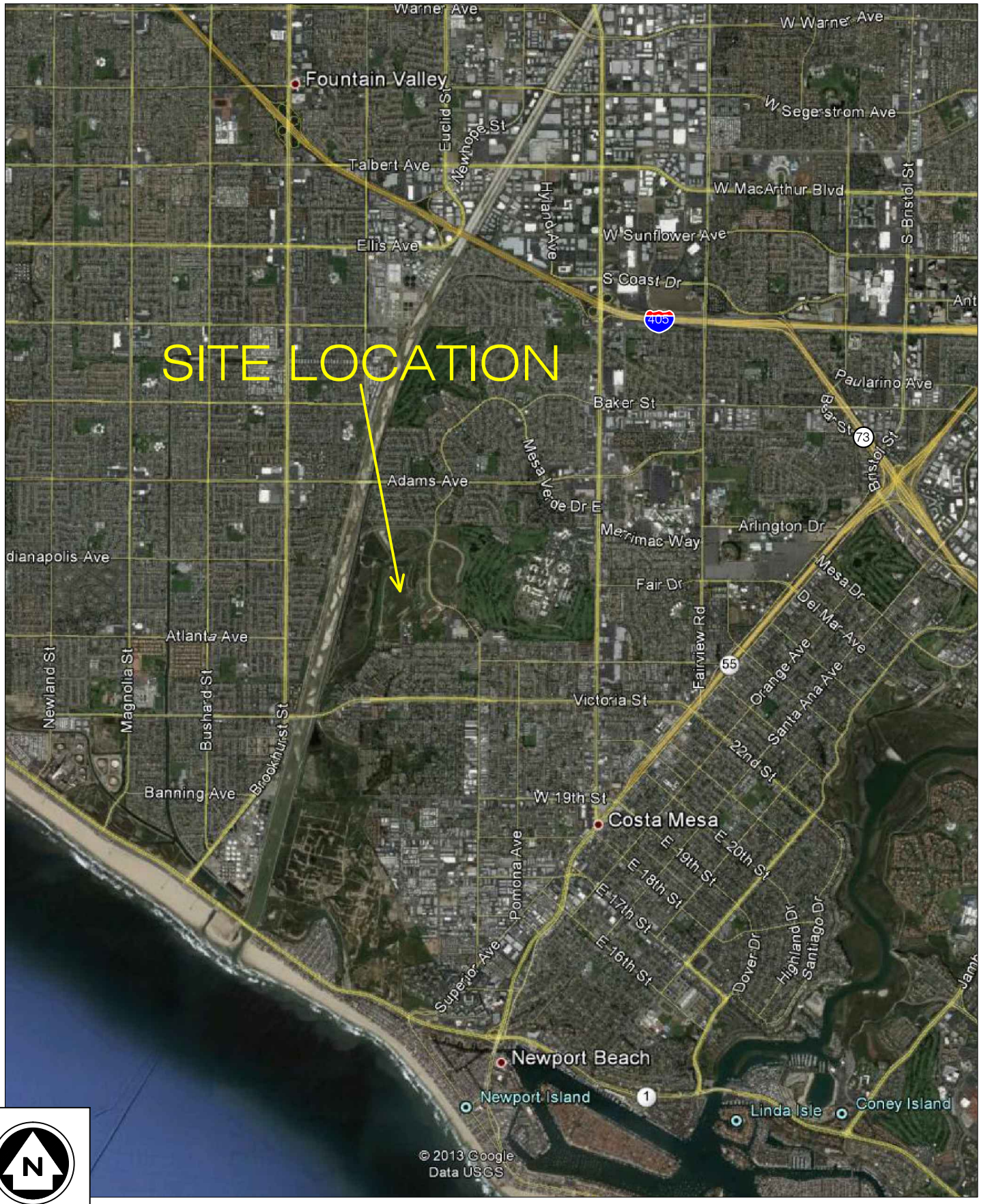
A 1-inch maximum size aggregate mix is recommended for concrete for exterior slabs. A water/cement ratio of less than 0.45 is recommended, in order to decrease the potential for shrinkage cracks. Coarse and fine aggregate in concrete should conform to the "Greenbook" Standard Specifications for Public Works Construction.

Special attention should be paid to the method of curing the concrete to reduce the potential for excessive shrinkage and resultant random cracking. Minor cracks occur normally in concrete slabs and foundations due to shrinkage during curing and redistribution of stresses. Some shrinkage cracks can be expected. These cracks are not necessarily an indication of vertical movements or structural distress.

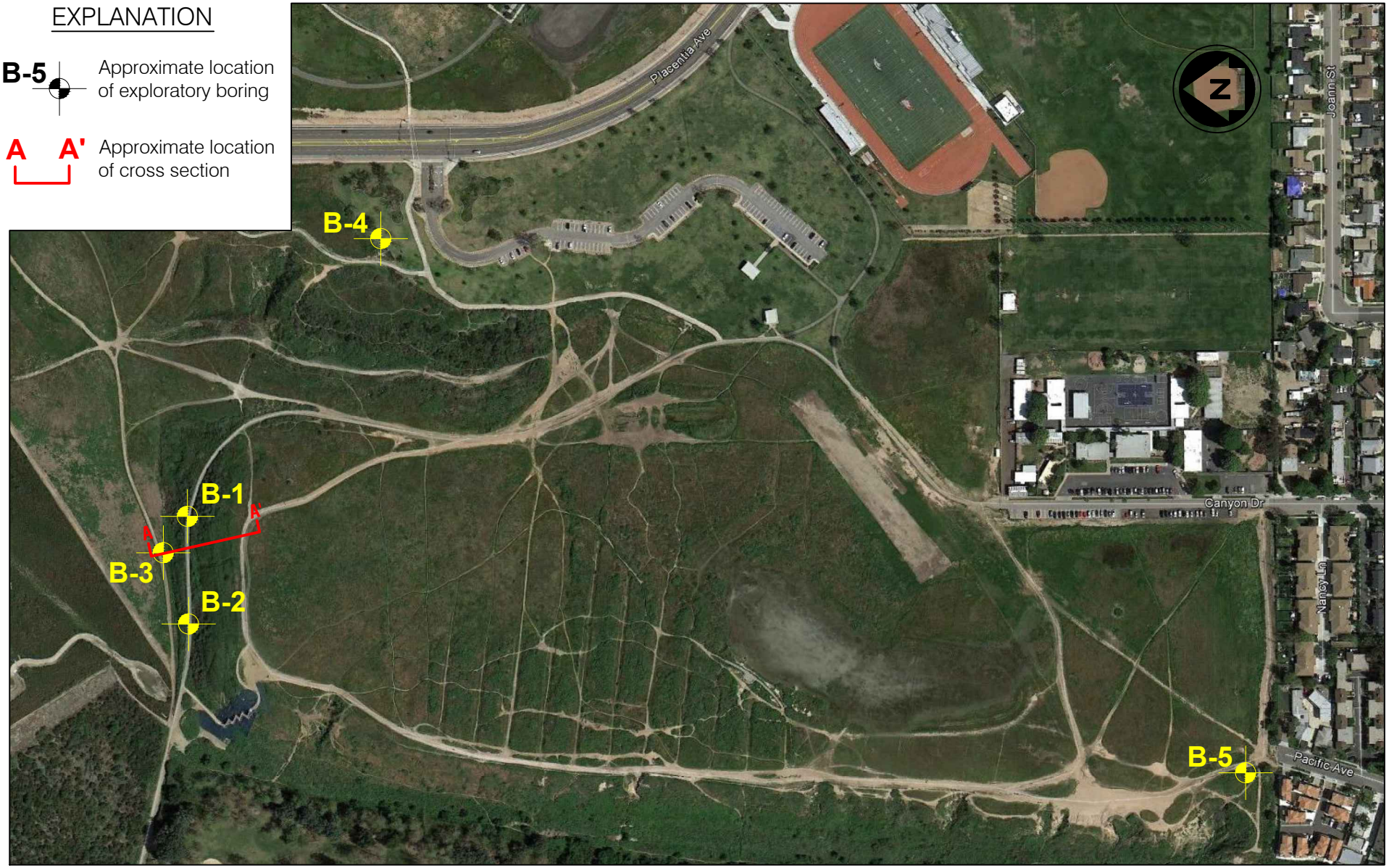
5. CLOSURE

SCST should be advised of any changes in the project scope so that the recommendations contained in this report can be evaluated with respect to the revised plans. Changes in recommendations will be verified in writing. The findings in this report are valid as of the date of this report. Changes in the condition of the site can, however, occur with the passage of time, whether they are due to natural processes or work on this or adjacent areas. In addition, changes in the standards of practice and government regulations can occur. Thus, the findings in this report may be invalidated wholly or in part by changes beyond our control. This report should not be relied upon after a period of two years without a review by us verifying the suitability of the conclusions and recommendations to site conditions at that time.

In the performance of our professional services, we comply with that level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions and in the same locality. The client recognizes that subsurface conditions may vary from those encountered at the boring location, and that our data, interpretations, and recommendations are based solely on the information obtained by us. We will be responsible for those data, interpretations, and recommendations, but shall not be responsible for interpretations by others of the information developed. Our services consist of professional consultation and observation only, and no warranty of any kind whatsoever, express or implied, is made or intended in connection with the work performed or to be performed by us, or by our proposal for consulting or other services, or by our furnishing of oral or written reports or findings.



SOUTHERN CALIFORNIA SOIL & TESTING, INC.	SITE VICINITY MAP CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK	Date: April, 2015 By: AKN Job No.: 1231043PN-1 Scale: Not To Scale	Figure: 1

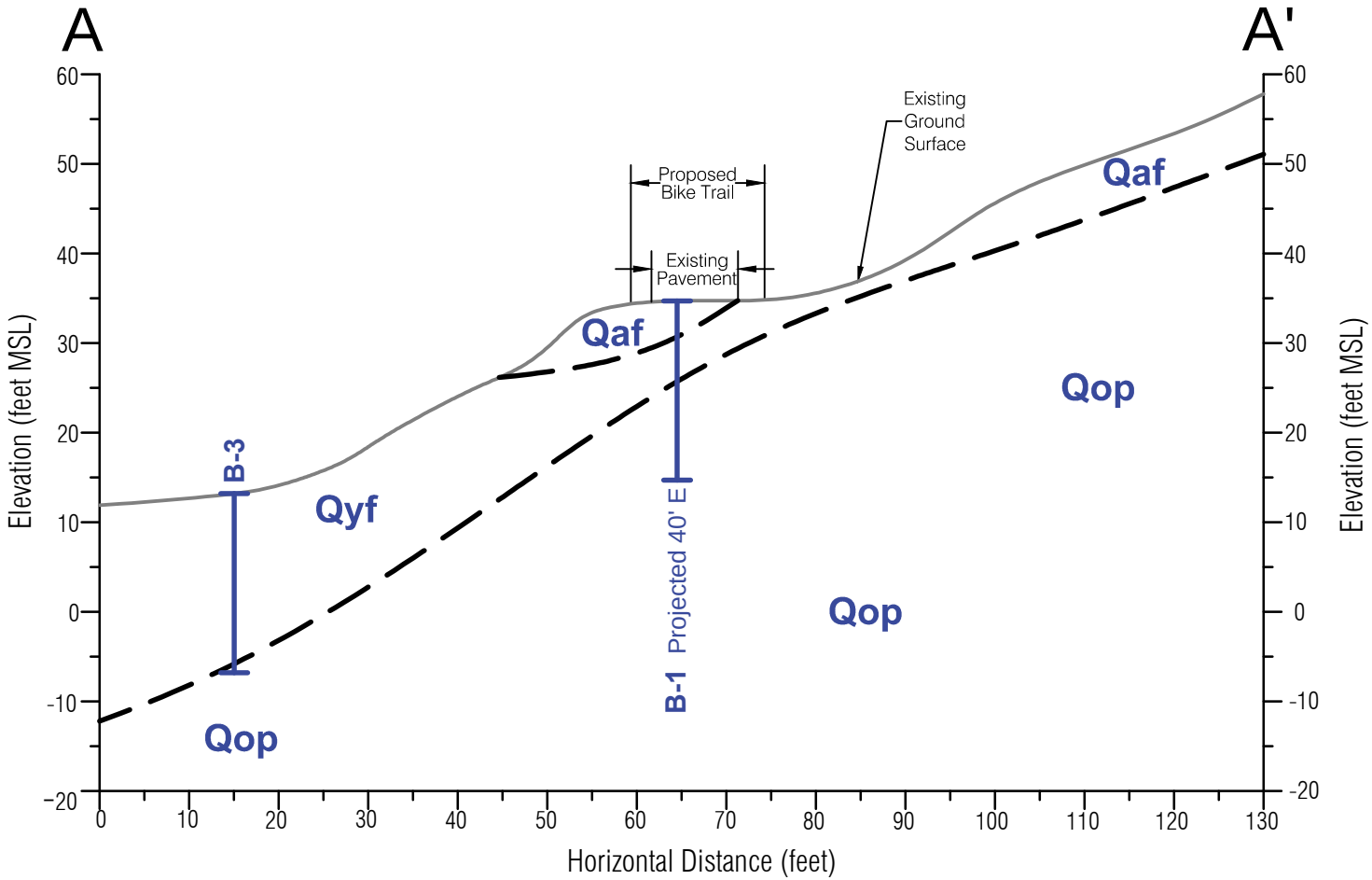


SOUTHERN CALIFORNIA SOIL & TESTING, INC.

SUBSURFACE EXPLORATION MAP
CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

Date:	April, 2015
By:	AKN
Job No.:	1231043PN-1
Scale:	Not To Scale

Figure: 2



SCST LEGEND:

B-3	Approximate Location of Boring	Qyf	Young Aluvial Fan Deposits		Approximate Geologic Contact
Qaf	Artificial Fill	Qop	Old Paralic Deposits		

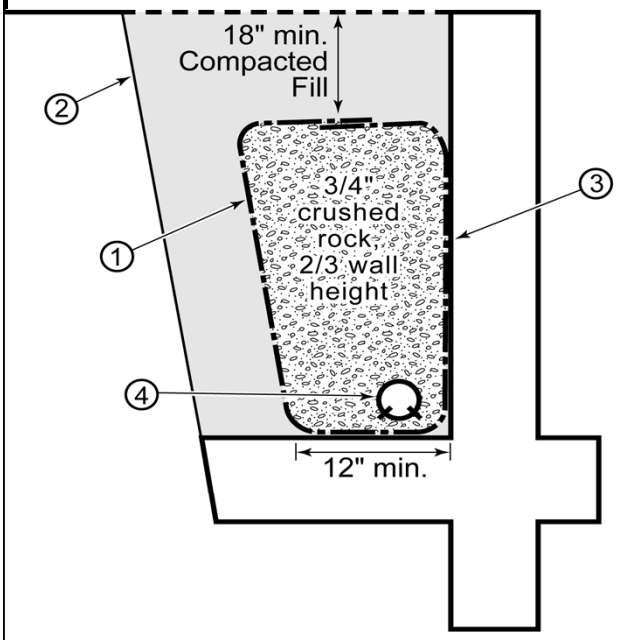
0 20′ 40′
Scale

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

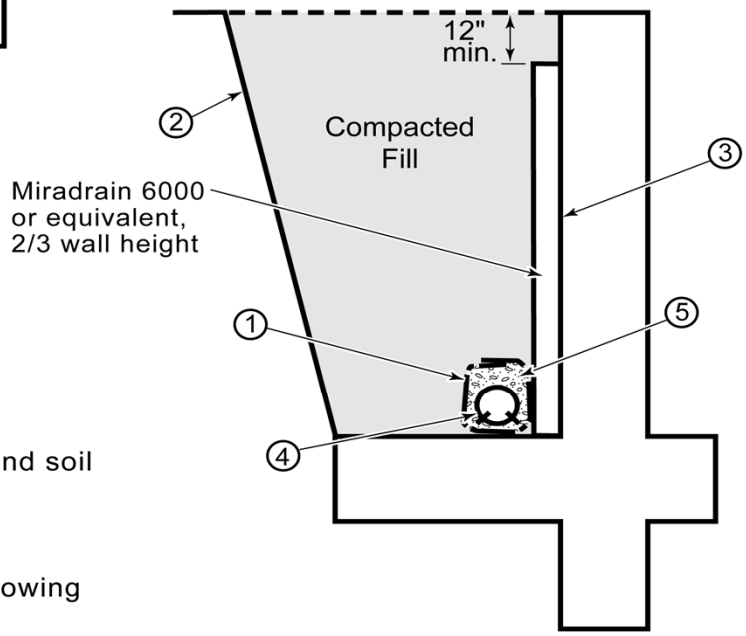
CROSS SECTION A-A'
CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

Date: April, 2015
By: JGA
Job No.: 1231043PN-1

Figure: 3



Typical Retaining Wall
Backdrain Detail
Not to Scale



① Filter fabric between rock and soil

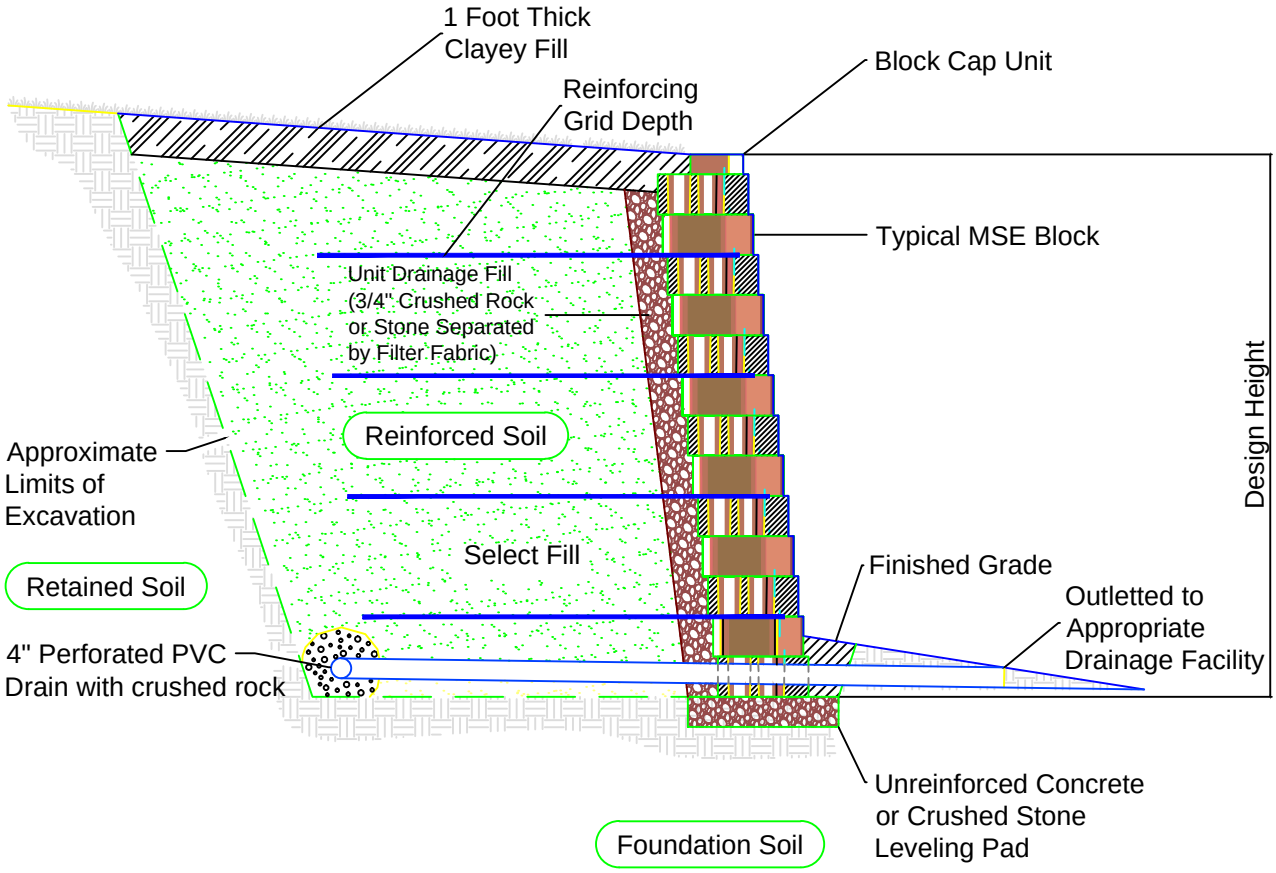
② Backcut

③ Waterproof back of wall following architect's specifications

④ 4" minimum perforated pipe, SDR35 or equivalent, holes down, 1% fall to outlet, encased in 3/4" crushed rock. Provide 3 cubic feet per linear foot crushed rock minimum. Crushed rock to be surrounded by filter fabric (Mirafi 140N or equivalent), with 6" minimum overlap. Provide solid outlet pipe at suitable location.

⑤ 3/4" crushed rock

SOUTHERN CALIFORNIA SOIL & TESTING, INC.	CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK		
	By: AKN	Date:	April, 2015
	Job Number: 1231043PN-1	Figure:	4



Typical MSE Wall Section

SOUTHERN CALIFORNIA SOIL & TESTING, INC.	TYPICAL MSE WALL DETAIL CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK	Date: April, 2015 By: DAS Job No.: 1231043PN-1 Scale: Not To Scale	Figure: 5

APPENDIX I

FIELD INVESTIGATION

Five exploratory test borings were drilled at the locations indicated on Figure 2. The field work was performed under the observation of our geology personnel, who also logged the borings and obtained samples of the materials encountered. Relatively undisturbed samples were obtained with a 2.5-inch inner diameter sampler driven with a 140-pound weight falling 30 inches. Disturbed samples were obtained from drill cuttings. The number of blows required to drive both types of samplers the final 12 inches of an 18-inch drive are noted on the borings logs as “PENETRATION (blows/ft. of drive).”

Soils are described in accordance with the Unified Soil Classification System illustrated on Figure I-1. The boring logs are presented on Figures I-2 through I-6.

SUBSURFACE EXPLORATION LEGEND

UNIFIED SOIL CLASSIFICATION CHART

SOIL DESCRIPTION		GROUP SYMBOL	TYPICAL NAMES
I. COARSE GRAINED, more than 50% of material is larger than No. 200 sieve size.			
GRAVELS More than half of coarse fraction is larger than No. 4 sieve size but smaller than 3".	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
		GP	Poorly graded gravels, gravel sand mixtures, little or no fines.
	GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, poorly graded gravel-sand-silt mixtures.
		GC	Clayey gravels, poorly graded gravel-sand, clay mixtures.
SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SANDS	SW	Well graded sand, gravelly sands, little or no fines.
		SP	Poorly graded sands, gravelly sands, little or no fines.
	SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, poorly graded sand and silty mixtures.
		SC	Clayey sands, poorly graded sand and clay mixtures.
II. FINE GRAINED, more than 50% of material is smaller than No. 200 sieve size.			
	SILTS AND CLAYS (Liquid Limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, sandy silt or clayey-silt-sand mixtures with slight plasticity.
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
		OL	Organic silts and organic silty clays or low plasticity.
	SILTS AND CLAYS (Liquid Limit greater than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
		CH	Inorganic clays of high plasticity, fat clays.
		OH	Organic clays of medium to high plasticity.
III. HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils.

▽ - Water level at time of excavation or as indicated
⊠ - Bulk Sample
AL - Atterberg Limits
CAL - Modified California pentration test sampler
CK - Undisturbed chunk sample
CL - Chloride
CON - Consolidation
COR - Corrosivity Test
- Sulfate
- Chloride
- pH and Resistivity

DS - Direct Shear
EI - Expansion Index
MS - Maximum Size of Particle
MAX - Maximum Density
pH - pH & Resistivity
RC - Relative Compaction
RV - R Value
SA - Sieve Analysis
SC - Sand Cone
SF - Sulfate & Chloride
SPT - Standard penetration test sampler
ST - Shelby Tube
TX - Triaxial Compression
UC - Unconfined Compression

SOUTHERN CALIFORNIA SOIL & TESTING, INC.	CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK		
	By: AKN	Date:	April, 2015
	Job Number: 1231043PN-1	Figure:	I-1

LOG OF EXPLORATORY BORING NUMBER B-1

Date Excavated:	1/9/2013	Logged by:	AKN
Equipment:	Hollow Stem Auger	Project Manager:	GBF
Surface Elevation (ft):	N/A	Depth to Water (ft):	Not Encountered

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: UNDISTURBED	SAMPLES: BULK	PENETRATION (blows/ ft. of drive)	MOISTURE (%)	DRY UNIT WT. (pcf)	LABORATORY TESTS
	CL	**2 INCHES OF ASPHALT CONCRETE**						
2		**ARTIFICIAL FILL (Qaf)** - Dark brownish gray, very moist, soft, SANDY CLAY with GRAVEL.		X				AL, SA
4	SC	**YOUNG ALLUVIAL FAN DEPOSITS (Qyf) -** Mottled medium brown and dark gray, moist, medium dense, CLAYEY SAND.	CAL	X	18			DS
6								
8								
10		**OLD PARALIC DEPOSITS (Qop) -** Mottled light yellowish brown and light gray, moist, medium dense, CLAYEY SANDSTONE.	CAL		20			
12		Light brownish gray, moist, stiff, SANDY CLAYSTONE.		X				
14								
16			CAL		33			DS
18		(contact at 19½ feet) Light orange brown, moist, dense to very dense, SILTY SANDSTONE.						
20			CAL		78			

BORING TERMINATED AT 20 FEET.

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	I-2

LOG OF EXPLORATORY BORING NUMBER B-2

Date Excavated:	1/9/2013	Logged by:	AKN
Equipment:	Hollow Stem Auger	Project Manager:	GBF
Surface Elevation (ft):	N/A	Depth to Water (ft):	Not Encountered

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: UNDISTURBED	SAMPLES: BULK	PENETRATION (blows/ ft. of drive)	MOISTURE (%)	DRY UNIT WT. (pcf)	LABORATORY TESTS
	CL	**2 INCHES OF ASPHALT CONCRETE**						
2		**ARTIFICIAL FILL (Qaf)** - Dark brownish gray, moist to very moist, soft, SANDY CLAY.		X				MAX, DS
4	CL	**YOUNG ALLUVIAL FAN DEPOSITS (Qyf) -** Mottled medium brown and dark gray, moist, stiff, SANDY CLAY.		X				
6			CAL		25			AL, SA
8								
10			CAL		18			
12								
14								
16			CAL		33			
		OLD PARALIC DEPOSITS (Qop) - Mottled light yellowish brown and light gray, moist, medium dense, CLAYEY SANDSTONE.		X				
18		Light orange brown, moist, dense, SILTY SANDSTONE.						
20			CAL		40			

BORING TERMINATED AT 20 FEET.

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	I-3

LOG OF EXPLORATORY BORING NUMBER B-3

Date Excavated:	1/9/2013	Logged by:	AKN
Equipment:	Hollow Stem Auger	Project Manager:	GBF
Surface Elevation (ft):	N/A	Depth to Water (ft):	Not Encountered

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: UNDISTURBED	SAMPLES: BULK	PENETRATION (blows/ ft. of drive)	MOISTURE (%)	DRY UNIT WT. (pcf)	LABORATORY TESTS
	CL	**YOUNG ALLUVIAL FAN DEPOSITS (Qyf) -** Mottled dark gray and light gray, moist, stiff, SANDY CLAY.		X				
2								SA
4								
			CAL		33			
6								
8								
10			CAL		41			
12								
14		Becomes mottled dark gray and medium brown below 14 feet.						
			CAL		28			
16								
18		**OLD PARALIC DEPOSITS (Qop) -** Mottled light yellowish brown and light gray, moist, medium dense, CLAYEY SANDSTONE.						
20			CAL		65			

BORING TERMINATED AT 20 FEET.

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	I-4

LOG OF EXPLORATORY BORING NUMBER B-4

Date Excavated:	1/9/2013	Logged by:	AKN
Equipment:	Hollow Stem Auger	Project Manager:	GBF
Surface Elevation (ft):	N/A	Depth to Water (ft):	Not Encountered

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: UNDISTURBED	SAMPLES: BULK	PENETRATION (blows/ ft. of drive)	MOISTURE (%)	DRY UNIT WT. (pcf)	LABORATORY TESTS
		6 INCHES OF SOD AND ASSOCIATED TOPSOIL						
2	CL	**YOUNG ALLUVIAL FAN DEPOSITS (Qyf) -** Mottled dark gray and light gray, moist to very moist, very stiff, SANDY CLAY.		X				RV
4		**OLD PARALIC DEPOSITS (Qop) -** Mottled light yellowish brown and light gray, moist, medium dense, CLAYEY SANDSTONE.	CAL	X	73			
6								
8		Mottled medium brownish gray and medium orange brown, moist, very dense, SILTY SANDSTONE.		X				
10		**BORING TERMINATED AT 10 FEET.**	CAL		50/6"			
12								
14								
16								
18								
20								

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	I-5

LOG OF EXPLORATORY BORING NUMBER B-5

Date Excavated:	1/9/2013	Logged by:	AKN
Equipment:	Hollow Stem Auger	Project Manager:	GBF
Surface Elevation (ft):	N/A	Depth to Water (ft):	Not Encountered

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: UNDISTURBED	SAMPLES: BULK	PENETRATION (blows/ ft. of drive)	MOISTURE (%)	DRY UNIT WT. (pcf)	LABORATORY TESTS
		OLD PARALIC DEPOSITS (Qop) - Mottled medium brownish gray and medium brown, moist, very stiff to hard, SANDY CLAYSTONE.						
2								SA
4								
6			CAL		54			
8		Mottled medium brownish gray and medium orange brown, moist, very dense, SILTY SANDSTONE.						
10		**BORING TERMINATED AT 10 FEET.**	CAL		50/6"			
12								
14								
16								
18								
20								

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

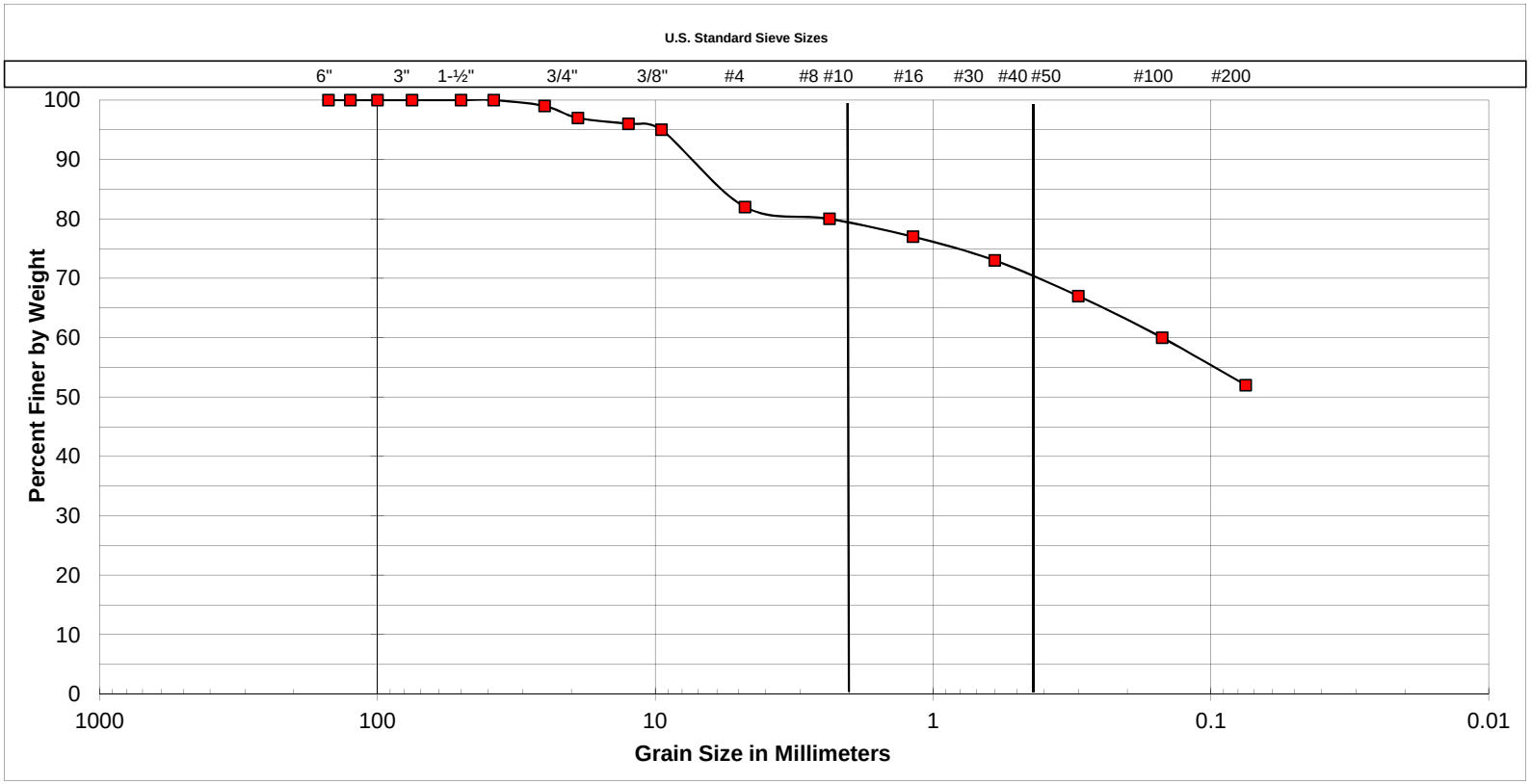
CITY OF COSTA MESA BIKE TRAIL INPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	I-6

LABORATORY TESTING

The laboratory test program was designed to fit the specific need of this project and was limited to testing on-site materials. A brief description of each type of test is presented below. Results are given on the following pages and on the test pit logs in Appendix I.

- **CLASSIFICATION:** Field classifications were verified in the laboratory by visual examination. The final soil classifications are in accordance with the Unified Soil Classification System.
- **ATTERBERG LIMITS:** The atterberg limits were determined for 2 samples in accordance with ASTM D 4318. The results are presented on Figures II-1 and II-2.
- **GRAIN SIZE DISTRIBUTION:** The grain size distributions were determined for four samples in accordance with ASTM D 422. The results are shown on Figures II-1 through II-4.
- **MAXIMUM DENSITY AND OPTIMUM MOISTURE:** The maximum density and optimum moisture content was determined for one sample in accordance with ASTM D 1557. The results are presented on Figure II-5.
- **RESISTANCE R-VALUE:** One R-value was determined for the subgrade material in accordance with California Test 301. The result is presented on Figure II-5.
- **DIRECT SHEAR:** Three direct shear tests were performed in accordance with ASTM D 3080. The shear stress was applied at a constant rate of strain of approximately 0.003 inch per minute. The results are presented on Figures II-6 through II-8.



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-1 at 1 foot to 4 feet

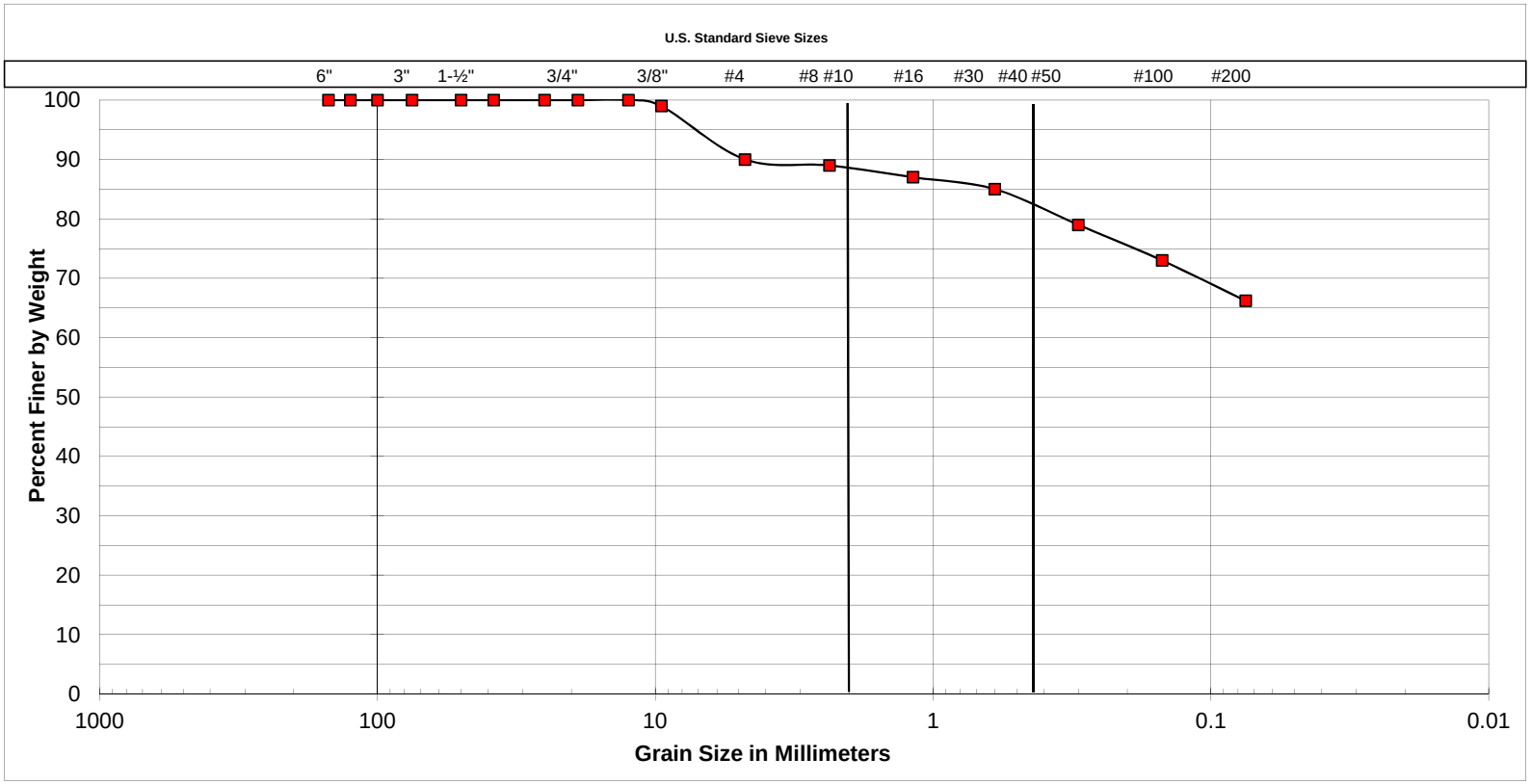
UNIFIED SOIL CLASSIFICATION:	CL
DESCRIPTION	SANDY CLAY with GRAVEL

ATTERBERG LIMITS	
LIQUID LIMIT	34
PLASTIC LIMIT	19
PLASTICITY INDEX	15

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-1



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-2 at 4 feet to 9 feet

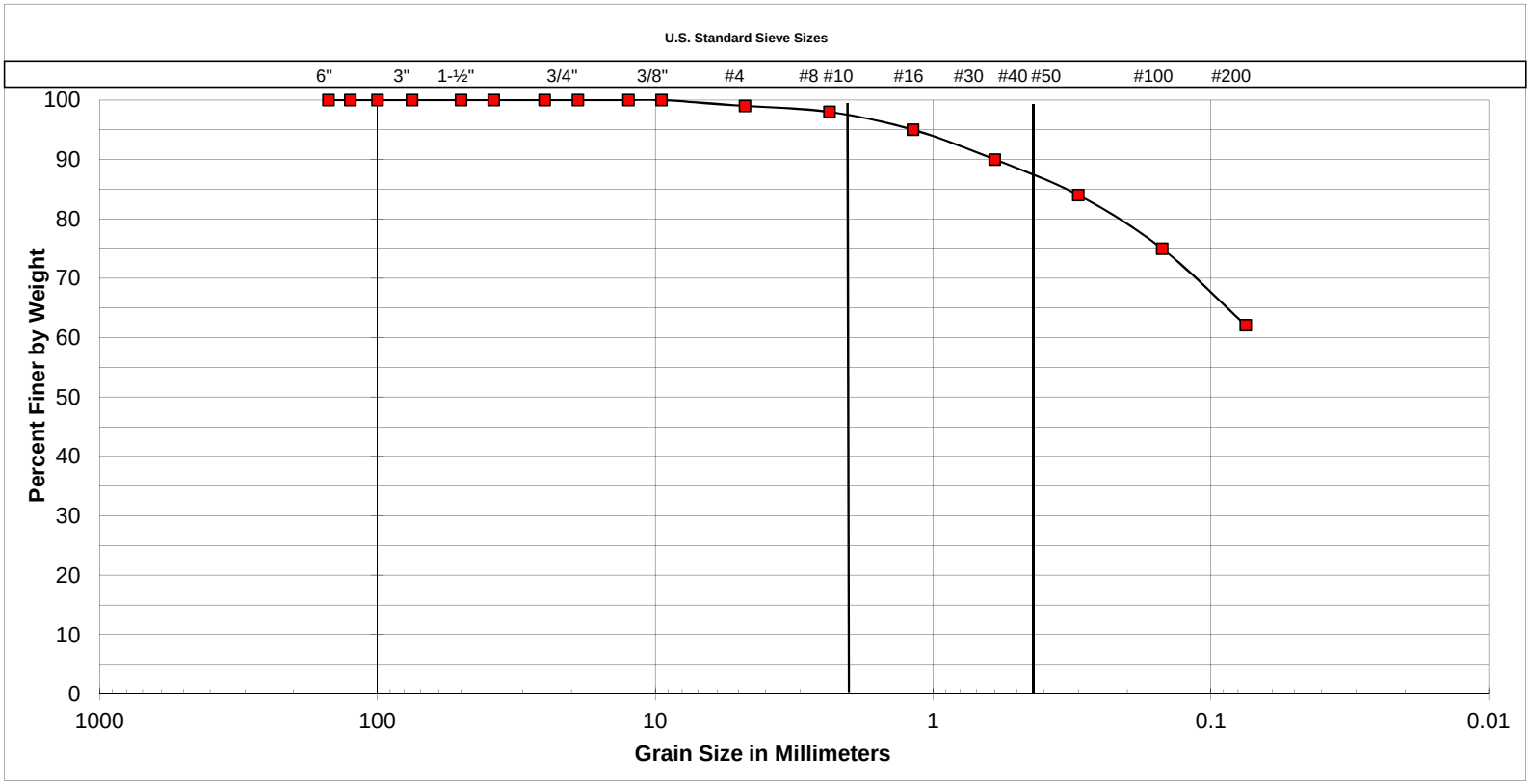
UNIFIED SOIL CLASSIFICATION:	CL
DESCRIPTION	SANDY CLAY

ATTERBERG LIMITS	
LIQUID LIMIT	40
PLASTIC LIMIT	13
PLASTICITY INDEX	27

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-2



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 0 foot to 5 feet

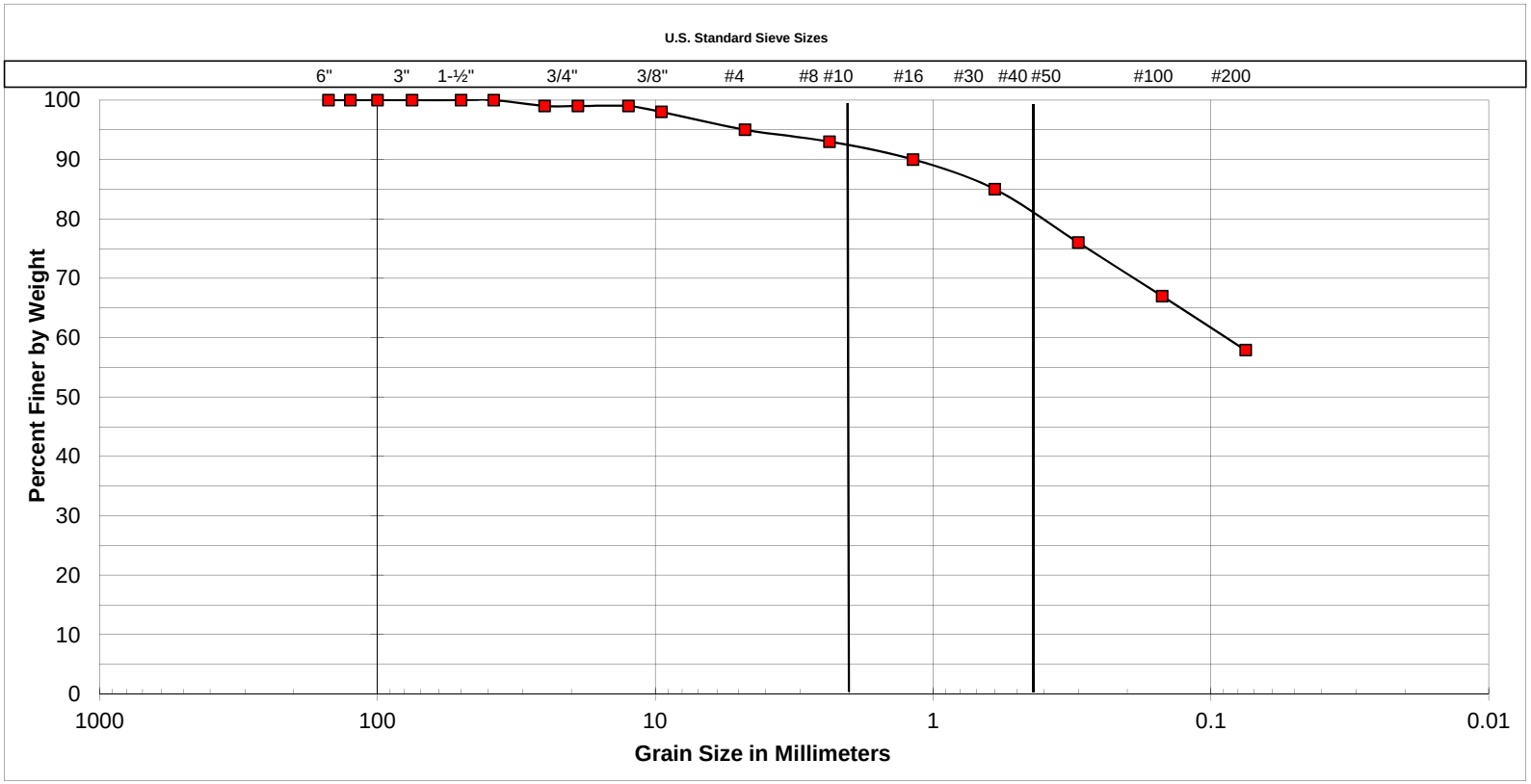
UNIFIED SOIL CLASSIFICATION:	CL
DESCRIPTION	SANDY CLAY

ATTERBERG LIMITS	
LIQUID LIMIT	N/A
PLASTIC LIMIT	N/A
PLASTICITY INDEX	N/A

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-3



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-5 at 0 foot to 5 feet

UNIFIED SOIL CLASSIFICATION:	CL
DESCRIPTION	SANDY CLAY

ATTERBERG LIMITS	
LIQUID LIMIT	N/A
PLASTIC LIMIT	N/A
PLASTICITY INDEX	N/A

SOUTHERN CALIFORNIA SOIL & TESTING, INC.

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-4

MAXIMUM DENSITY & OPTIMUM MOISTURE CONTENT

METHOD - A

ASTM - D1557

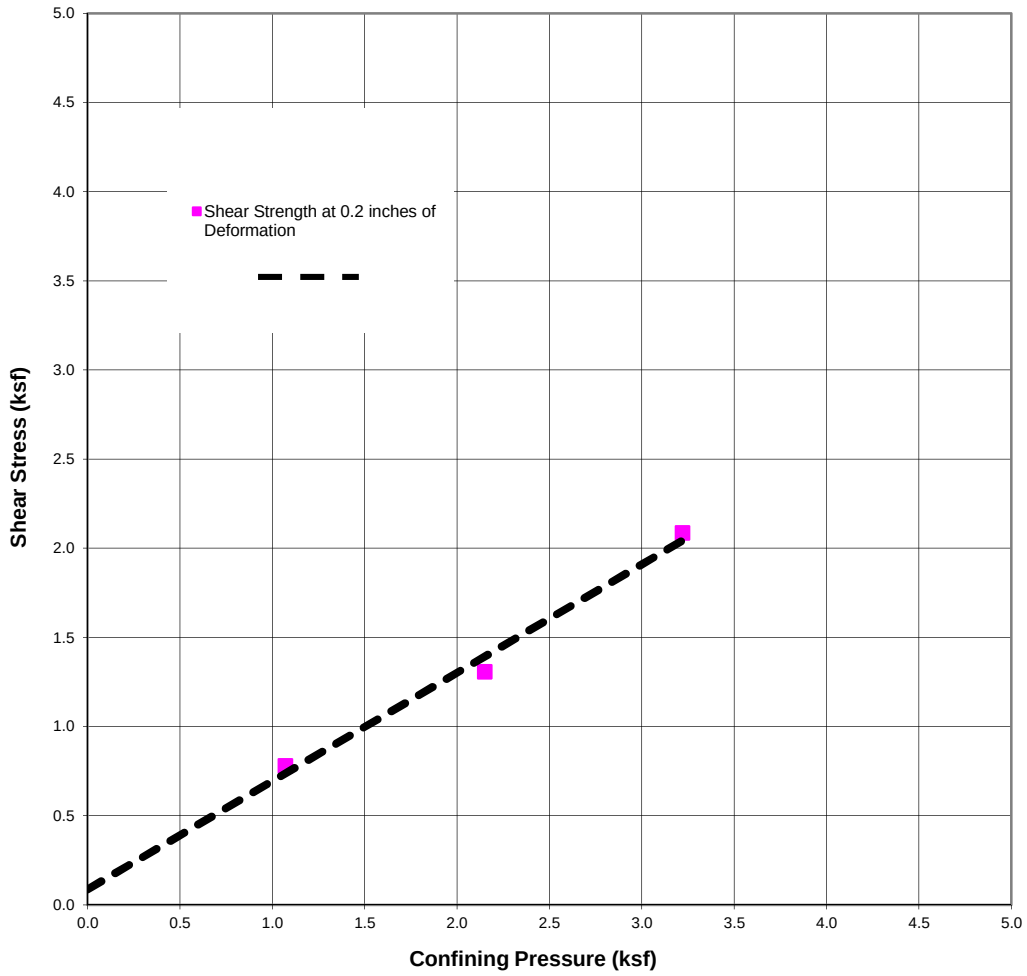
SAMPLE	DESCRIPTION	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE (pcf)
B-2 at 1 foot to 4 feet	SANDY CLAY (CL)	121.9	10.5

"R" VALUE

Caltrans Test 301

SAMPLE	"R" VALUE
B-4 at 1 foot to 4 feet	**<5**

Direct Shear Test Results



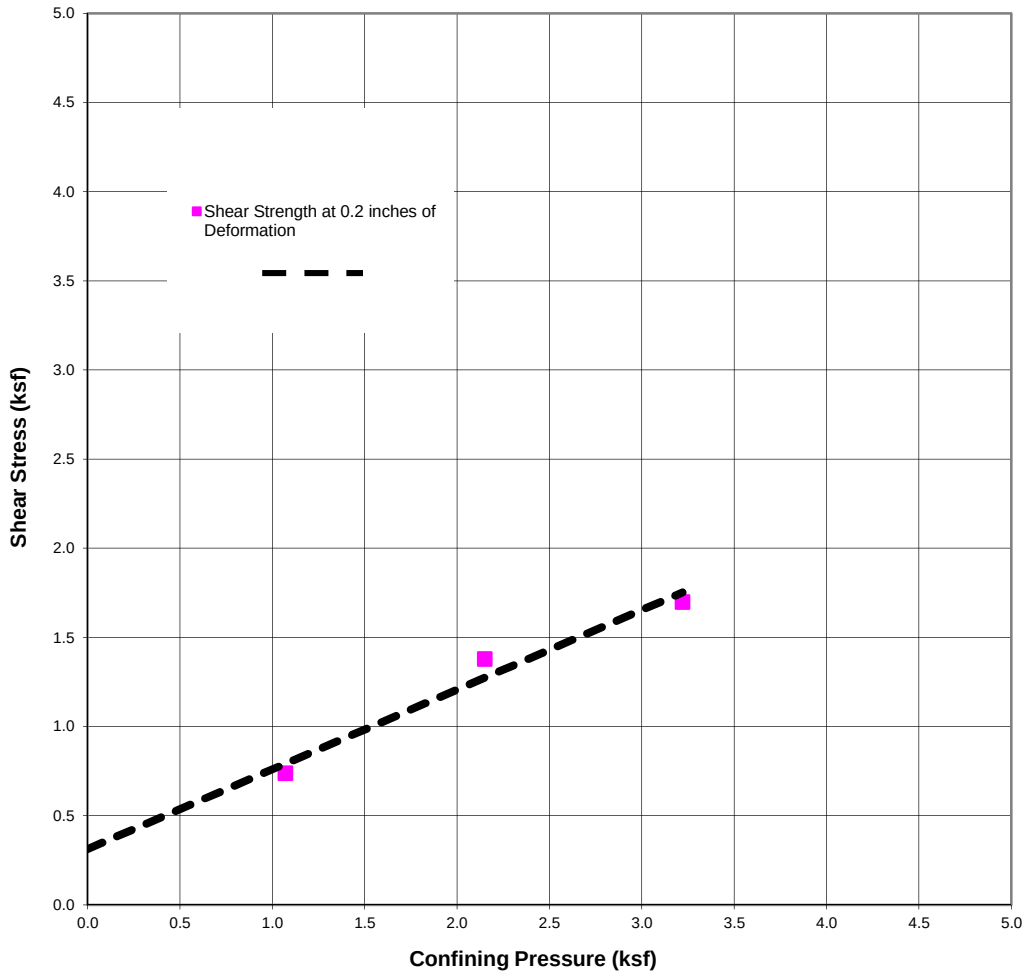
SAMPLE	DESCRIPTION	INTERNAL FRICTION ANGLE(DEG.)	COHESION INTERCEPT (PSF)
B-1 at 5 feet	CLAYEY SAND (SC)		
Shear Strength at 0.2 inches of Deformation		31	86

SOUTHERN CALIFORNIA SOIL & TESTING

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-6

Direct Shear Test Results



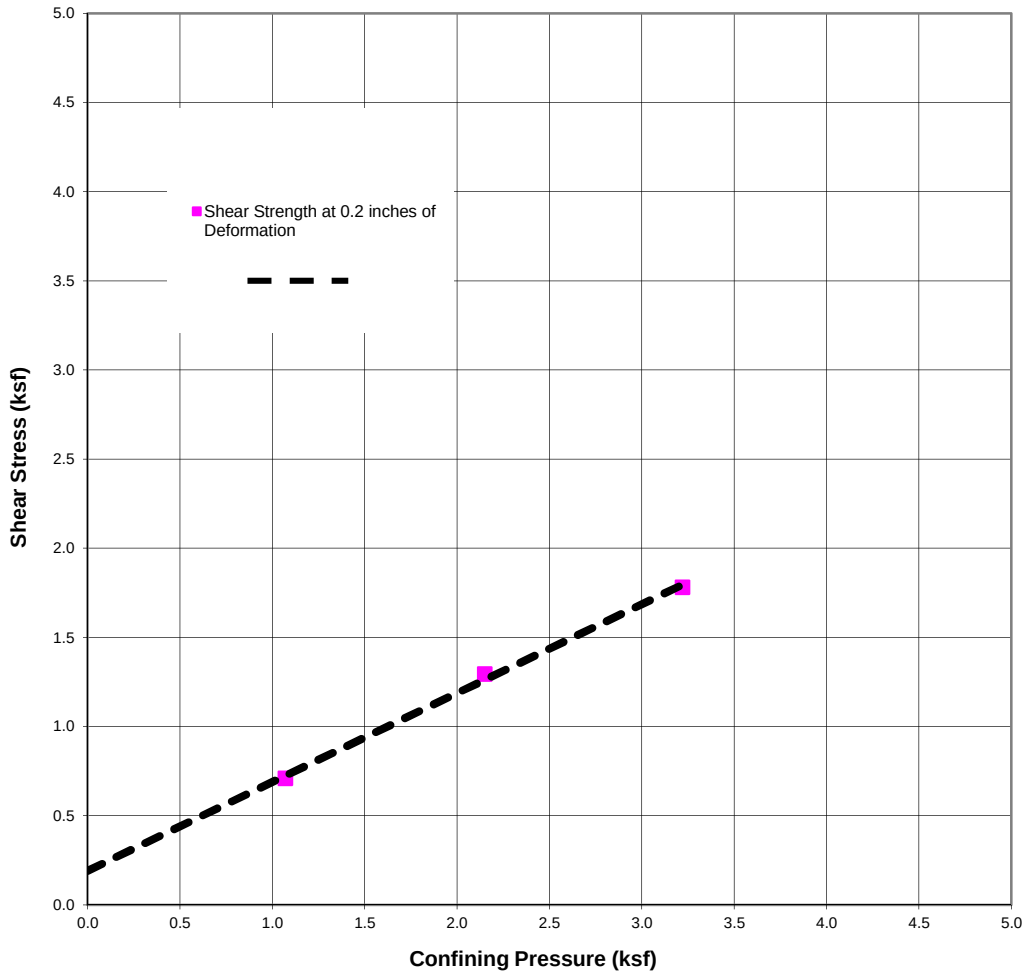
SAMPLE	DESCRIPTION	INTERNAL FRICTION ANGLE(DEG.)	COHESION INTERCEPT (PSF)
B-1 at 15 feet	SANDY CLAY (CL)		
Shear Strength at 0.2 inches of Deformation		24	312

SOUTHERN CALIFORNIA SOIL & TESTING

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-7

Direct Shear Test Results



SAMPLE	DESCRIPTION	INTERNAL FRICTION ANGLE(DEG.)	COHESION INTERCEPT (PSF)
B-2 at 1 foot 4 feet	SANDY CLAY (CL)		
Shear Strength at 0.2 inches of Deformation	Remolded to 90% Relative Compaction	26	192

SOUTHERN CALIFORNIA SOIL & TESTING

CITY OF COSTA MESA BIKE TRAIL IMPROVEMENTS AT FAIRVIEW PARK

By:	AKN	Date:	April, 2015
Job Number:	1231043PN-1	Figure:	II-8

Dr. & Mrs. William Williams
[redacted]
Costa Mesa, CA 92627
[redacted]

August 13, 2015

Costa Mesa City Council
Costa Mesa City Hall
77 Fair Drive
Costa Mesa, CA 92626

SEP 15 '15 AM 7:52

Subject: Lack of Handicapped Access to the Ponds at Fairview Park

Gentlemen:

First, let me applaud the addition of the "ponds" at the Fairview Park area. They really add a lot of interest to the area as well as clarifying the water and attracting wildlife.

My concern is that the ponds are not accessible to the physically handicapped.

There is no parking available in that area, so people who are physically handicapped and thus are not able to walk from the upper parking area and navigate their way up and down the bluff are unable to access the lower pond area.

I am certain there are many people, besides my husband and myself, that would appreciate having access to the pond area. Perhaps when you are discussing the addition of a pathway this month, you can also address the handicapped parking situation.

Thank you for your kind consideration in this matter.

Sincerely yours,

Alma Williams M. A.

William C. Williams, PHD

MEJIA, JESSICA

Subject: FW: Council Mail 9-15-15

From: MUNOZ, ERNESTO
Sent: Tuesday, September 15, 2015 12:06 PM
To: STEPHEN MENSINGER [redacted]
Cc: Gary Monahan [redacted] CITY COUNCIL <CITYCOUNCIL@ci.costa-mesa.ca.us>; HATCH, THOMAS <THOMAS.HATCH@costamesaca.gov>; GREEN, BRENDA <brenda.green@costamesaca.gov>; RODELIUS, SHARON <SHARON.RODELIUS@costamesaca.gov>; LETOURNEAU, TAMARA <TAMARA.LETOURNEAU@costamesaca.gov>
Subject: RE: Council Mail 9-15-15

Mr. Mayor,

Currently there is no ADA-compliant access to the wetlands areas of the park from the main parking lot. The proposal for improvements to the trails at Fairview Park will address this concern and will tie the lower wetlands with the upper mesa area of the park via ADA accessible trails. The realigned portion of the trail through the canyon provides a more direct access to the lower Fairview Park amenities, including the proposed gathering and interpretive area near Pond A.

Ernesto Munoz, P.E.
Public Services Director
City of Costa Mesa
714-754-5343
ernesto.munoz@costamesaca.gov

From: Mensinger Steve [mailto:[redacted]
Sent: Tuesday, September 15, 2015 10:33 AM
To: RODELIUS, SHARON <SHARON.RODELIUS@costamesaca.gov>
Cc: Gary Monahan [redacted] CITY COUNCIL <CITYCOUNCIL@ci.costa-mesa.ca.us>; HATCH, THOMAS <THOMAS.HATCH@costamesaca.gov>; GREEN, BRENDA <brenda.green@costamesaca.gov>; MUNOZ, ERNESTO <ERNESTO.MUNOZ@costamesaca.gov>
Subject: Re: Council Mail 9-15-15

Tammy,

This greatly concerns me. Can we get a staff report on what we are doing to grant access and improve the links for the disabled??

Via IPhone
Regards,

Steve Mensinger
Mayor
City of Costa Mesa
77 Fair Drive
Costa Mesa, California 92627

MEJIA, JESSICA

Subject: FW: City Council Consent Calendar Item No. 10 - vacation of excess right-of-way at 752 W. 19th St.

From: Cynthia McDonald [mailto:[redacted]
Sent: Tuesday, September 15, 2015 12:31 PM
To: GREEN, BRENDA <brenda.green@costamesaca.gov>; SETHURAMAN, RAJA <RAJA.SETHURAMAN@costamesaca.gov>; ARMSTRONG, GARY <GARY.ARMSTRONG@costamesaca.gov>
Cc: FOLEY, KATRINA <KATRINA.FOLEY@costamesaca.gov>; GENIS, SANDRA <SANDRA.GENIS@costamesaca.gov>; RIGHEIMER, JIM <JIM.RIGHEIMER@costamesaca.gov>; MENSINGER, STEPHEN <STEPHEN.MENSINGER@costamesaca.gov>; MONAHAN, GARY <GARY.MONAHAN@costamesaca.gov>
Subject: City Council Consent Calendar Item No. 10 - vacation of excess right-of-way at 752 W. 19th St.

As a resident and a member of the Bikeways and Walkability Committee, I ask that you not vacate this right-of-way. The City's Bicycle Master Plan is grossly deficient in providing adequate bike lanes. Given the redevelopment of the Westside, which includes this live-work project, the City will need to provide additional bike lanes, protected bike lanes and multi-user trails to offset the additional motor vehicle traffic that comes with new residents. In addition, there is a substantial amount of commuter bike traffic in Costa Mesa, and the ranks are rising daily. The City needs to start looking at more ways to provide safe streets for those riders.

Please note that the Bikeways and Walkability Committee has a substantial amount of work to do before it makes changes to the Bicycle Master Plan. Please do not take away the flexibility it needs to accomplish its goals and to make Costa Mesa more active transportation friendly. Rights-of-way, utility easements, abandoned rail lines may seem like a tiny thing to you, but to a bicyclist, a few inches means a lot in terms of safety.

Thank you for your consideration.

Cynthia McDonald
[redacted]
Costa Mesa, CA 92626
[redacted]

MEJIA, JESSICA

Subject: FW: September 15th City Council Agenda New Business Item 2 - North Bluff Trail Realignment

-----Original Message-----
From: GENIS, SANDRA
Sent: Tuesday, September 15, 2015 1:40 PM
To: GREEN, BRENDA <brenda.green@costamesaca.gov>
Subject: FW: September 15th City Council Agenda New Business Item 2 - North Bluff Trail Realignment

fyi

From: Brian Burnett [redacted]
Sent: Tuesday, September 15, 2015 1:28 PM
To: CITY COUNCIL
Subject: September 15th City Council Agenda New Business Item 2 - North Bluff Trail Realignment

Dear Costa Mesa City Council,

I would like to respectfully challenge the city council to create a solution for the multi-purpose trail that currently goes through Fairview Park that does not involve breaking the laws of California or the United States, not violate city policy 500-11, not violate the Fairview Park Master Plan, not violate AB-52, and possibly most important be aesthetically and texturally pleasing to the senses and not take away from the natural beauty of the park that changes from season to season.

As far as new business item 2 goes regarding whether or not the realignment is or is not consistent with the Fairview Park Master Plan, it is clearly, without a doubt, not consistent with the Master Plan. Here are just a few reasons why:

1. The Master Plan states that the canyon in question is to be restored with coastal bluff scrub plant community. It does not say build an 8 foot wide concrete trail through the canyon.

2. The intent of the Master Plan is to preserve park resources. The realignment will destroy biological resources of the park and likely impact cultural resources of the park as well. Many of these resources are listed in the Master Plan and biological reports commissioned by the city of Costa Mesa.

3. The intent of the Master Plan is to have minimal trails, and any trails that are constructed are to be as natural as possible. Concrete is the most unnatural material the city could possibly use.

4. The intent of the Master Plan is to protect the watershed of the park. The Master Plan identifies the canyon as part of the park's watershed. It's also listed with the USFWS inventory of wetlands and is considered a water of the state of California. That means the infilling of the canyon in 2009 was probably illegal and all the habitat that was destroyed will have to be restored.

As something closely related to Item 2, I would suggest using DG and revegetating the north bluff to strengthen the slope. It does not need retaining walls. That appears to be a false dilemma created

by an inaccurate report from city staff. Other engineers have looked at it and have mentioned that cracks in the asphalt on the slope are also found in other areas on the flat upper mesa as well. Cracks in the current asphalt multipurpose trail are more than likely due from the trail not having been properly maintained since 1988.

The advantages of DG are that it's healthier and safer for people that walk, jog, or run on. This is because it's more natural for human biology and kinder to feet, knees, and the body in general. It's also safer for anyone that falls on a bike and hits their head. This is even more important since bicycle helmets create a false sense of security, very rarely provide much benefit, and are often not worn. DG is also much more natural looking than asphalt or concrete. It also provides a texture that is much more pleasant to walk that still lets your body know you are in a natural environment.

As far as ADA goes, the park is currently ADA compliant. There is no requirement for concrete to be used to be ADA compliant. In fact, concrete will likely increase the speed of sport bicyclists biking through a nature park and create a more dangerous speed differential situation than currently exists. People in wheelchairs at Fairview go there for the same reason able bodied people do. To enjoy nature and to feel the texture of the dirt and gravel underneath their feet.

The city should not proceed with the construction process now that it knows it will be violating the Master Plan. I would like to respectfully ask the city council to vote against the realignment.

Sincerely,

Brian Burnett
Costa Mesa

MEJIA, JESSICA

Subject: FW: Fairview Park access trail - Sept 15th City Council Meeting

From: Cromwell, Tim [mailto:[redacted]
Sent: Tuesday, September 15, 2015 2:18 PM
To: Mayor <Mayor@costamesaca.gov>; MENSINGER, STEPHEN <STEPHEN.MENSINGER@costamesaca.gov>; RODELIUS, SHARON <SHARON.RODELIUS@costamesaca.gov>; RIGHEIMER, JIM <JIM.RIGHEIMER@costamesaca.gov>; FOLEY, KATRINA <KATRINA.FOLEY@costamesaca.gov>; GENIS, SANDRA <SANDRA.GENIS@costamesaca.gov>; MONAHAN, GARY <GARY.MONAHAN@costamesaca.gov>; GREEN, BRENDA <brenda.green@costamesaca.gov>
Cc: Fairview Park <FairviewPark@ci.costa-mesa.ca.us>
Subject: Fairview Park access trail - Sept 15th City Council Meeting

Dear Members of the Costa Mesa City Council:

I am rarely in support of adding more concrete to Fairview Park, especially if it might not be something that the current Master Plan would allow.
We need to remember always that this park is supposed to remain a passive Preserve.

I don't think adding a concrete road is a very good idea, but what really concerns me most is this:

- If we build this wide concrete road, would cars ever drive down it?
- If cars can drive down it, is there a chance that the City will suggest adding a parking lot?
- If we have cars driving down there and a parking lot, are adding bathrooms next?

Does anyone recall that we originally had a natural canyon before we allowed a grading contractor to dump all of their dirt there?
That's where this wide, dirt path came from...the grading of lower Fairview Park and construction for the ponds (I'll complain about the mosquitoes at a later date)

Is this new access road a modification to the Master Plan?
And are all these modifications just a plan to eventually get parking lots on the lower park?

I'd like to know if the County of Orange has ever suggested we provide access and parking to their Talbert Park.
Or that the City acquire Talbert Park?
Can you tell us if these ideas have ever been discussed?

A second concern is this:
If you build this new concrete road, you will probably do something really dumb and want to remove the asphalt trail that leads from Talbert Park to the top of the bluffs.
You know the one – the one that all of the high school athletic teams, joggers, hikers, walkers, bicyclists and families love to use for their exercise…every day of the week, 365 days a year.
It's the perfect grade elevation for training.
A little crumbling asphalt that worries you?
Big deal…get the pot holes filled once in awhile.
This trail is loved and used by many, many people and we do NOT want to see it removed!

Let's just keep it simple, stick with our Master Plan and stop making changes to it.

Please stop removing our dirt trails and adding more concrete to our Preserve.

By the way, seemingly out of nowhere, two benches have been installed on the decomposed granite trail alongside the bluffs.
One was installed somewhat out of the way of the trail, the other was installed so that it's encroaching the trail, and in a ridiculous location near a busy intersection of trails.
Just seemed to be very strange locations for benches, pretty unnecessary and a waste of money.

Thanks for your time and consideration.

Tim Cromwell
[redacted]
Costa Mesa
[redacted]

MEJIA, JESSICA

Subject: FW: Fairview park
Attachments: 0493-6_Trail Realignment_091415.pdf

From: MUNOZ, ERNESTO
Sent: Tuesday, September 15, 2015 2:21 PM
To: KATRINA FOLEY <[redacted]
Cc: HATCH, THOMAS <THOMAS.HATCH@costamesaca.gov>; GENIS, SANDRA <SANDRA.GENIS@costamesaca.gov>; MENSINGER, STEPHEN <STEPHEN.MENSINGER@costamesaca.gov>; MONAHAN, GARY <GARY.MONAHAN@costamesaca.gov>; RIGHEIMER, JIM <JIM.RIGHEIMER@costamesaca.gov>; RODELIUS, SHARON <SHARON.RODELIUS@costamesaca.gov>; Gary Monahan <[redacted]>; LETOURNEAU, TAMARA <TAMARA.LETOURNEAU@costamesaca.gov>
Subject: RE: Fairview park

Council Member Foley,

We have reviewed the comments made in the Facebook post and we are providing the following responses (in red). Also, subsequent to concerns raised regarding the designation of the path for the proposed realigned trail as "riverine wetlands", and to provide accurate information to the Council, a field investigation was conducted by the firm of Glenn Lukos Associates. Their memorandum, outlining their findings which support the responses to the comments made on the Facebook site is included herein for your information. Mr. Tony Bomkamp with Glenn Lukos Associates will be available at tonight's meeting to answer any questions you may have regarding his findings. Mr. Bomkamp is a Field Botanist, Wetlands Biologist, and Senior Specialist at Glenn Lukos Associates with extensive experience in wetlands delineation through Southern California. Please note that if the City moves forward with the trail realignment alternative, it would be required to prepare all the environmental studies and reports so they may be reviewed by all the applicable regulatory agencies. No work on the trail would begin until the City has cleared all the environmental requirements as per CEQA and NEPA and approval is obtained by the granting agencies.

Facebook comments and responses (in red):

Important City Council Meeting on Tuesday September 15th!
New business item 2 on the agenda is regarding a proposed 8 foot wide concrete multi-purpose trail / road (plus 4 feet of shoulder) to be bulldozed through Fairview Park's only naturally formed canyon and historic watershed.
Luckily we have one more chance to say no to the realignment. Make sure to show up at the meeting or send an email to the Costa Mesa city council and let them know the Fairview Park north bluff trail realignment is NOT consistent with the Fairview Park Master Plan.
Here are just a few reasons why it is not consistent with the master plan:

1. The Master Plan clearly states that the canyon the proposed realignment goes through is to be restored with coastal bluff scrub plant community with no mention of a concrete trail or road.
The switchback trail on the Fairview Park Master Plan was amended as a minor amendment to the Fairview Park Master Plan at the May 24, 2006 Parks and Recreation Commission meeting as a realigned 4 ft. wide ADA trail. Staff captured a $200,000 grant from the State Parks and Recreation Habitat Conservation Fund in November 2013 to restore 2 acres of Coastal Sage Scrub, which includes the canyon, and to build the 4 ft. DG trail through the canyon. This project has not been started and the funding is still available. If the existing trail is realigned, staff would work with the granting agencies to revise the scope of work for this grant.

2. The Master Plan is clear about protecting the park's biological resources including gnat catcher habitat and other endangered or threatened habitat which the canyon does have. Not only is there riparian habitat but rare trap door spider habitat that the FPMP specifically mentions as being in the canyon.
A biological survey was conducted by the City's consultant, LSA Associates Inc. in 2005 and 2006 (included in the Fairview Park Master Plan) which did not detect any California Trapdoor Spiders.

The coastal sage scrub that is located immediately east of the proposed north-south segment of the proposed realigned trail exhibits some potential for supporting the coastal California gnatcatcher; however, the project would not result in the loss of coastal sage scrub and as such there would be no potential for direct impacts to the coastal California gnatcatcher. In order to ensure that there would be no indirect impacts during construction, the work would either 1) be performed outside the coastal California gnatcatcher nesting season (February 15 to July 31) or that pre-construction surveys by a qualified biologist be conducted to ensure that there are no coastal California gnatcatchers using the area. If coastal California gnatcatcher is detected, then work would be delayed until nesting is completed. Should coastal California gnatcatchers be detected, the City will notify U.S. Fish and Wildlife Service (USFWS) to ensure that potential impacts are fully avoided.

3. The Master Plan clearly states the canyon is part of the historic watershed of the park. The intent of the master plan was to protect the watershed in the most natural way possible.
The proposed trail does not change existing drainage patterns in the park. The work covered by the Habitat Conservation Fund grant includes removing all non-native plants and replanting the canyon with appropriate California native plant species.

Furthermore, the canyon Mayor Mensinger (and potentially his 3 member council majority) might bulldoze is listed in the USFWS National Wetlands Inventory. Neither the city of Costa Mesa nor the CDFW has any record of any permits the city would have needed to obtain before part of the canyon was damaged in 2009. That particular damage included environmentally sensitive areas. No where in the Master Plan does it condone illegally destroying habitat. If anything the city needs to restore the canyon and return it to how it was before 2009 let alone build a trail / road through there. Building the mayor's road through the park will no doubt cost the city even more money in legal fees and lost credibility.
The grant awarded by the California Department of Parks and Recreation will restore the Coastal Sage Scrub in the canyon and connect it to the recently restored "Vandersloot Garden"/Eagle Scout Project.

The USFWS Wetland Inventory shows the north-south canyon segment as containing "Riverine Wetlands". The area was carefully evaluated by a biologist for wetland conditions including signs of wetland hydrology, vegetation, and hydric soils. Given all of these considerations, it is clear that the subject canyon has been inaccurately mapped as a "Riverine Wetland". It is also noteworthy to point out that the figure provided by USFWS includes the following disclaimer:

"This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or correctness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site"

It is important to also note that USFWS has no regulatory authority over "wetlands" per se; rather, impacts to wetlands are regulated by the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act. As already noted, the area fails to meet the Corps' wetland definition which requires that wetland hydrology, hydric soils and wetland vegetation ALL be present at the same location for an area to be considered wetland under Section 404. Given that all three criteria are absent, the area is not a wetland under Section 404. The area also fails to meet the new definition of Waters of the U.S as set forth in the new regulation issued jointly by the Corps and EPA on June 29, 2015.

The plans and specifications for the construction of the Wetlands project included the use of the soil generated from the construction of the ponds at two possible degraded locations within the park; The canyon in question, and the location over ORA-58 to use the soil as a cap for the archeologically sensitive site. The Canyon area was selected over

ORA-58 because it was denuded of vegetation and it was badly eroded and degraded by the constant use of BMX bike enthusiasts. No habitat was destroyed with this work.

Please let me know if we can answer any additional questions on this item.

Ernesto Munoz, P.E.
Public Services Director
City of Costa Mesa
714-754-5343
ernesto.munoz@costamesaca.gov

From: Katrina Foley-Costa Mesa City Councilmember [mailto:[redacted]
Sent: Tuesday, September 15, 2015 6:19 AM
To: MUNOZ, ERNESTO <ERNESTO.MUNOZ@costamesaca.gov>; HATCH, THOMAS <THOMAS.HATCH@costamesaca.gov>
Subject: Fairview park

I'd like to get some information that helps me understand this project better. What is the response to some of these concerns?

https://www.facebook.com/FairviewNaturePark/posts/959235517468367:0

Katrina Foley
Costa Mesa City Council
www.costamesaca.gov

www.katrinafoley.com
@katrinafoley

Sent from my iPhone

MEMORANDUM

GLENN LUKOS ASSOCIATES
Regulatory Services

PROJECT NUMBER: 04930006MANA

TO: Bart Mejia

FROM: Tony Bomkamp

DATE: September 14, 2015

SUBJECT: Results of Review of Biological Resources Associated with the Fairview Park North Bluff Trail Alternative Alignment

---

On September 4, 2015, I conducted a site visit to review the biological resources associated with the Fairview Park North Bluff Trail Alternative Alignment [Attachment 1 from City's Staff Report dated August 27, 2015 included as Exhibit 1].

Site Description

The North Bluff Trail Alternative Alignment includes a north-south segment and an east-west segment. The north-south segment follows an existing trail and much of this segment is contained in a gentle canyon that extends from portions of the Fairview Park mesa, dropping in elevation as the trail extends to the north where it makes a sweeping westerly turn to where it connects with another existing trail.

The north-south trail segment consists of a heavily used trail that is highly compacted and supports minimal vegetation [Exhibit 2, Photograph 1]. Vegetation within this segment is generally restricted to the unused outer portions of the trail and includes a few native goldenbush shrubs (*Isocoma menziesii*) and a number of weeding species including summer mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), tumble weed (*Amaranthus albus*), horehound (*Marrubium vulgare*), telegraph weed (*Heterotheca grandiflora*), and ragweed (*Ambrosia acanthicarpus*). The slope to the east supports coastal sage scrub and the slope to the west support a predominance of non-native grasses and forbs.

The proposed east-west segment leaves the canyon and associated trail and cuts across the toe of a gentle slope as it extends to the west. The slope is dominated by non-native forbs including summer mustard, Russian thistle, horehound, doveweed (*Croton setigerus*), stinking gourd (*Curcrbita foetidissima*), and tocalote (*Centaurea melitensis*) [Exhibit 2, Photograph 2]. The area which the proposed realigned trail traverses supports small patches of southern tarplant (*Centromadia parryi* ssp. *australis*) that have been introduced as a habitat restoration project, which is supported by irrigation.

29 Orchard ▪ Lake Forest ▪ California 92630-8300
Telephone: (949) 837-0404 Facsimile: (949) 837-5834

Impact Analysis

With the exception of the southern tarplant, which occurs along the northerly edge of the east-west segment of the area proposed for the trail realignment, there are no special-status resources that would be impacted by the proposed alternative alignment. The coastal sage scrub that occurs immediately east of the north-south segment exhibits some potential for supporting the coastal California gnatcatcher; however, the project would not result in the loss of coastal sage scrub and as such there would be no potential for direct impacts to the coastal California gnatcatcher; however, in order to ensure that there would be no indirect impacts during construction, it is recommended that the work either 1) be performed outside the coastal California gnatcatcher nesting season (February 15 to July 31) or 2) pre-construction surveys by a qualified biologist be conducted to ensure that there are no coastal California gnatcatchers using the area. If coastal California gnatcatcher is detected, then work would be delayed until nesting is completed and the fledglings are no longer dependent on the nest. Should coastal California gnatcatchers be detected, it is recommended that the City notify U.S. Fish and Wildlife Service (USFWS) to ensure that potential impacts are fully avoided.

Impacts to the southern tarplant would be considered adverse; however, any potential impacts can be easily mitigated through seed collection and distribution consistent with the existing restoration program. As such, any potential impacts to the southern tarplant can be reduced to levels well below significant.

Jurisdictional Streambeds

The USFWS Wetland Inventory shows the north-south canyon segment as containing "Riverine Wetlands". During the site review, the area was carefully evaluated for wetland conditions including signs of wetland hydrology, vegetation, and hydric soils. For the reasons set forth below, we have determined that the "Riverine Wetland" designation was an error and no wetland habitat is present in this portion of Fairview Park.

The USFWS wetland definition is found in *Classification of Wetlands and Deepwater Habitats of the United States*[1]

> *WETLANDS are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric*

[1] Cowardin, Louis M., Virginia Carter, Francis Golet, and Edward LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* United States Fish and Wildlife Service Biological services program; FWS/OBS-79/31 .

> *soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.*

The canyon does not contain hydrophytic vegetation or hydric soils, but it does contain soil, so it does not exhibit any of the three potential attributes of a "wetland" pursuant to the USFWS definition. Also, the absence of wetland hydrology, hydrophytic vegetation and hydric soils, as set forth in the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0[2], means that there are no wetlands as defined by the Corps pursuant to Section 404 of the Clean Water Act as discussed in more detail below.

"Riverine Wetlands" are defined in *Classification of Wetlands and Deepwater Habitats.* as follows:

> Definition: The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean derived salts in excess of 0.5 ppt. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water" (Langbein and Iseri 1960:5).
>
> Limits: The Riverine System is bounded on the landward side by upland, by the channel bank (including natural and man-made levees), or by wetland dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens. In braided streams, the system is bounded by the banks forming the outer limits of the depression within which the braiding occurs. The Riverine System terminates at the downstream end where the concentration of ocean-derived salts in the water exceeds 0.5 ppt during the period of annual average low flow, or where the channel enters a lake. It terminates at the upstream end where tributary streams originate, or where the channel leaves a lake. Springs discharging into a channel are considered part of the Riverine System.

"Riverine Wetlands" are separated into four subsystems: "Tidal" "Upper Perennial", "Lower Perennial" and "Intermittent." Each is defined in terms of water permanence, gradient, water velocity, substrate, and the extent of floodplain development as described below.

> *Tidal.* - The gradient is low and water velocity fluctuates under tidal influence. The streambed is mainly mud with occasional patches of sand. Oxygen deficits

---

[2] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center and Engineering Laboratory.

> may sometimes occur and the fauna is similar to that in the Lower Perennial Subsystem . The floodplain is typically well developed .
>
> *Lower Perennial.*-The gradient is low and water velocity is slow. There is no tidal influence, and some water flows throughout the year. The substrate consists mainly of sand and mud. Oxygen deficits may sometimes occur, the fauna is composed mostly of species that reach their maximum abundance in still water, and true planktonic organisms are common. The gradient is lower than that of the Upper Perennial Subsystem and the floodplain is well developed.
>
> *Upper Perennial.*-The gradient is high and velocity of the water fast. There is no tidal influence and some water flows throughout the year. The substrate consists of rock, cobbles, or gravel with occasional patches of sand. The natural dissolved oxygen concentration is normally near saturation. The fauna is characteristic of running water, and there are few or no planktonic forms. The gradient is high compared with that of the Lower Perennial Subsystem, and there is very little floodplain development.
>
> *Intermittent.*-In this Subsystem, the channel contains flowing water for only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.

The Corps defines intermittent stream as follows:

> Intermittent Stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.[3]

The subject area in Fairview Park clearly does not fit into "Tidal" "Upper Perennial", or "Lower Perennial" subclasses, leaving only the "Intermittent" subclass as potentially applicable. However, the Intermittent subclass requires flows for some period of the year and such streams are fed at times by high groundwater, neither of which occurs at Fairview Park.

Given all of these considerations, it is clear that the subject canyon has been inaccurately mapped as a "Riverine Wetland". It is also noteworthy that the map provided by USFWS includes the following disclaimer:

> This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map.

---

[3] Department of the Army, Corps of Engineers: Reissuance of Nationwide Permits, Final Rule. Federal Register / Vol. 77, No. 34 / Tuesday, February 21, 2012 / Notices.+

> All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

While the subject area appears to have been incorrectly designated on a USFWS map, the USFWS has no regulatory authority over "wetlands" *per se*; rather, impacts to wetlands are regulated by the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act. As already noted, the subject area fails to meet the Corps' wetland definition which requires that wetland hydrology, hydric soils and wetland vegetation ALL be present at the same location for an area to be considered wetland under Section 404. Given that all three criteria are absent, the area is not a "wetland" under Section 404.

The new definition of Waters of the U.S., as set forth in the regulation issued jointly by the Corps and EPA on June 29, 2015, specifically excludes the rills and erosional features found at Fairview Park:[4]

> (b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(4) through (8) of this section...(vi) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways;

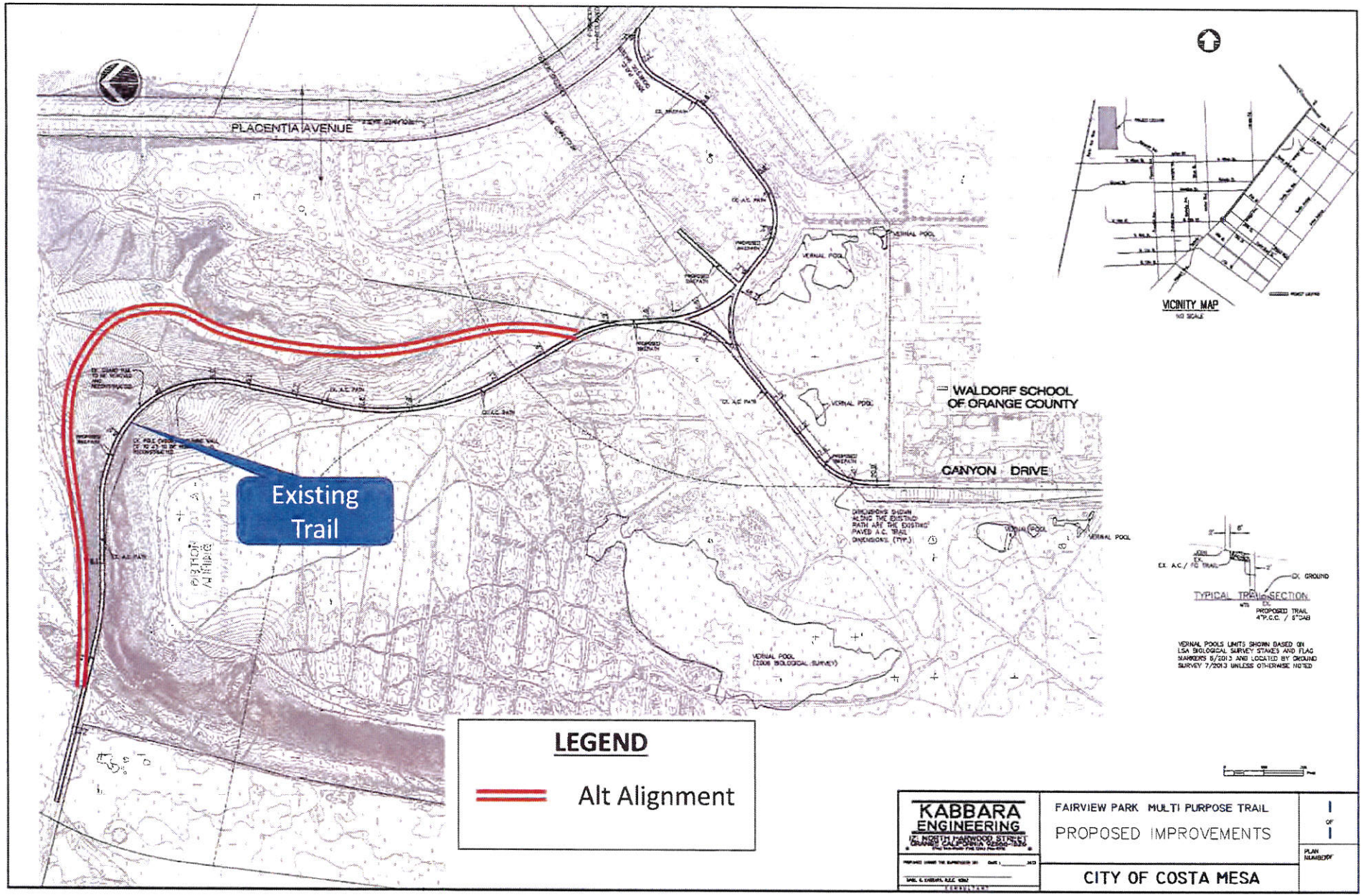
In the preamble to the new rule the Corps and EPA clarify their intent regarding the regulation of rills and erosional features:

> Further, the rule explicitly excludes from the definition of "waters of the United States" erosional features, including gullies, rills, and ephemeral features such as ephemeral streams that do not have a bed and banks and ordinary high water mark. [p. 37058]

Finally, the Fairview Park canyon does not meet CDFW's definition of a "Stream" pursuant to Section1602. The Fish and Game Code defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." The erosional features at Fairview Park do not support surface or subsurface flow capable of supporting any aquatic plants or animals. Thus, the subject area within Fairview Park would not be subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code.

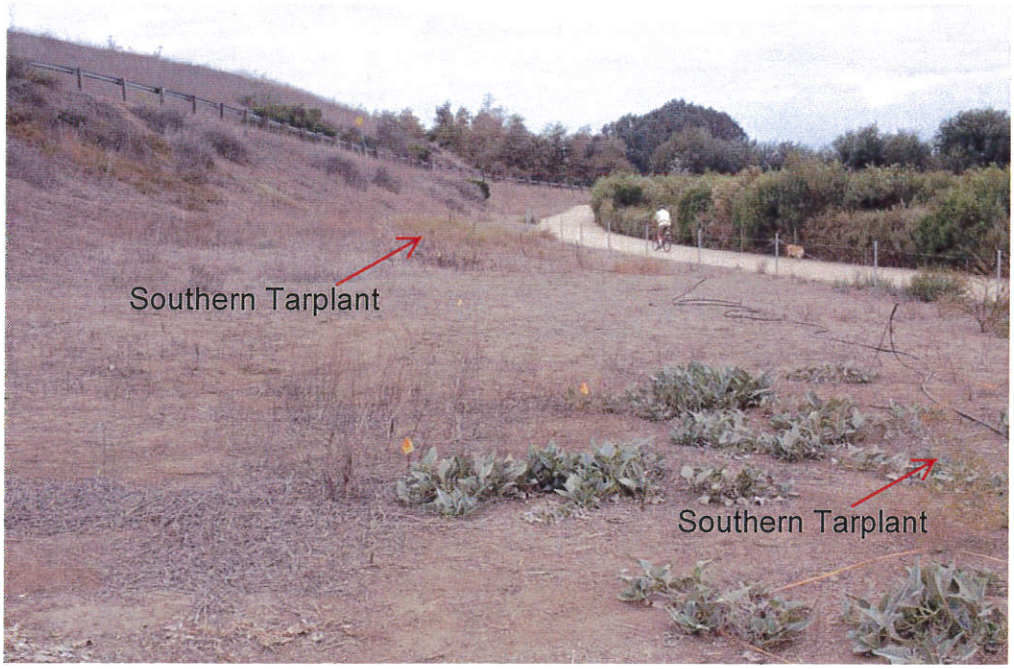
---

[4] Department of the Army, Corps of Engineers and Environmental Protection Agency: Clean Water Rule: Definition of "Waters of the United States". Federal Register / Vol. 80, No. 124 / Monday, June 29, 2015 / Rules.



Attachment 1

Photograph 1: View of proposed route for realigned trail looking south up "canyon".



Photograph 2: View of proposed route for trail realignment looking west.

GLENN LUKOS ASSOCIATES

Exhibit 2

NORTH BLUFF TRAIL ALTERNATIVE ALIGNMENT

Site Photographs

U.S. Fish and Wildlife Service

National Wetlands Inventory

Fairview Park

Sep 3, 2015

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

Riparian Status

- Digital Data

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks: