RECEIVED

5 January 2011

4:01 pm, Jan 10, 2011

Alameda County

Environmental Health



Tesoro Environmental Resource Company 3450 South 344th Way, Suite 201 Auburn, WA 98001-5931 253 896 8700 Phone 253 896 8863 Fax

Mr. Jerry Wickham Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Subject:

Well Abandonment Report

1088 Marina Boulevard, San Leandro, California

Tesoro No. 67106 (Former Beacon 3720); ACEH Case No. RO0216

Dear Mr. Wickham:

Enclosed please find a copy of the well abandonment report for the subject site located at 1088 Marina Boulevard in San Leandro, California. This report is submitted by Arctos Environmental on behalf of Tesoro Environmental Resources Company.

Based on my inquiry of the person or persons directly responsible for gathering the information contained in this report, I believe the information was prepared by qualified personnel who properly gathered and evaluated the information, and that the information submitted is, to the best of my knowledge and belief, true, correct, and complete. Please feel free to call me at 253/896-8700 or Michael Purchase of Arctos Environmental at 510/525-2180 with questions.

Sincerely,

Jeffrey M. Baker, P.E.
Supervisor, Environmental
Compliance & Remediation

Tesoro Companies, Inc.

Attachments

CC: Arctos - Michael Purchase



Arctos Environmental

✓ 1332 Peralta Avenue Berkeley, CA 94702

510 525-2180 PHONE 510 525-2392 FAX

Main Office

O 3450 E. Spring St., Suite 212 562 988-2755 PHONE Long Beach, CA 90806

562 988-2759 FAX

5 January 2011 Project No. 01DO

Jerry Wickham Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Well Abandonment Report

1088 Marina Boulevard, San Leandro, California

Tesoro No. 67106 (Former Beacon 3720); ACEH Case No. RO0216

Dear Mr. Wickham:

Arctos Environmental (Arctos), on behalf of Tesoro Environmental Resources Company (Tesoro), has prepared this letter report summarizing well abandonment activities at the subject site (Figure 1). The field program was conducted in accordance with Alameda County Public Works Agency requirements for well abandonment.

Site Background

A site description and background are included in Arctos's Request for Closure dated 9 May 2008 (Arctos, 2008).

Objective and Scope of Work

The objective of the well abandonment program was to remove (1) nine groundwater monitoring wells, (2) seven air sparge wells, and (3) two vapor extraction wells at the site (Figure 2). To meet this objective, Arctos performed the following scope of work:

- Obtained well destruction permits from Alameda County Public Works Agency (Attachment A) and encroachment permit from the City of San Leandro for offsite wells MW-6 and MW-7 (Attachment B)
- Marked the boring locations and notified Underground Service Alert (USA) to identify subsurface utilities

Jerry Wickham Alameda County Environmental Health 5 January 2011 Page 2



effrey P. Gwinn, P.E.

Vice President

- Updated the site-specific health and safety plan and monitored health and safety during field activities
- Abandoned all 18 wells by pressure grouting with Portland cement at a minimum pressure of 25 pounds per square inch for at least 5 minutes
 - Removed well materials to a depth of 5 feet below ground surface and surface vaults and backfilled with Portland cement
 - □ Finished the surface of each boring to match the surrounding surface
- □ Submitted well completion reports to Alameda County Public Works Agency (Attachment C).

If you have questions or comments, please call Mike Purchase at 510/525-2180 or Jeff Gwinn at 562/988-2755.

Very truly yours,

ARCTOS ENVIRONMENTAL

Michael P. Purchase, P.E. Senior Project Manager

Jeffrey M. Baker – Tesoro Companies, Inc.

Brian Kelleher – Kelleher & Associates

Attachments: Figure 1 – Site Location Map

Figure 2 – Site Plan

Attachment A – Alameda County Public Works Agency Well Destruction Permits

Attachment B - City of San Leandro Encroachment Permit

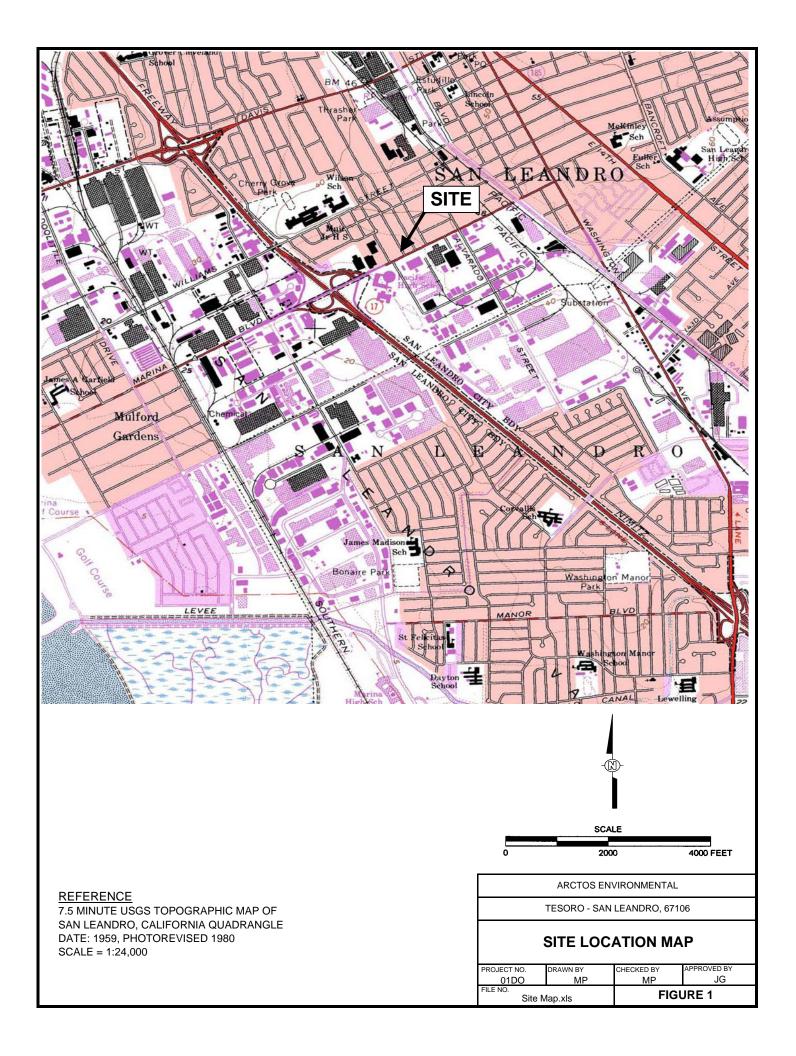
NO. C71230 Exp. 6/30/11

Attachment C – Well Completion Reports

Reference

Copy:

Arctos Environmental, 2008. Request for Closure, 1088 Marina Boulevard, San Leandro, California, Tesoro No. 67106 (Former Beacon 3720), ACEH Case No. RO0216, 9 May.





ATTACHMENT A ALAMEDA COUNTY PUBLIC WORKS AGENCY WELL DESTRUCTION PERMITS



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 11/25/2009 By vickyh1 Permit Numbers: W2009-1044 to W2009-1054 Permits Valid from 09/29/2010 to 10/01/2010

City of Project Site:San Leandro Application Id: 1258760602721

Site Location: Valero Gas Station

1088 Marina Blvd.

San Leandro, Ca 94577

Project Start Date: Completion Date: 12/18/2009 12/14/2009

Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Extension End Date: 10/01/2010 **Extension Start Date:** 09/29/2010 **Extension Count:** Extended By: vickyh1

Phone: 510-525-2180 Applicant: Orion Environmental Inc. - Michael Purchase

1332 Peralta Ave., Berkeley, CA 94702

Bedrock Construction Inc. **Property Owner:** Phone: --5302 Asterwood Drive, Dublin, CA 94568

Client: Tesoro Companies, Inc. Phone: --

3450 S. 344th Way, Auburn, WA 98001

Total Due: \$4103.00 \$4103.00

Receipt Number: WR2009-0423 **Total Amount Paid:**

Payer Name: Orion Environmental Inc. Paid By: CHECK PAID IN FULL

Works Requesting Permits:

Well Destruction-Monitoring - 9 Wells

Driller: RSI Drilling - Lic #: 802334 - Method: over Work Total: \$3573.00

Specifications

•										
Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2009-	11/25/2009	03/14/2010	MW-1	8.00 in.	2.00 in.	8.00 ft	27.50 ft	2S/3W35L4	87073	N/A
1044										
W2009-	11/25/2009	03/14/2010	MW-2	10.00 in.	4.00 in.	8.00 ft	22.50 ft	2S/3W35L5	87073	N/A
1045										
W2009-	11/25/2009	03/14/2010	MW-3	8.00 in.	2.00 in.	8.00 ft	28.50 ft	2S/3W35L6	87073	N/A
1046										
W2009-	11/25/2009	03/14/2010	MW-4	8.00 in.	2.00 in.	8.00 ft	27.50 ft	2S/3W35L7	87073	N/A
1047										
W2009-	11/25/2009	03/14/2010	MW-5	8.00 in.	2.00 in.	8.00 ft	29.00 ft	2S/3W35L8	87073	N/A
1048										
W2009-	11/25/2009	03/14/2010	MW-6	8.00 in.	2.00 in.	6.50 ft	18.50 ft	2S/3W35L2	91439	N/A
1049								4		
W2009-	11/25/2009	03/14/2010	MW-7	8.00 in.	2.00 in.	8.50 ft	25.50 ft	2S/3W35L2	91439	N/A
1050								5		
W2009-	11/25/2009	03/14/2010	MW-8	8.00 in.	2.00 in.	13.50 ft	30.50 ft	2S/3W35L2	91439	N/A
1051								6		
W2009-	11/25/2009	03/14/2010	MW-9	8.00 in.	2.00 in.	3.00 ft	25.00 ft	2S/3W35L	91521	N/A
1052										

Specific Work Permit Conditions

1. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities

or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

- 2. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
- 4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 6. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Remediation Well Destruction-Injection - 7 Wells

Driller: RSI Drilling - Lic #: 802334 - Method: over Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2009- 1053	11/25/2009	03/14/2010	SP-1	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record
W2009- 1053	11/25/2009	03/14/2010	SP-2	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record
W2009- 1053	11/25/2009	03/14/2010	SP-3	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record
W2009- 1053	11/25/2009	03/14/2010	SP-4	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record
W2009-	11/25/2009	03/14/2010	SP-5	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record

1000										
W2009- 1053	11/25/2009	03/14/2010	SP-6	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record
W2009- 1053	11/25/2009	03/14/2010	SP-7	8.00 in.	2.00 in.	22.00 ft	25.00 ft	No Record	No Record	No Record

Specific Work Permit Conditions

40E2

- 1. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.
- 2. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 3. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

- 4. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 5. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Remediation Well Destruction-Vapor Remediation Well - 2 Wells

Driller: RSI Drilling - Lic #: 802334 - Method: over Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well	Hole Diam.	Casing	Seal Depth	Max. Depth	State Well #	Orig.	DWR #
			ld		Diam.				Permit #	
W2009- 1054	11/25/2009	03/14/2010	VW-1	8.00 in.	2.00 in.	8.00 ft	25.00 ft	No Record	No Record	No Record
W2009- 1054	11/25/2009	03/14/2010	VW-2	8.00 in.	2.00 in.	8.00 ft	25.00 ft	No Record	No Record	No Record

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

- 2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.
- 4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 6. Remove the Christy box or similar structure. Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.



ATTACHMENT B CITY OF SAN LEANDRO ENCROACHMENT PERMIT



City of San Leandro **Engineering and Transportation Department** 835 East 14th Street San Leandro, California 94577 (510) 577-3428



ENCROACHMENT PERMIT

Permit Type

Environmental

AMS

Permit Number: ENC2010-00355

Job Address: 1111 Marina Bl

Issued: 9/8/2010

Project Name: CORNERSTONE ENVIROMENTAL

Description of Work:

Abandon well MW-7 @ Wayne Ave & MW-6 @ Marina Blvd. Work by

Cornerstone, Calvac, RSI Drilling, Penhall Company, & Lane Safety. All work per

Standard Drawings 120A&B,122AB&C,126, 128, 608AB&C attached

Customer # 22009

Planned Start Date: September 08, 2010 Planned Completion Date: October 09, 2010

USA Tag No.

252155

Emergency Contact

Rex L. Fowler

Contact Phone Number

925-324-0767

CORNERSTONE ENVIRONMENTAL CONTRA

Applicant:

San Leandr

1111 Marina Blvd

3527 MT. DIABLO BLVD

LAFAYETTE CA 94549

San Leandro CA 94577-3364

Contractor:

Agent:

Owner:

REX FOWLER 3527 MT. DIABLO BLVD LAFAYETTE CA 94549

Associated Permits:

To Acct #3306

Utility /Job Number

Building Permit No.

Oro Loma Permit No.

Cal State Permit No.

Ala County Permit No. W2009-1044

Grading Permit No.

PERMIT FEE: PLAN CHECKER

To CN#

RESTORE/INSPECT DEPOSIT

STREET CUT FEE

To Acct #3304

TOTAL:

2.965,00

Method of Repair

Backfill Required

Class 2 AB or CDF

All work shall be per City Standard Trench, Backfill & Resurface details and specs. Two way traffic and pedestrian safety shall be maintained at all times.

Pavement Section Requir

Min Depth of Cover

Section 1 Art. 12 inches over 12" T-top

36 inches

Section 2 Col. 9 inches over 12" T-top

36 inches

Section 3

Pre Video

Post Video

SEE TRAFFIC CONTROL FOR ADDITIONAL RESTRICTIONS

Consent Form

Police and Fire Notification: Police (510) 577-3208 Fire (925) 447-4257

Traffic Control Required

PLEASE CALL (510) 577-3308 FOR INSPECTIONS 24 HOURS PRIOR TO WORK

By the application and acceptance of this permit, the undersigned intending to be legally bound does hereby agree that all work performed will be in accordance with all applicable provisions of this permit and all regulations, provisions, and specifications as adopted by the City. Further, the undersigned agrees that this permit is to serve as a guaranty for payment for all permit and/or inspection charges as billed by the City. Any misrepresentation of information requested from the applicant on this form shall make this permit null and void.

Signature:

SHOWNING ON FILE

Print Name: REX_FOWLER

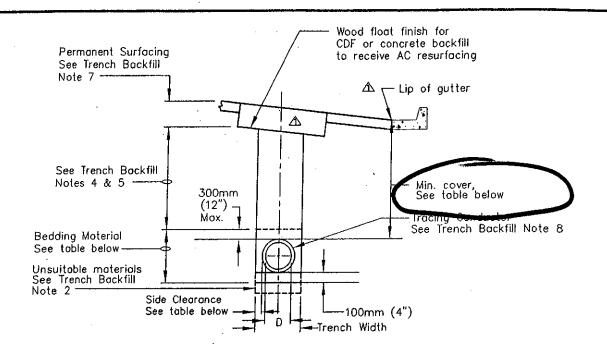
Date: 9/8/2010 9:20:45AM

GENERAL PROVISIONS

- (a) All work must be performed in accordance with City of San Leandro Standard Plans, Specifications, and Title V Chapter 1 of the Municipal Code.
- (b) Twenty four hours notice prior to start and/or request for inspection. All work must be completed between the hours of 8:00AM to 4:00PM. No work is permitted on Saturday, Sunday, City holidays, or Furlough days. The City website has a schedule of holidays and furlough days: http://www.ci.san-leandro.ca.us/holidayschedule.html
- (c) City to be notified next working day (by permit application) of all emergency work performed.
- (d) Permittee shall be responsible for all liability imposed by law for personal injury or property damage proximately caused by failure on permittee's part to perform his obligations under said permit respect to maintenance. If any claim of such liability is made against the City of San Leandro or its officers or employees, permittee shall defend, indemnify and hold each of them harmless from such claim.
- (e) No utility contractor or subcontractor shall park their construction equipment, including personal vehicles, entirely or partially in the sidewalk area. Per Section 5610 of the Streets and Highways Code, the permittee shall be responsible for the repair of any damaged sidewalk where utility contractor's or subcontractor's vehicles or equipment are parked whether or not the damage was preexisting.
- (f) Cost of emergency work required to restore unsatisfactorily construction that becomes hazardous will be charged to permittee.
- (g) Permit void 90 days from issue date unless otherwise noted. Extension time may be granted when requested in writing.
- (h) Permit must be readily available at work site. Permit is not assignable.
- (i) Section 6500 of the Labor Code requires permit from the State Division of Industrial Safety (CAL OSHA) prior to an excavation five feet or deeper.
- (j) Prior to digging or drilling, permittee shall request Undergrounding Service Alert (USA) markings, phone #800-227-2600.
- (k) Trenches are to be inspected prior to backfilling. Backfill compaction tests may be required.
- (f) All tunneling prohibited. Pipe must be bored or jacked or open trenched including under curb, gutter and/or sidewalk.
- (m) Forms for concrete work must be inspected prior to placing concrete.
- (n) All concrete, including concrete pavement (overlayed with A.C. or not), must be sawcut prior to breakout.
- (o) All sawcuts must be along scorelines, 1.5" minimum depth (special conditions for concrete pavements.
- (p) Concrete sections to be replaced shall be no smaller than 30 inches in either length or width.
- (q) If a sawcut falls within 30 inches of a construction joint, expansion joint or edge, the concrete shall be removed to the joint or edge.
- (r) Temporary paving is required in all street and sidewalk areas and is is to be placed the same day work is performed. From October 15 through April 15, only A.C. paving is to be used.
- (s) Permanent paying or sidewalk is to be replaced within 30 days. Permittee shall notify City before placing surfacing.
- (t) Permittee shall provide, erect, and/or maintain such lights, barriers, warning signs, patrols, watchmen and other safeguards as are necessary to protect the traveling public in accordance with the current State "Manual of Warning Signs, Lights, and Devices for Use in Performance of Work Upon Highways".
- (u) Before any work is begun that will interrupt the normal flow of public traffic, proposed lane closures and advanced warning light, sign, and barricade with flashing light details and layout plans shall be submitted to the City. If flagmen are required copies of certifications must be provided prior to issuance of a permit.
- (v) Open trench one lane at a time, necessary traffic control, to keep traffic moving both directions during working hours. If at the end of the work day backfilling operations have not been completed, steel bridging shall be required to make the entire traveled way available to the public traffic.
- (w) Pedestrian safety shall be maintained at all times.
- (x) Permittee shall contact City for final inspection and approval of completed work.

INSPECTION RECORD

Date	Comments	Inspector	Hours Charged
		,	
		Subtotal	



PIPE or CONDUIT	BEDDING MATERIAL	SIDE CLEAR	ANCE		MINIMUM COVER
.]		Min.	Mox.	SIDEWALK	ALL STREETS, PARKING LOTS, PATHWAYS, ETC.
All Pipe/Conduit 150mm (6") or smaller solid wall	100mm (4") sand, envelope all around to 300mm (12") max. above, except perforated pipe which shall be 19mm (3/4") Crushed Rock	100mm (4")	(4")	450mm (18"): Galv. Rigid Metal, Type K Copper, DIP, CIP 600mm (24"): All other materials	in or gutter.
Plastic Pipes and DIP and CMP D= 150mm (6") to 375mm (15"), solid or perforated wall	19mm (3/4") Crushed Rock See Trench Backfill Note 3	200mm (8")	300mm (12")	600mm (24")	△ 36" Below Low side of lip of gutter.
Plastic Pipes and DIP and CMP D= greater than 375mm (15")	19mm (3/4") Crushed Rock See Trench Backfill Note 3	300mm (12")	450mm (18")	600mm (24")	△ 36" Below Low side of lip of gutter.
RCP VCP	Crushed Aggregate Bose See Trench Backfill Note 3	150mm (6")	100mm (12")	600mm (24")	△ 36" Below Low side of lip of gutter.

SEE DWG. 120B CASE 3101 FOR TRENCH BACKFILL NOTES

ACAD FILE NO.C3101D120AB RevI.DWG

		CITY	OF	SAN LEA	NDF	RO * STA	NDARD F	PLANS
NO.	REVISIONS Revised drawing	DATE 1/19/07 /	BY AMS	TRE	исн в	ACKFILL		APPROVED Kenneth Joseph, City Engineer R.C.E. No.34870 Expires 9/30/09
DRAW	GF/MLWH/VL CHECKED	KJ/KRC	DATI	E May 2002	SCALE	NONÉ	SHEET 1 OF 2	DWG. NO. 120A CASE. 3101

- 1. All work shall be done in accordance with the Standard Specifications for Public Works Construction, the "GREENBOOK", the most current edition and all supplements thereto, adopted by the Southern California Chapter of the American Public Works Association and the Special Provisions (Technical Specifications) thereto adopted by the City.
- 2. Unsuitable material shall be removed when directed by the City Engineer and replaced with 12" min. of 2" Crushed Rock to provide adequate foundation for pipe bedding.
- BEDDING: Crushed Aggregate Base, Crushed Misc. Base, Processed Misc. Base bedding shall be compacted to backfill requirements.

Crushed Rock bedding shall be placed in two (2) lifts minimum, spading / rodding / forking the bedding along side and under pipe haunch to provide full support and eliminate all voids. Perforated pipe bedding shall be encapsulated with filter fabric.

4. BACKFILL: Trenches shall be backfilled with Crushed Aggregate Base (CAB) or Crushed Miscellaneous Base (CMB) Native material, clean soil, free from trash, debris, rubbish or other objectionable substances may be used in landscaped areas.

Backfill 5' below finish grade shall be compacted to 90% RC min. Jetting will be permitted up to 5' below finished grade. In no case shall a lift to be jetted exceed 5' in depth. All accumulated water shall be removed at contractor's expense.

The top 5' shall be mechanically compacted in 6" maximum lifts to 95% RC min. except in areas, wich sail be 90% RC min.

Backfill shall be tested by a City approved lab at contractor's expense. Certified test results shall be provided to the City Engineer prior to permanent resurfacing.

Other granular imported material conforming to Processed Miscellaneous Base may be utilized as backfill when a full pavement section is to be subsequently constructed over the trench and when specifically authorized by the City Engineer.

Sand, Pea Gravel or other non-binding (running) materials are prohibited.

- 5. Controlled Low Strength Material (CLSM) also known as Controlled Density Fill (CDF) may be substituted for bedding (except for the bottom 4" or for perforated pipes) for backfill at the contractor's option and sole expense. All pipes / conduits shall be anchored in place prior to CDF placement and CDF shall be placed and vibrated / spaded / rodded / forked or otherwise consolidated in lifts to prevent flotation and to provide full support and eliminate all voids. Compaction tests shall be waived.
- △ CDF—Controlled Density Fill shall be used as a substitute for Crushed Aggregate Base where shown on the drawings. CDF Shall have the following characteristics. CDF Shall be hand excavatable, non—structural controlled fill with an unconfined 28 day compressive strength of 50 psi minimum and 150 psi maximum.

 Materials for CDF shall consist of the following.

1. Aggregate no larger than 3/8" top size. The 3/8" aggregate shall not compromise more than 40% of the total aggregate content

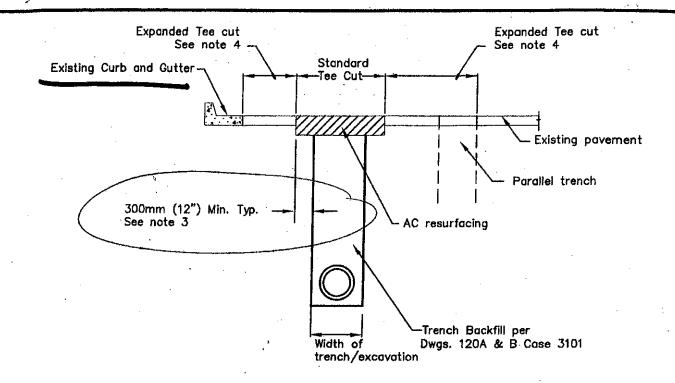
2. Cement which shall conform to the requirements of ASTM C-150, Type II cement. 30-40lbs. per cubic yard. 3. Fly ash which shall conform to the requirements of ASTM C-618 for Class F pozzolans and shall not inhibit the entrainment of air. 300 lbs. per cubic yard.

4. Air entraining agent which shall conform to the requirements of ASTM C-260, Entrained air shall be 7% minimum.

- 6. Pipes / conduits shall not be stacked unless specifically authorized by the City Engineer. There shall be at least 4" horizontal clearance between pipes / conduits.
- For Curb, Gutter and Sidewalk resurfacing see Dwg. 100 Case 3101.
 For Driveway resurfacing see Dwg. 102 Case 3101.
 For AC resurfacing see Dwgs. 122A & B Case 3101.
- 8. All plastic pipe, conduit, or sleeves shall be Schedule 40 or SDR 26 minimum and shall be UL listed if for electrical systems or NSF approved for potable water or sanitary systems. A #12 tracing conductor and pull rope shall be installed with all non-electrical or empty plastic pipes or conduits, terminate w/36" coil in a splice box, Christy F1 or equal. Tracing conductor shall be Type THHN in conduit or Type UF taped 5' O.C. on exterior of water or sanitary pipelines.
- 9. Concrete pipe bedding or bockfill requires PRIOR approval by the City Engineer.
- 10. DIP shall be installed with loose polyethylene encasement in accordance with AWWA C 105.
- 11. In accordance with Government Code Section 4216.4(a):
 When an excavation is within the approximate location of subsurface installation, the excavator shall determine the exact location of subsurface installations by excavating with hand tools within the area of the subsurface installations before using any power—operated or power—driven excavating or boring equipment.

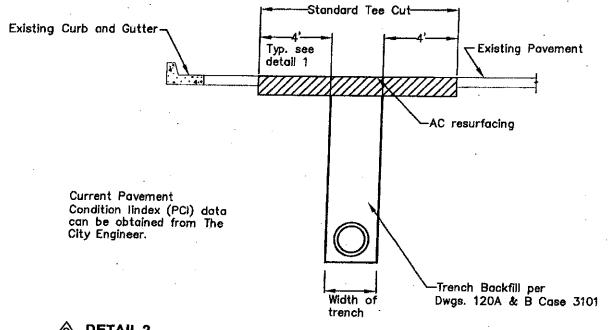
ACAD FILE NO. C3101D120B Rev3.DWG

l		CITT	UF	SAN LEA	ANDK	O . 21A	NUA	KU P	LANS	
NO.			BY						APPROVED /	7/1)/,
. 🖎	Added CDF Description	11/2/09	MS	TRENCH	1 BACK	FILL NOTE	S		Kenneth Maen	th Oth Francisco RCF No 3487
				TALITO!	· DAOI					on, Oty Engineer R.C.E. No.34870 Expires 9/30/11
DRÁ	WN GF/MLWH/VL CHECKED	KJ/KRC	DATE	E 14 0000	SCALE	110115	SHEET	0.05.0	DWG. NO	120B CASE, 3101
	GF/MLWH/VL	KJ/KKC		May 2002		NONE	10.,,,,,	2012	01101 1101	



🖄 DETAIL 1

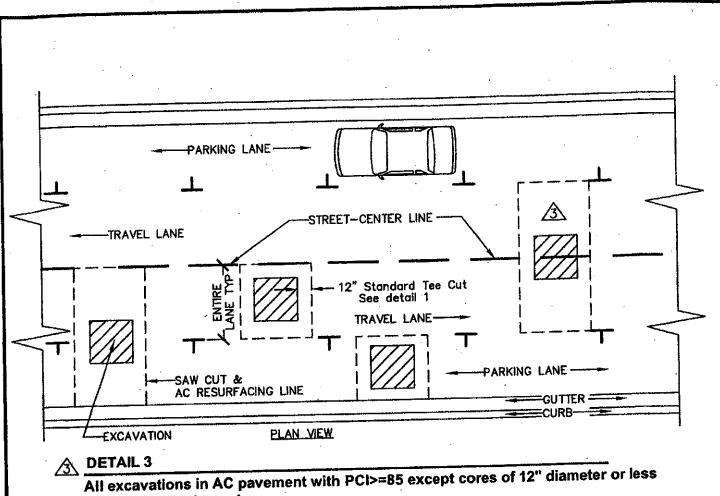
All excavations in AC pavement with PCI<85 except cores of 12" diameter or less



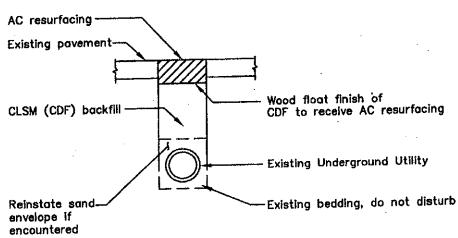
DETAIL 2

Longitudinal Trenches (parallel to traffic lanes) in AC pavement with PCI >= 85

ACAD FILE NO. C3101D122ABC Rev2.DWG **CITY OF SAN LEANDRO * STANDARD PLANS** REVISIONS
Changed name "Trench Resurfacing"
Revised drawings & notes for DATE BY APPROVED 12/8/08 NT **EXCAVATION RESURFACING** Details 1 & 2 y Engineer R.C.E. No.34870 Expires 9/30/09 DATE KJ/KRC SHEET 1 OF 3 May 2002 DWG. NO. NONE CASE. 3101



and longitudinal trenches



Contractor shall submit a plan showing location and depth of all found utilities upon completion of the work

DETAIL 4

Cores of 12" diameter or less (PCI 0 to 100)

ACAD FILE NO. C3101D123B Rev3.DWG

CITY	OF S	AN LEA	ANDRO '	STAI	NDARD P	LANS
NO PENSIONS	DATE 2/3/10	BY	CAVATION			Kenneth City Engineer R.C.E. No.34870 Expires 9/30/11
DRAWN NT/AMS CHECKED	DATE	DEC 2008	SCALE	NONE	SHEET 2 OF 3	DWG. NO. 122B CASE. 3101

- 1. All work shall be done in accordance with the Standard Specifications for Public Works Construction, the "GREENBOOK", the most current edition and all supplements thereto, adopted by the Southern California Chapter of the American Public Works Association and the Special Provisions (Technical Specifications) thereto adopted by the City.
- 2. Final pavement surface shall not vary more than 3mm (1/8") from a 3m (10") straight edge (except at changes of grade).
- 3. Permanent full depth asphalt section resurfacing shall extend a minimum of 300mm (12") outside excavation and at least 150mm (6") beyond any pavement damaged by excavation.
- △ 4a. AC resurfacing shall be extended to any adjacent gutter lip, curb, or cold joint that is within 24" of the Standard Tee cut.
- 4b. AC resurfacing shall extend to the far side of any adjacent parallel trench, or cracked or failed pavement when the near edge of said feature is within 24" of the Standard Tee cut.
- 4c. If the Standard Tee cut width is expanded by the above notes and the edge of the Expanded Tee cut is within 12" of any gutter lip, curb, cold joint, or existing trench then the AC resurfacing shall extend to said feature or in the case of an existing trench, to the far side of said feature.
- 5. Initially saw cut AC even with the excavation walls. Make final saw cut for T section immediately prior to paving. Saw cuts shall be a minimum of 1/2 the thickness of the existing pavement.
- Δ 6. All saw cut residue shall be vacuumed concurrently with the sawing operations.
- 🖎 7. Seal saw cut extending beyond new pavement with approved crack sealant.
- **⚠** 8. Compaction of AC and base shall be tested by a City approved lab at contractor's expense. Certified test results shall be provided to the City Engineer.
 - 9. For Curb, Gutter and Sidewalk resurfacing see Dwg. 100 Case 3101. For Driveway resurfacing see Dwg. 102 Case 3101.
 - 10. Replace all traffic striping, legends, markings, and markers in kind.
 - 11. The City Engineer may specify PG70—10 Paving Grade Asphalt to bridge poor subgrade conditions, or if air temperatures become hot enough to warrant its use, at no additional cost to the City.
 - 12. Caltrans Type A, Medium and all Type B AC mixes are prohibited. AC mixes containing recycled products are allowed for base course only, but are prohibited for surface courses.
- ∕2√3, Traffic Control Guideline Dwg 608 A, B, & C shall apply.
- 314. Full Depth Asphalt Section Resurfacing:
 - 300mm (12") Minimum for arterial and commercial/industrial streets.
 - 225mm (9") Minimum for collector streets.
 - 150mm (6") Minimum for all non-arterial streets, parking lots, pathways, etc.
 - ⚠ Base Courses: B—PG64—10 or B—PG64—10—RAP (19mm (3/4") Dense Medium Coarse) (Caltrans Type A, Coarse equivalent).
 - △Surface Course: B-PG64-10 (19mm (3/4") Dense Medium Coarse) (Caltrons Type A, Coarse equivalent).

 Maximum installed and compacted thickness of AC lifts shall be per table:

Compaction Equipment	Maximum Compacted Thickness mm (in)
Vibratory Plate	38mm (1-1/2")
Pneumatic Plate	50mm (2")
Vibratory Rammers	50mm (2")
Steel Wheel Roller*	63mm (2-1/2")
Vibratory Roller*	75mm (3")
Pneumatic Tired Rollers	Not Permitted

*Rollers must fit entirely within the trench for bose courses.

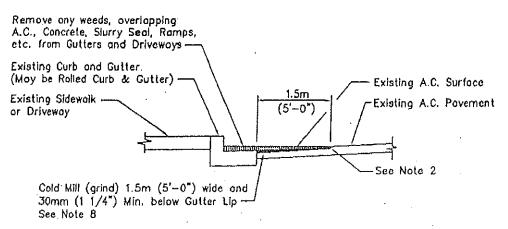
All base courses shall be mechanically compacted with a rammer or tamper with particular attention to the perlimeter and corners of the excavation. Surface course shall be compacted with steel wheeled roller. A vibratory plate may be used for surface course of .37m² (4 sq. ft.) maximum.

95% Relative Compaction minimum all courses. See Note 8.

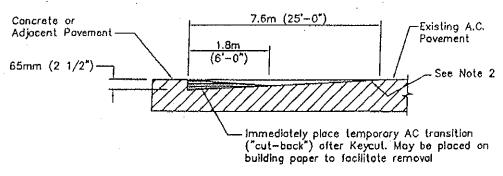
SS—1h Tack Coat (paint binder) all hard surfaces. (AC, PCC, etc.)

ACAD FILE NO. C1010122C Rev3.DWG

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NO.	REVISIONS		BY	Α				APPROVED-7//	
	Revised notes 2 - 8, NEW	12/28/08	NT	CVOAVA.	TEPER PE	mouine i ou	NA NATES	1/2/1/	/(
\\	note #13. Changed notes 13	1 . 1		EXCAVA	HON K	ESURFACI	NG NOTES	Kenneth Joseph, City E	ngmeer R.C.E. No.34870
/3 \	to 14. Drawing name replaced AR-4000 w/PG64-10	8758769	NT	•		' - '	,	<u> </u>	Expires 9/30/11
DRAY	AL COURAGE		ATE	May 2002	SCALE	SEASIC	SHEET 7 OF 7	DWG. NO. 122C	CASE, 3101
بينييا	QL AMEMULAE V	JAKE		MOY 2002		NONE	3 UF 3		



30mm (1 1/4") x 1.5m (5'-0") KEYCUT DETAIL



65mm (2 1/2") x 7.6m (25'-0") CONFORM DETAIL

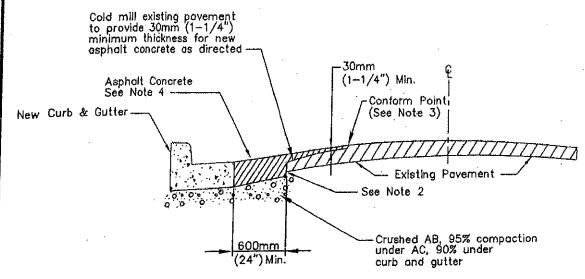
NOTES:

- All work shall be done in accordance with the Standard Specifications for Public Works Construction, the "GREENBOOK", the most current edition and all supplements thereto, adopted by the Southern California Chapter of the American Public Works Association and the Special Provisions (Technical Specifications) thereto adopted by the City.
- Keycut shall be flush with pavement surface for subsequent overlays. Keycut shall be 30mm (1 1/4") min. below pavement surface for A.C. tie—ins.
- 3. Lower Manhole, Water Valve, Monument Frames and Covers below the grinding plane prior to beginning grinding / rehabilitation operations. Protect monument core from damage.
- 4. When Manholes, Manuments, Water Valves, Cleanauts, etc. occur within any Keycut areas, asphalt shall be removed by grinding to the grinding plane. Chipping and /or Jack Hammering is strictly prohibited.
- 5. The surface of povement after milling shall be uniform and the grade shall not deviate from a straight edge by more than 10mm (3/8") at any point.
- 6. A False Bottom shall be installed in all manholes and storm water inlets in the grind / rehabilitation area to prevent debris from entering the systems. Immediately remove upon completion of paving operation.
- 7. Manholes, Cleanouts, Utility Covers and Manuments shall be raised to grade per Dwg. 222 Case 3101,
- 8. For subsequent open graded AC mixes, the grinding plane shall be flush with the gutter lip.

ACAD FILE NO. 031010128 CITY OF SAN LEANDRO * STANDARD PLANS APPROVED 16/24/02

Kennelly Joseph, City Engineer RCE, Nd.34870

Expires 9/30/03 NO. REVISIONS DATE PAVEMENT COLD MILLING DETAILS (KEYCUT & CONFORM) DRAWN GF/MLWH/VL CHECKED DATE SCALE SHEET 1 OF 1 DWG. NO. 126 **CASE. 3101** KJ/KRC Moy 2002 NONE



NOTES:

- All work shall be done in accordance with the Standard Specifications for Public Works Construction, the "GREENBOOK", the most current edition and all supplements thereto, adopted by the Southern California Chapter of the American Public Works Association and the Special Provisions (Technical Specifications) thereto adopted by the City.
- 2. Tie-in pavement section shall be sawcut minimum 1/2 thickness of the (E) AC and the (N) AC section shall be a minimum of 150mm (6") deep on local residential streets, parking lots, pathways, etc., 225mm (9") on collector streets and 300mm (12") on arterial & commercial/industrial streets.
- 3. Conform point shall be determined by the City Engineer and may occur anywhere between the edge of pavement and the centerline. 2% minimum, 5% maximum cross slope.
- 4. Maximum installed and compacted thickness of AC lifts shall be per table:

Compaction Equipment	Maximum Compacted Thickness mm (in)
Vibratory Plate	38mm (1-1/2")
Pneumatic Plate	50mm (2")
Vibratory Rammers	50mm (2")
Steel Wheel Roller*	63mm (2-1/2")
Vibratory Roller∗	75mm (3")
Pneumotic Tired Rollers	Not Permitted

^{*}Rollers must fit entirely within the trench for bose courses.

All base courses shall be mechanically compacted with a rammer or tamper with particular attention to the perimeter and corners of the excavation. Surface course shall be compacted with steel wheeled roller. A vibratory plate may be used for surface course of .37m² (4 sq. ft.) maximum. Caltrans Type A, Medium and all Type B AC mixes are prohibited. AC mixes containing recycled products are allowed for base course only. They are prohibited for surface courses.

Base Course: B-PG64-10 (19mm (3/4") Dense Medium Coarse) (Caltrans Type A, Coarse equivalent). Surface Course: C2-PG64-10 (12.5mm (1/2") Dense Medium) (Caltrans Type A, Coarse equivalent).

- 95% Relative Compaction minimum all courses. AC shall be tested by a City approved lab at contractor's expense. Certified test results shall be provided to the City Engineer.
- 6. SS-1h Tack Coat (paint binder) all hard surfaces (AC, PCC, etc.).
- 7. The City Engineer may specify PG70—10 Paving Grade Asphalt to bridge poor subgrade conditions, or if air temperatures become hot enough to warrant its use, at no additional cost to the City.

ACAD FILE C31010128 RevI.DWG.

	CI	TY OF	= 5	SAN LEANDRO *	STAND	ARD P	LANS ,)
NO. Re	REVISIONS Placed AR-4000 with PG64- AR-8000 with PG70-10	DATE 10 8/28/09	BY NT	PAVEMENT TI	E-IN		APPROVED Kenneth Joseph, City Engineer R.C.E. No.34870 Expires 9/30/11
DRAWN (GE/MENH/VE CHECKED K	/krc D	ATE	May 2002 SCALE NON	E SHEE	T 1 0F 1	DWG. NO. 128 CASE. 3101

TRAFFIC CONTROL PLAN GUIDELINES

Temporary traffic control shall be provided around work zones for the safety and protection of the workers and public traffic in conformance with the Manual on Uniform Traffic Control Devices (MUTCD) 2003 and the MUTCD 2003 California Supplement, Part 6 Temporary Traffic Control, when work is being performed within the roadway or road shoulder. Traffic Control Plans shall be submitted and accepted by the City of San Leandro Engineering and Transportation Department for work being performed on a roadway listed on the attached Table — Traffic Control Plans Required. For roadways not listed, a Traffic Control Plan submittal is not required, however the temporary traffic controls shall conform to the MUTCD 2003 and MUTCD 2003 California Supplement, Part 6 Temporary Traffic Control.

Traffic Control Plans shall include:

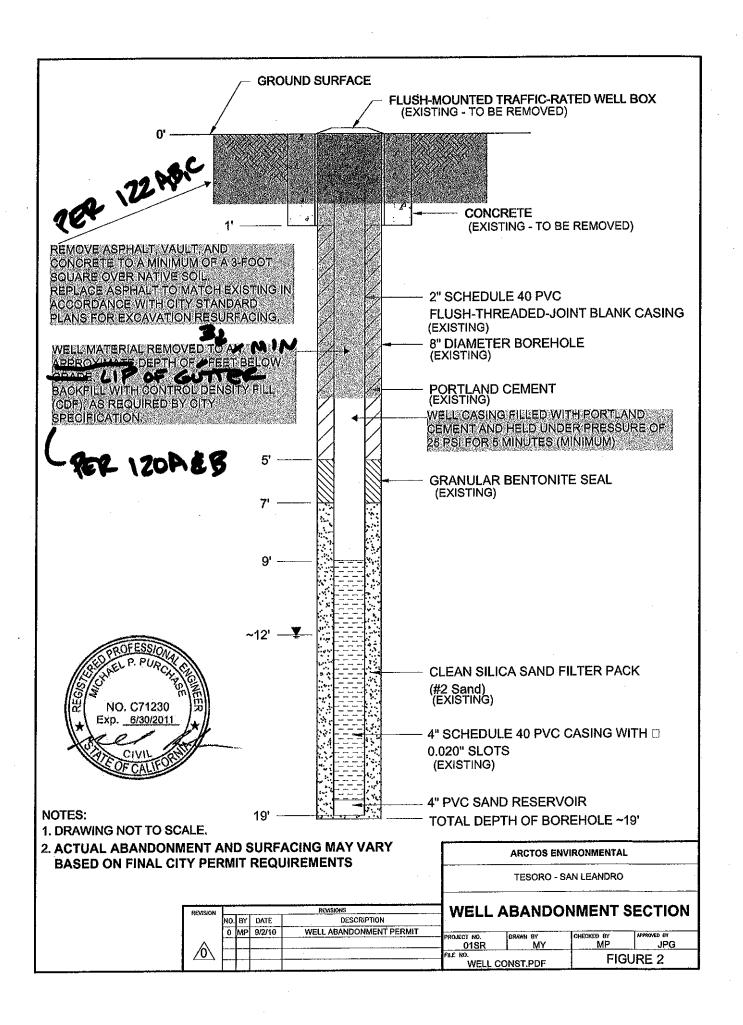
- "Typical" Traffic Control Plans are acceptable for many non—intersection locations. Photo copies of the MUTCD 2003 and MUTCD 2003 California Supplement, Part 6 Temporary Traffic Control are acceptable. "Typical" traffic controls are not acceptable for intersection work. Site—specific Traffic Control Plans are required for intersections.
- Traffic Control Plans shall specify the signage, cones, flashing arrow panels and other devices
 that will be used to redirect traffic. Distances between signs, the taper length, and the lane
 widths shall be specified to illustrate conformance to above standards.
- Traffic Control Plans shall indicate where parking is proposed to be restricted. The duration
 of the parking restriction shall be indicated. "No Parking" Signs provided by the City shall be
 posted and verified by Engineer 72 hours prior to effective dates.
- The dates and hours of the proposed Traffic Control Plan shall be specified.
- No work that interferes with public traffic on collector and arterial roadways shall be performed between the hours of 6:00 a.m. to 9:00 a.m., nor between 3:00 p.m. and 6:00 p.m. except as otherwise provided in the lane closure chart(s) or approved by the Engineer.
- The full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays, and designated legal holidays; after 3:00 p.m. on Fridays, and the day proceeding designated legal holidays; and when construction operations are not actively in progress, unless approved by Engineer.
- For multi-phase operations, such as trenching across a roadway one lane at a time, provide a separate Traffic Control Plan for each phase. Each Traffic Control Plan should state the approximate duration of the phase.
- Flashing Arrow Panel shall be required per attached Table Traffic Control Plans Required.
 When two of three lanes will be taken, then two arrow panels will be required. Multiple lane
 closures require multiple Flashing Arrow Panels. The Engineer may require changeable message
 signs in addition to the arrow panel.
- Excavations exceeding 6" in depth and within 6 feet of a travel lane, require K—rail between the excavation and the travel lane unless otherwise approved by the Engineer.
- Residents and businesses affected by the Traffic Control Plans shall be provided notification 7
 days in advance. For a roadway closure/detours 14 days advance notification, including advance
 warning signs, are required.
- The Engineer may provide lane closure charts that specify minimum travel lane requirements for specific times for the contractor to prepare the Traffic Control Plans accordingly.
- The San Leondro Police Department (510) 577—3208, Alameda County Fire Department (510) 670—5858 and A.C. Transit (510) 891—4901 if applicable shall be notified of daily closures, detours, etc.

For questions about these requirements please contact the City of San Leandro Transportation Section at (510) 577-3410.

ACAD FILE NO. C31010608ABC RevI.DWG CITY OF SAN LEANDRO * STANDARD PLANS DATE BY 10/1/07 AMS APPROVED REVISIONS TRAFFIC CONTROL PLAN "GUIDELINES" TO TITTLE Kenneth Joseph, City Engineer R.C.E. No.34870 **△ GUIDELINES** Expires 9/30/09 SHEET 1 OF 3 DWG, NO. 608A CASE. 3101 DATE October 2007 DRAWN GF/MLWH/VL CHECKED KJ/KRC NONE

+	D ŏ B	İ			TRAFFIC CONTROL P	ANS PEOUPED		
	ADDED .		Street Name	Begin	End	Classification	Flashing	Caltrans ROW
	REVISIONS "GUIDELINES"	1	136TH AVE	E 14TH ST	SCHOOL ST	RES COLLECTOR	Arrow Panel	<u> </u>
'		- 1	143RD AVE	WASHINGTON AVE	E 14TH ST	COLLECTOR	NO	@ E 14TH ST
	NE SE	- 1	148TH AVE	E 14TH ST	BANCROFT AVE	LOCAL	NO	@ E 14TH ST
1	1 1 1	. 1	150TH AVE	HESPERIAN BLVD	1-580	ARTERIAL	NO	@ E 14TH ST
			ADAMS AVE	DOOLITTLE DR	BIGGE ST	COLLECTOR	YES	© E 147H ST & 1-580 OFF RA
3 10 11 15		_	ALADDIN AVE	TEAGARDEN ST	ALVARADO ST		NO	@ DOOLITTLE DR
		위	ALVARADO ST	DAVIS ST	MARINA BLVD	ARTERIAL COLLECTOR	YES	
	5.	-1 1	ALVARADO ST	MARINA BLVD	FREMONT AVE	ARTERIAL	YES	@ DAVIS ST
		\prec	ALVARADO ST	FREMONT AVE	PORTOLA ST	RES. COLLECTOR	YES	
	97	ol	AURORA DR	WILLIAMS ST	FAIRWAY DR	RES. COLLECTOR	NO	
	AWS AM	۲I	BANCROFT AVE	N/CITY LIMIT-DURANT AVE	E 14TH ST	RES. ARTERIAL		
_L	1 3	l t	BEATRICE ST	W/O. FREEWAY OFF RAMP	KESTERSON ST		YES	@ E 14TH ST
		3/	BENEDICT DR	ESTUDILLO AVE	SOUTH CITY LIMITS	RES. COLLECTOR	YE\$	@ I-880 OFF RAMP
		<u>≥</u>	BEST AVE	SAN LEANDRO BLVD	E 14TH ST	COLLECTOR	YES	@ I-580 ON/OFF RAMPS
		Z	BIGGE ST	N CITY LIMITS			No	
_	크		BLOSSOM WAY	E 14TH ST	S SIDE ADAMS AVE	COLLECTOR	NO	
	TRA	U	BROADMOOR BLVD	E 14TH ST	BANCROFT AVE	COLLECTOR	NO	@ E 14TH ST
1	<u>√</u> fi	ANDRO	CALLAN AVE	E 14TH ST	BANCROFT AVE	LOCAL	YES	© E 14TH ST
4	FFIC ⊝GL	ZI	CALLAN AVE	HUFF AVE	HUFF AVE	RES. ARTERIAL	YES	@ E 14TH ST
JIDELINES	ا ن چ	므	CASTRO ST	SAN LEANDRO BLVD	BANCROFT AVE	COLLECTOR	YES	
	ᆿ오ᅵ	낁	CATALINA ST	FAIRWAY DR	E 14TH ST	COLLECTOR	YES	@ E 14TH ST
	₾ 🗵 🛭		CORVALLIS ST	OWATTA AVE	FARALLON DR	COLLECTOR	NO	
	╤∃Ӏ	*	DAVIS ST	WEST END	FARNSWORTH ST	LOCAL	NO	
	듀Շ니	S	DAVIS ST	DOOLITTLE DR	DOOLITTLE DR	COLLECTOR	YES	@ DOOLITTLE DR
	s P	TANDARD	DOLORES AVE	E 14TH ST	E 14TH ST	ARTERIAL	YES	BTWN DOOLITTLE DR & E 14TH
	ויסר	≥	DOLORES AVE		BANCROFT AVE	COLLECTOR	YES	
		ZI	DOOLITTLE DR	BANCROFT AVE	GRAND AVE	RES. COLLECTOR	NO	@ E 14TH ST
	ź	91	DOOLITTLE DR	NORTH CITY LIMITS	FAIRWAY DR	ARTERIAL	YES	NORTH OF DAVIS ST
		<u> 2 </u>	DOWLING BLVD	FAIRWAY DR	FARALLON DR	COLLECTOR	YES	
		낃	DURANT AVE	DUTTON AVE	BANCROFT AVE	LOCAL	NO .	
		וסו		E 14TH ST	MACARTHUR BLVD	RES. COLLECTOR	NO	@ E 14TH ST
		וסו	DUTTON AVE	E 14TH ST	MACARTHUR BLVD	RES. COLLECTOR	YES	@ E 14TH ST
	X A		E_14TH_ST	NORTH CITY LIMITS	SOUTH CITY LIMITS	ARTERIAL.	YES	ENTIRE LENGTH
	APPROVED Kenneth Jos	ANS	ESTABROOK ST	WASHINGTON AVE	E 14TH ST	COLLECTOR	YES	@ E 14TH ST
1		Z	ESTUDILLO AVE	E 14TH ST	HUFF AVE	COLLECTOR	YES	© E 14TH ST
Joseph, Cily Engineer R.C.E. No. 34870 Expires 9/30/09	D D		ESTUDILLO AVE	HUFF AVE	MACARTHUR BLVD	RES. ARTERIAL	YES	@ 1-580 ON/OFF RAMPS
			EVERGREEN AVE	SYBIL AVE	W OF SCHOOL ST	RES. COLLECTOR	NO .	
		3 1	1741110111 011	HESPERIAN BLVD	E 14TH ST	ARTERIAL	YES	@ E 14TH ST
	5/2	1	FAIRWAY DR	NEPTUNE DR	DOOLITTLE DR	RES. COLLECTOR		
		ΥL	FAIRWAY DR	DOOLITTLE DR	ALADDIN AVE	ARTERIAL	YES	•
	7 5 () 5 2 ()		FARALLON DR FARGO AVE	DOOLITTLE DR	WICKS BLVD	COLLECTOR	YES	
	.CE			FARNSWORTH ST	WASHINGTON AVE	RES. COLLECTOR		
	الماج		FARNSWORTH ST	CORVALLIS ST	LEWELLING BLVD	RES. COLLECTOR		
ပွဲ	3 4		FLORESTA BLVD	CORVALLIS ST	FREMONT AVE	RES. ARTERIAL	YES	
,0	870		FLORESTA BLVD	FREMONT AVE	WASHINGTON AVE	ARTERIAL	+	
		<u> </u>	.,		THE PROPERTY AVE	TANTERIAL	YES	<u> </u>

ADD		-			TRAFFIC CONTROL PL	ANS REQUIRED		
ED "G			Street Name FREMONT AVE	Begin	End	Classification	Flashing Arrow Panel	Caltrans ROW
GUIDELIN	ŝ		GRAND AVE	ALVARADO ST	FLORESTA BLVD	ARTERIAL	YES	-
	S	- 1		JOAQUIN AVE	BENEDICT DR	COLLECTOR	YES	@ L 590 ON (055 Days
	ONS.	- 1	4	WASHINGTON AVE	HESPERIAN BLVD	RES. ARTERIAL	YES	@ I-580 ON/OFF RAMPS
		- 1		E 14TH ST	W JUANA AVE	LOCAL	YES	
	1		HUFF AVE	E 14TH ST		ARTERIAL	YES	A LIMPS OF STATE
))TILE		\neg		CALLAN AVE	ESTUDILLO AVE	RES. ARTERIAL	YES	@ HWY 238 ON RAMP
	, .	테	JUANA AVE	E 14TH ST	BANCROFT AVE	COLLECTOR	YES	
10/1/07	ol.	- <u> </u>	JUANA AVE	BANCROFT AVE	GRAND AVE	RES. COLLECTOR	YES	@ E 14TH ST
		≺	JUNIPER ST	WILLOW AVE	MANOR BLVD	LOCAL	NO	
		ol.	KESTERSON ST	MANOR BLVD	BEATRICE ST	RES. COLLECTOR	YES	
≥	∞	٦l	LAKE CHABOT RD	ESTUDILLO AVE	CITY LIMITS	RES. COLLECTOR	YES	
T I N	7 I	ဖ	LARK ST	138TH AVE	150TH AVE	LOCAL	NO NO	
			LEWELLING BLVD	WICKS BLVD		RES. ARTERIAL	YES	
	1		LEWELLING BLVD	WASHINGTON AVE	HESPERIAN BLVD	ARTERIAL	YES	@ 1 880 OFF 51110
	l		MACARTHUR BLVD	N CITY LIMITS	JOAQUIN AVE	ARTERIAL	YES	@ 1-880 OFF RAMP
TRAFFIC	‡ 1		MANOR BLVD	WICKS BLVD	KESTERSON ST	COLLECTOR	YES	⊕ I-580 OFF RAMP
	۶I	四	MARINA BLVD	NEPTUNE DR	DOOLITTLE DR	RES. ARTERIAL	YES	
	וַ תַּ	AND	MARINA BLVD	DOOLITTLE DR	SAN LEANDRO BLVD	ARTERIAL	YES	@ I-880 ON/OFF RAMPS
ି ଜ 🕏	"	/ 1	MARINA BLVD	SAN LEANDRO BLVD	WASHINGTON AVE	COLLECTOR	YES	W 1-000 UN/UFF RAMPS
⊆≿	ίΙ	ᅱ	MERCED ST	WILLIAMS ST	WICKS BLVD	ARTERIAL	YES	
□ 2	śΙ	찡	MERCED ST	WICKS BLVD	WILLOW AVE	LOCAL	YES	
P 2	Ž	1	MONARCH BAY DR	MARINA BLVD	FAIRWAY DR	COLLECTOR	YES	
GUIDELINES	;	*	MONTEREY BLVD	PORTOLA DR	WASHINGTON AVE	RES. COLLECTOR	YES	
<u> </u>	šΙ	လျှ	NEPTUNE DR	WILLIAMS ST	MARINA BLVD	RES. COLLECTOR		
O) L	-	スI	PARK ST	W BROADMOOR BLVD	SAN LEANDRO BLVD	COLLECTOR	NO NO	
7	₽∣	5 1	PARROTT ST	HAYS ST	E 14TH ST	LOCAL	NO .	
7 (2)	>	AND	POLVAROSA ST	AURORA DR	DOOLITTLE DR	COLLECTOR	NO NO	@ E 14TH ST
7	z	۶I	PURDUE ST	JUNIPER ST	FARNSWORTH ST	LOCAL	NO.	
	l	$\sqrt{2}$	SAN LEANDRO BLVD	N CITY LIMITS	E 14TH ST	ARTERIAL	NO	10.5.4.171.07
	- 1	õ	SPRINGLAKE DR	WASHINGTON AVE	HESPERIAN BLVD		YES	© E 14TH ST
		1	SYBIL AVE	E 14TH ST	GRAND AVE	COLLECTOR RES. COLLECTOR	YES	@ HWY 238 OFF RAMP
T =		밀	TEAGARDEN ST	MARINA BLVD	ALVARADO ST	COLLECTOR	YES	@ E 14TH ST
Kenneth	Ą	!	TIMOTHY DR	DAVIS ST	WILLIAMS ST	LOCAL	YES YES	A DAVIS CT
ě	ĕ	₽	W JUANA AVE	SAN LEANDRO BLVD	E 14TH ST	COLLECTOR		@ DAVIS ST
<u>ક</u>	췭	S	WASHINGTON AVE	W JUANA AVE	SAN LEANDRO BLVD	COLLECTOR	YES	@ E 14TH ST
Joseph,	_	٠,١	WASHINGTON AVE	SAN LEANDRO BLVD	SOUTH CITY LIMITS		YES	0 1 000 011 (055 041100
	NS.		WAYNE AVE	DAVIS ST	MARINA BLVD	ARTERIAL	YES	@ I-880 ON/OFF RAMPS
- ₹	NA		y			RES. COLLECTOR		@ DAVIS ST
[]	\sqrt{c}	R		MERCED ST	WILLIAMS ST	COLLECTOR	YES	@ DAVIS ST
y Engineer R.C.E. N	7	7	WICKS BLVD WICKS BLVD WILLIAMS ST WILLIAMS ST		MANOR BLVD	ARTERIAL	YES	
χ		1	WILLIAMS ST	MANOR BLVD NEPTUNE DR	LEWELLING BLVD	RES. ARTERIAL	YES	
S E			WILLIAMS ST		DOOLITTLE DR	RES. COLLECTOR	YES	
9 8				DOOLITTLE DR	SAN LEANDRO BLVD	COLLECTOR	YES	
No.34870 9/30/09			WILLIAMS ST WILLIOW AVE	SAN LEANDRO BLVD	E 14TH ST	COLLECTOR	YES	@ E 14TH ST
96			& MILLION AVE	MERCED ST	JUNIPER ST	LOCAL	NO	





ATTACHMENT C WELL COMPLETION REPORTS

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