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January 29, 2008

Final Phase of Cleanup Activities
at
S&W Atlas Iron and Metal Company, Inc.
10019 South Alameda Street
Los Angeles, California.

The attached work plan has been approved by DTSC, subject to completion of an anticipated settlement in People of the State of California, et al. v. S & W Atlas Iron and Metal Co., et al., Los Angeles Superior Court Case No. BC 316733, and with the following corrections:

- Figure 3, Cross Section A-A, the 5" reinforced concrete slab should be changed to 6".
- The typo on Page 3.3, first paragraph, duplicate "will be" should be corrected.
- On page 1.1, in the first paragraph of the work plan, the reference to "late Summer, 2007" should be changed to "early 2008."

REMEDIAL ACTION WORK PLAN – FINAL PHASE
FOR ATLAS IRON & METALS, INC.

Atlas Iron & Metals, Inc.
10019 South Alameda Street, Los Angeles, California

REED International Ltd.
2140 Shattuck Ave, Ste 209
Berkeley, California 94704

May 9, 2007
Final December 12, 2007
Revision 4

Atlas Iron and Metals
FINAL PHASE WORKPLAN

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INTRODUCTION

1.0 INTRODUCTION

1.1 PURPOSE

This Remedial Action Workplan ("RAWP") addresses work at the Atlas Iron & Metals ("Atlas") site and regarding the adjacent Jordan High School ("Jordan") site located in Los Angeles, California. The removal actions contained in the earlier DTSC approved Remedial Action Workplan (REED International, July 7, 2006) have been completed. The purpose of this RAWP is to provide a description of the procedures and protocols to be followed during the phase scheduled for implementation beginning in late Summer, 2007 and lasting for approximately eight weeks. These activities include:

Activities requiring medical monitoring and HAZWOPPER training

- Demolition and footing removal of the current Atlas/Jordan wall;
- Backfilling the current remedial excavation;
- Compaction of imported soil and gravel;
- Installation of geotextile;

Activities not requiring medical monitoring and HAZWOPPER training

- Placement of temporary fence on Jordan High School;
- Survey the Atlas/Jordan property line and northern property line;
- Grading and pavement base preparation;
- Placement of concrete forms and rebar;
- Concrete pavement and finishing;
- Construction of new post and panel wall at Atlas/Jordan perimeter.

REED International Ltd. was retained by Atlas to prepare this RAWP on behalf of Atlas for submission to the Department of Toxic Substances Control ("DTSC") for review prior to commencement of any further activities. The selected contractor to perform the final closure work is SOS, a California "A" engineering licensed contractor, number 702818, with HAZ certification. SOS will be supported by licensed subcontractors and by the Atlas on-site personnel. Subcontractors will conduct demolition, grading, concrete forming and rebar installation, concrete paving and finishing, and post and panel wall construction at the Atlas/Jordan perimeter.

At the point in the work when the excavation is covered with geotextile, then regular work trades will be allowed to enter the work area to complete the placement of concrete forms and rebar; capping of the site, and the remainder of the work regarding the Atlas/Jordan perimeter.

All SOS and Atlas personnel, who would participate in the backfilling and grading actions have been HAZWOPPER trained in Spanish and English in accordance with the following requirements of 1910.120 and CCR Title 8 Section 5192.:

> **Training. --**
> 1910.120(e)(1)
> General.
> 1910.120(e)(1)(i)
> *All employees working on site (such as but not limited to equipment operators, general laborers and others) exposed to hazardous substances, health hazards, or safety hazards and their supervisors and management responsible for the site shall receive training meeting the requirements of this paragraph before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards, and they shall receive review training as specified in this paragraph.*

Those personnel who are required to be medically monitored have and will continue to be so.

1.2 SITE LOCATION AND DESCRIPTION

The Atlas site is located at 10019 South Alameda Street in the City of Los Angeles, California (Figure 1). Access to the site is achieved through the main gate fronting South Alameda Street. The property is roughly rectangular in shape and is bounded by an industrial facility to the north, Jordan High School to the west, South Alameda Street and the Alameda Corridor Railroad to the east, and a parking lot for the school to the south. Atlas is an active metal recycler that purchases and segregates specific recyclable metals based on their metallurgy. Atlas sells the segregated metal to other entities that reuse and further recycle the metals.

The site is characterized by piles of segregated metals stored on concrete and/or asphalt awaiting shipment off-site for recycling. As shown on Figure 2 (hatched area), the soil remaining under the larger of the former piles is the subject of the RAWP. The original piles were removed under the surveillance of the U. S. Environmental Protection Agency personnel. There are two main buildings and a variety of specialty recycling storage areas located around the site.

1.3 PROJECT OBJECTIVE

The objective of this final phase of the removal action is to finalize the prior work regarding the excavation, capping, and Atlas/Jordan perimeter work according to a stipulation and judgment in accordance with discussions amongst the parties and with Judge Lichtman. The proposed work area previously contained storage piles of materials identified by EPA's START contractor to contain hazardous substances. The earlier phase was completed in September, 2006, and approximately 1,948 tons of material were removed from the work area. The storage piles of material have been transported to a licensed disposal facility. Confirmation Soil Sampling was conducted when the removal action was completed and the results have been presented as *Summary Report For Work Performed At Atlas Iron & Metals, Inc., October 31, 2006.*

The project objective will be accomplished by completing the following tasks:

- Preparing a work plan to provide a description of the procedures and protocols to be performed during this final phase of the project;
- Prepare survey of the Atlas/Jordan property line and northern property line;
- Installation of a temporary 10 foot high chain link fence at the Atlas/Jordan perimeter;
- Backfilling the current remedial excavation and perimeter area;
- Compaction of imported certified clean soil and gravel;
- Grading and pavement base preparation;
- Perimeter wall demolition and perimeter footing removal;
- Construction of new cast-in-place grade beam and drilled foundations; and
- Construction of a new ten-foot high post and panel wall at Atlas/Jordan perimeter;
- Placement of concrete forms and rebar;
- Concrete pavement and finishing;

SECTION 2.0

BACKGROUND

2.0 BACKGROUND

2.1 FACILITY OPERATIONS

Atlas purchases and prepares for recycling ferrous and non-ferrous metals at this site. The site employs approximately thirty persons that prepare and sort the purchased metals according to their metallurgy.

2.2 PREVIOUS INVESTIGATIONS/ACTIONS

In April 2003 and April 2004, DTSC conducted sampling at the Atlas site. DTSC collected samples of the two piles. On February 25, 2006, EPA collected samples from both piles. The EPA report claims that samples from both piles contained material exceeding hazardous waste levels for copper, lead, and zinc (the California TTLC), and that the EPA TCLP limit for lead was exceeded. In addition, the EPA claims that the samples contained materials with particle diameter of less than 0.1 millimeter, and some non-regulatory Preliminary Remediation Goals (PRGs) were exceeded for lead and other heavy metals and some polynuclear aromatics (PNAs). A summary of the EPA sampling results (from the April 28, 2006 EPA report) are presented in Attachment A. The results of the removal action was completed in 2006 have been reported in *Summary Report For Work Performed At Atlas Iron & Metals, Inc. October 31, 2006.*

There were two piles at the site. The smaller pile was approximately 40 feet by 40 feet and had an average height of approximately 6 feet. The larger of the two piles was approximately 140 feet by 40 feet and had an average height of approximately 4 - 5 feet.

An exclusion zone was established and all HAZWOPPER-trained personnel were required to decontaminate after entering the exclusion zone. A cover of visqueen plastic was laid over the existing concrete, and the material in the small pile was segregated by removing the larger recylables prior to loading and transport during the week of August 14, 2006. These materials were removed from the Atlas site, and then the excavator was used to remove the materials in the larger pile to the previous location of the smaller pile. A rubber-tired loader was used to load the trucks, as the materials from the large pile were loaded and segregated onto the site of the small pile. This process continued until the larger pile was removed to approximately existing grade of the lower concrete slab. At the end of each day, the materials remaining in the pile and the site of the large pile were covered with a visqueen cover.

During excavation, several large concrete slabs and structures were encountered. Care was taken to remove as much of the material as was feasible. Two pit areas were encountered along the easterly side of the pile area. These areas were excavated to the maximum extent possible and confirmation sampling was conducted.

Following removal of the materials to grade, it was evident that foreign fill materials remained on site. At the direction of the government, an additional 1.5 to 2 feet of mixed fill material was then removed. These materials were handled in the manner described above. The site was leveled and a visqueen cover was placed over the site. Based on the weigh tickets, the total mass removed was 1,948 tons. Approximately 100 tons of steel and cast iron were removed for recycling from the materials piles during loading.

The purpose of implementing a dust control program during the removal activities was to reduce the amount of particulate matter in the ambient air as a result of fugitive dust emissions potentially caused by the loading of the piles. The provisions of the South Coast Air Quality Management District ("SCAQMD") Rule 403, "Fugitive Dust," were followed and actions were applied to prevent, reduce, or mitigate dust emissions. At a minimum, the Best Available Control Measures ("BACM") as set forth in Rule 403 were used.

Measures that were taken to minimize dust emissions during the excavation and loading of the material consisted of the following:

- Maintained a cover on the piles, except on the working face;
- Applied water mist at sufficient quantities to prevent visible dust plumes;
- Provided upwind fencing to prevent material movement;
- Swept excess material from the work area;
- Emptied the loader bucket close to the truck (to minimize drop height and prevent visible dust plumes);
- No loading activities were conducted during high wind conditions (+25 mph).

Application of water for dust suppression was strictly controlled to minimize the unnecessary weight to be hauled and to ensure that the material was never saturated. A rigorous sweeping program was implemented along the truck route from the loading area to the exit gate to maintain a clean, sediment free, pathway. Prior to decontamination, the loader remained within the exclusion zone around the piles to minimize potential material transport to other areas of the site.

Monitoring for dust emissions consisted of visual reconnaissance, supported by real-time measurements with a direct reading instrument (i.e., MIE PDM Miniram). Monitoring was conducted at the working face and within the exclusion zone. The instrument was pre-set to sound an audible alarm should a predetermined baseline reading be exceeded (based on lead concentration detected in the pile). No such excursions occurred. The majority of the results for this sampling indicated that total particle concentration was 0.00 mg/m^3.

Additionally, three high-volume air monitoring devices were located in accordance with the directive of the government, to monitor the lead concentration in the dust at the site. The filters were replaced daily and delivered to the laboratory for analysis of lead. The average results indicated that the monitoring results were approximately two orders of magnitude below the OSHA PEL for lead of 50 $\mu g/m^3$ (0.05 mg/m^3). The samples were analyzed for lead by AmeriSci Laboratories in Carson, CA.

The high volume air samplers were Tisch Model TE 5170D fixed throat air monitors. The units were individually calibrated at the beginning of the job on August 14, 2006. The air flow rate was approximately 1.25 m^3/minute. Each of the meters has an elapsed time meter and an automatic time clock that was set to start at 05:30 and to shut off at 16:30 daily. The filters used were 8 inch by 10 inch Whatman #100 glass fiber filters.

2.3 CONFIRMATION SAMPLING RESULTS

The results of the Confirmation Sampling are presented in this section.

Sample Collection

The confirmation samples (deep) were collected on August 31, 2006 from the bottom of pits excavated through the remaining foreign fill materials. Samples were taken from the bottom of these seven pits.

The surface confirmation sampling was made on September 12, 2006 on the same grid used for the August 31, 2006 sampling, which were also done with EPA approval and oversight. Eight samples were collected at random locations within the grids. Approximately a one-foot cube of soil was removed with a shovel and samples were taken from the materials at the bottom of each of the sampling pits. Samples were taken at each location with a new trowel that had been cleaned with TSP prior to use. The samples were placed in wide mouth jars, cooled, and then transported to the laboratory for analysis. At the request of the government, the analyses to be conducted were PCBs, TTLC metals, and TCLP.

The results of the deeper confirmation sampling (August 31, 2006) are shown on Table 1. The highest residual lead concentration in these samples was 136 mg/kg in a single sample (at location #6). The California standard for lead under the HWCA TTLC criterion is 1,000 mg/kg. The majority of the samples showed lead concentrations that were less than 15 mg/kg. All locations had essentially non-detect levels of PCBs, other than two samples (#2 and #6) that showed detectable PCB concentrations (6.2 and 2.2 mg/kg).

The results of the surface confirmation sampling are shown on Table 2. The highest residual lead concentration in these samples was 12,900 mg/kg in a single sample (at location #1). The California standard for lead under the HWCA TTLC criterion is 1,000 mg/kg. The majority of the samples had lead concentrations that would not be characterized as hazardous wastes under the TTLC criterion. Three samples (#1, #3, and #6) had detectable PCB concentrations (approximately 2, 3 and 10 mg/kg, respectively). All other locations had non-detect levels of PCBs.

SECTION 3.0

FINAL PHASE ACTION PLAN

3.0 FINAL PHASE ACTION PLAN

3.1 FACILITY OPERATIONS

Atlas purchases and prepares for recycling ferrous and non-ferrous metals this site. The site employs approximately thirty persons that prepare and sort the purchased metals according to their metallurgy. Facility operations will continue during the activities as they have continued during the previous sampling events conducted by DTSC and EPA. The primary recycling/metals segregation is conducted by hand labor in the front of the facility. These functions will continue with business as usual during the capping operations.

The primary recycling operations at Atlas are conducted downwind of the high volume air monitoring devices installed to monitor the air quality during the backfilling and grading operations. The high volume air monitoring devices will be used to determine whether dust was generated during the backfilling and grading operations.

3.2 SCOPE OF WORK

The Scope of Work will consist of the following:

- Survey the Atlas/Jordan property line and northern property line;
- Installation of a ten-foot high chain link fence at the Atlas/Jordan perimeter;
- Perimeter wall demolition and perimeter footing removal;
- Preparation, backfill, and compaction using certified clean base, as specified;
- Grade and repave the area with six-inch thick concrete and finish;
- Construction of new post and panel wall at Atlas/Jordan perimeter.

3.3 TEMPORARY FENCE

For security and prior to the installation of the backfill, a temporary ten-foot high construction fence will be installed near the Atlas/Jordan perimeter. The fence will be ten-foot high and hung on driven posts, it will have top and bottom wires, corner braces, and will be covered with a woven polyethylene visual screen.

3.4 EXCAVATION SOIL COVER

A cover layer of certified clean imported fill soil will then be laid and compacted over the existing excavation area. This cover soil will be placed primarily over the northern portion of the work area to fill low spots. All areas will receive a minimum of 4 inches of clean cover soil and up to 24 inches where required depending upon the depth of the initial excavation. The base of the excavation soil will be compacted to a surface elevation of 14 inches below grade. The certified clean fill will be placed and compacted to 90 percent relative compaction density in 4 to

8 inch loose lifts with moisture applied as needed.

A geotextile will be placed over the clean fill when the compaction is complete and prior to placing the subbase materials. A polyethylene sheet will then be placed to ensure that construction debris does not get compacted into the site with the clean fill.

3.5 WALL DEMOLITION

When the cover soil and temporary fence are in place, the existing concrete wall and footing will be demolished using a skidsteer and hydraulic breaker. The debris will be removed including all of the polyethylene sheeting/tarps. The wall footing will be excavated with a backhoe assisted by a hydraulic concrete breaker mounted on a skidsteer loader. The demolition debris will be removed to a local concrete crusher recycler, if suitable, or an inert Class 3 landfill. When the wall demolition is completed, all soil areas will be compacted.

3.6 EXCAVATION BACKFILL

After the demolition, SOS will then furnish and deliver certified clean imported CAB base (Cal Trans Class 2 - 3/8"or ¾" gravel) to be placed in the work area. The work will be conducted by using a water truck or trailer; a small skip loader equipped with a grading box (gannon type or equivalent). A vibratory sheepsfoot drum roller will also be used in addition to a walk-behind vibratory plate.

The existing concrete surface near the sewer manhole (encasement) will be preserved and will also be used to establish grade to the south and the north. If required, the edges of this surface will be saw-cut prior to concrete placement. Prior to placing the subbase, a geotextile will be placed on top of the clean backfill. The area south of the sewer encasement will be filled to grade minus 6 inches with approximately 60 tons (3 loads) of gravel base to allow for a 6-inch thickness of reinforced concrete paving to be placed over 8 inches of compacted gravel base per Figure 4. North of the sewer encasement, approximately 165 tons (7 loads) will be filled to grade minus 6 inches to allow for a 6 inch thickness of reinforced concrete paving to be placed over 8 inches of compacted gravel base per Figure 4. A void space in the northeast corner will be filled with up to two loads of one sack slurry. The slab will be sloped from north to south to the paved lot and away from the western wall (as noted on Figure 3). The base rock will be commercial certified clean quarry 3/4" minus rock material, which is self compacting. A 3/8" CAB base layer will then be placed, wheel rolled, vibratory rolled, rough and final graded.

3.7 CONCRETE PAVING

The work area will be repaved with a 6-inch thick reinforced concrete cap (see Figure 3 and Attachment C). The concrete will be 2,500 psi mix design and will be placed over rebar (#4) placed at 18-inch intervals on center each way per structural design. The concrete finish will consist of a light broom finish.

The concrete north of the sewer encasement will be placed in the same manner as the concrete to the south of the sewer encasement, as described above. The concrete joints along the eastern edge and all other concrete joints will be will be sealed with silicone sealant (Sikka or equivalent). If required, the new 6-inch thick slab's western edge will be saw-cut to provide a clean edge where it joins post and panel foundation.

3.8 GRADE BEAM

As shown on Figure 4, a 20-inch wide and 24-inch deep grade beam will be installed on top of the drilled piers. The grade beam will be built on the edge of the capped area along the entire westerly boundary of the Atlas site.

3.9 POST AND PANEL WALL CONSTRUCTION

The post and panel wall will be constructed to a height of 10 feet. The wall will be constructed using 12-foot wide by 10-foot tall panels with posts as shown on Figure 4. The wall will be vertically and horizontally reinforced as required by the structural design as show on Figures 4 and 5 and Attachment C (#4 bars EW @12 inch OC or equal). The wall will be built adjacent to the edge of the capped area along the entire westerly boundary of the Atlas site.

3.10 PANEL

Figure 5 presents the REED design for the construction of the panels. As noted above REED's structural engineer has modified this design to incorporate (#4 bars EW @12 inch OC or equal) in the panels. The panels will be as smooth as possible.

3.11 DEMOBILIZE

Upon completion, SOS will remove the chain link fence. SOS and its subcontractors will clean the work area and demobilize.

3.12 WORK HOURS

All work related to the removal of materials will be conducted during daylight hours (approximately 7 a.m. to 6 p.m.). In the event that work is necessary after daylight hours, then a nighttime illumination program will be initiated in accordance with 8 CCR 5192(m).

3.13 DUST CONTROL AND MONITORING

The purpose of implementing a dust control program during the regrading activities is to monitor the amount of particulate matter in the ambient air as a result of fugitive dust emissions potentially caused by grading and backfilling with certified clean fill. The provisions of the

SCAQMD Rule 403, 'Fugitive Dust,' and apply actions to prevent, reduce, or mitigate dust emissions. At a minimum, the BACM as set forth in Table 1 of Rule 403 (Attachment B) will be used.

Measures that will be taken to minimize dust emissions during the excavation and loading of the materials consist of the following:

- Maintain a cover on existing soils;
- Applying water mist at sufficient quantities to prevent visible dusty plumes;
- Providing upwind fencing to prevent material movement;
- Consistently sweeping excess material from the work area;
- Emptying loader bucket close to the truck (to minimize drop height and prevent visible dust plumes);
- Not conducting loading activities during high wind conditions (+25 mph).

Based on the potential for sediment transport from the site, application of water for dust suppression will be strictly controlled and the debris from the wall will not be saturated, to prevent run-off. A rigorous sweeping program shall be implemented along the truck route from the loading area to the exit gate to maintain a clean, sediment free, pathway.

Monitoring for dust emissions shall consist of visual reconnaissance, supported by real-time measurements with a direct reading instrument (i.e., MIE PDM Miniram). This instrument allows for monitoring on-site. Monitoring will be conducted at the working area until the clean backfill is placed over the existing soil and the backfilling with certified clean fill is complete. The instrument will be pre-set to sound an audible alarm should an unsafe reading be exceeded (based on lead concentration detected in the pile, in accordance with the HASP. Should an excursion occur, the SOS Site Health & Safety Officer ("SHSO") supervisor will promptly implement sufficient dust control measures to mitigate the condition and assure compliance with AQMD Rule 403.

During the backfilling and grading phase, three high volume air monitoring devices will be located in the same vicinity as were used previously to monitor for the lead concentration in the dust at the site. The filters will be replaced as required and sent to the laboratory for analysis of lead until the surface is covered with certified clean fill.

3.14 STORM WATER MANAGEMENT

Any storm water that may be incurred will collect on the site. There are no storm drains on site and the storm water is managed manually in accordance with the site storm water management plan.

3.15 PERMITS AND NOTIFICATIONS

An evaluation of the applicable, or relevant and appropriate regulations ("ARARs"), within the limitations of the scope of work, has been attempted and based on this evaluation, the current proposal to backfill the expected quantity of material does not appear to require application for particulate monitoring from SAQMD, under Rule 403. However, dust control, and monitoring are expected to be implemented on an as-needed basis to comply with the intent of the rule and minimize fugitive dust from traveling offsite. Based on available data, there is no indication that the material has emissions of volatile organic compounds ("VOCs") exceeding 50 ppm. Therefore, no application of an AQMD Rule 1166 permit "Volatile Organic Compound Emissions From Decontamination Of Soil." If additional data become available that change this determination, then a reevaluation of the ARARs should be performed.

The closest school is Jordan High School. The school buildings are more than 500 feet from the site and the predominant wind direction is on-shore and therefore from the school to the Atlas site. At this time, it is not recommended that the removal action be coordinated with the school activities.

3.16 SITE SAFETY PLAN

The updated site-specific Health and Safety Plan ("HASP") for this project is being concurrently submitted. This plan will be followed to address potential health and safety issues of workers during implementation of the planned field work. The HASP establishes field procedures and delineates basic safety requirements. Prior to commencing field activities, a safety meeting shall be held to discuss potential work hazards and other site-specific health and safety issues.

The Department of Health Services shall follow previously established procedures of checking in at the Atlas office and signing in, as required by the Site Safety Plan, prior to entering the site during this phase of the Remedial Action Plan.

3.17 SCHEDULE

Based on the previously approved workplan (modified to incorporate the LAUSD comments), the work will begin on or about January 3rd, 2008 (or as soon as a building permit can be obtained) and continue for approximately ten weeks to be finalized by April 1, 2008 (weather permitting).

3.18 SITE ACCESS

Site access will be under the control of the SOS SHSO. DTSC personnel with proper training and certification will be allowed on site following notification and check in on site.

SECTION 4.0
FINAL PHASE REPORT

4.0 FINAL PHASE REPORT

4.1 OBJECTIVE

The objective of the Final Phase Report is to provide a comprehensive summary of the remedial activities, present documentation verifying work done, and make available the site monitoring data gathered during the remedial efforts.

4.2 FINAL PHASE ACTIONS

This section of the report shall have an accounting of the Final Phase actions. At a minimum, the documentation will include:

- Copies of the manifests (if required);
- Bills of Lading or Load Tickets;
- Copies of daily field logs; providing a written description of the daily loading events, personnel and equipment used, and number of trucks passing through.

4.3 SITE SAFETY DOCUMENTATION

The site safety documentation should include, at a minimum:

- Copies of Illness, Injury, and Unusual Occurrence Reports;
- Inspection Checklist;
- Safety Health Non-Compliance Forms;
- Tailgate Safety Meeting Forms
- Visitor's Log;
- Site Safety Plan Change Forms, if applicable.

4.4 MONITORING DOCUMENTATION

The site monitoring data gathered during the removal efforts should be included in the report. The information provided should, at a minimum, consist of:

- Copies of air monitoring records for the site perimeter and work zones;
- A description of the dust control methods employed;
- A narrative of other site issues worthy of note (i.e., site security issues, adjacent neighbor inquiries, interface with regulatory agencies).

TABLES

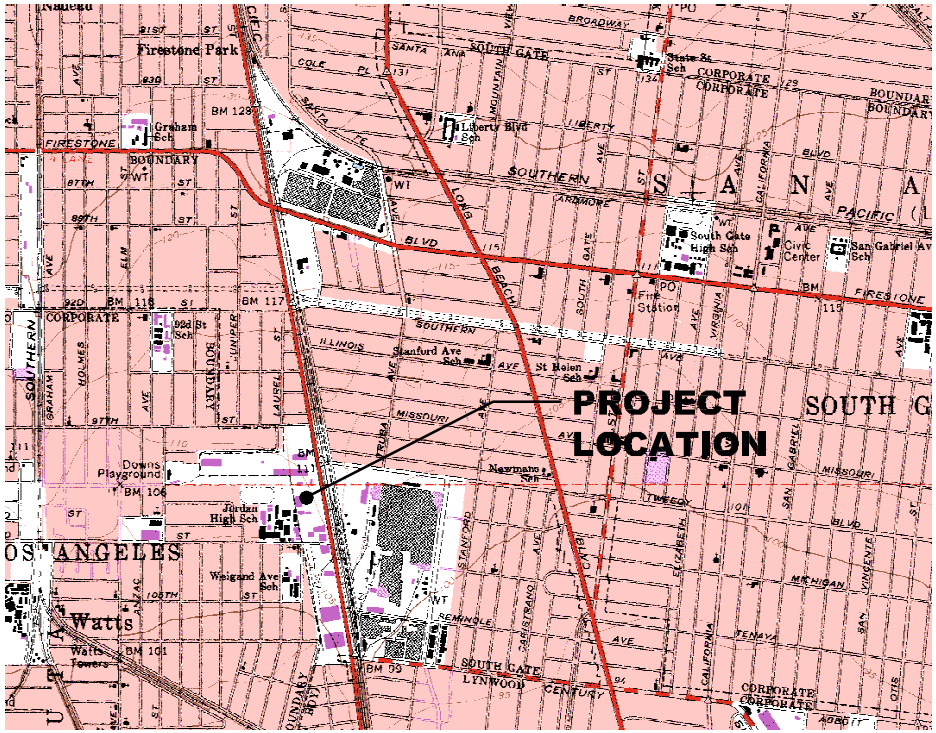
Table 1 - Metal and PCB data from Atlas Iron and Metals site - deep confirmation samples taken on 8/31/2006

	Sample Number						
mg/kg	#1-5'	#2-3.5'	#3-4'	#4-3'	#5-3'	#6-3'	#7-3'
Antimony	<3	8.6	3	3	3	3	10.2
Arsenic	<5	0.5	5	5	5	5	5
Barium	440	7.2	14.7	8.5	6.9	10.6	31.1
Beryllium	<1	0.1	1	1	1	1	1
Cadmium	<1	0.1	1.5	1	1	1	1
Chromium(total)	36.7	55.5	27.0	23.7	117	23.4	20.1
Cobalt	<1	0.1	1	1	1	1	1.4
Copper	42.2	27.4	67.6	18.9	15.9	37.1	148
Lead	<5	13.4	6.8	5	16.7	136	30.4
Mercury	0.18	0.34	0.22	0.20	0.1	0.24	0.31
Molybdenum	<1	1.5	1	4.4	1	3.5	11.5
Nickel	49.5	7.7	25.0	10.2	4.8	5.8	8.9
Selenium	<8	0.8	8	8	8	8	8
Silver	27.9	1.6	25.1	1.8	2.7	1	1.1
Thallium	<4	0.4	4	4	4	4	4
Vanadium	54.8	0.1	1	1	1	1	1
Zinc	109	77.3	82.9	62.6	98.8	291	199
PCB, mg/kg							
PCB-1016	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1221	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1232	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1242	0.1	3.2	0.1	0.1	0.1	0.5	0.1
PCB-1248	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1254	0.1	2.9	0.1	0.1	0.1	1.6	0.1
PCB-1260	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 2 - Metal and PCB data from Atlas Iron and Metals site - surface confirmation samples taken on 9/12/2006

TTLC	Sample Number								
mg/kg	#1	#2	#3	#4	'#5	#6	#7	#8	#9
Antimony	21	10	11	10	3	11	6	8	27
Arsenic	41	5	5	5	5	5	5	5	28
Barium	2,180	150	672	116	152	142	92	407	1,190
Beryllium	1	1	1	1	1	1	1	1	14
Cadmium	33	1	9	1	1	1	3	13	30
Chromium(total)	152	25	133.0	23	22	25	32	142	436
Cobalt	18	9	11	8	6	7	5	9	21
Copper	1,060	31	572	28	30	21	2,430	3,930	3,360
Lead	12,900	5	2,810	9	30	7	350	2,570	5,640
Mercury	5	0.2	2.3	0.10	0.2	0.2	0.2	7	5.3
Molybdenum	21	1	6	1	1	1	1	42	50
Nickel	94	19	100.0	17	14	15	35	117	398
Selenium	8	8	8	8	8	8	8	8	8
Silver	2	1	1	1	1	1	1	2	4
Thallium	4	4	4	4	4	4	4	4	5
Vanadium	18	28	29	31	27	32	21	24	24
Zinc	12,300	89	2,150	71	138	69	3,340	2,390	6,400
TCLP - mg/l									
Arsenic	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.36
Barium	4.36	0.49	1.98	0.36	0.45	0.40	0.33	1.85	3.14
Cadmium	1.48	0.01	0.41	0.01	0.01	0.01	0.03	0.36	1.15
Chromium (total)	0.22	0.03	0.21	0.02	0.04	0.03	0.05	0.25	0.62
Lead	141.00	0.05	87.50	0.09	0.31	0.05	0.48	76.80	64.30
Mercury	0.12	0.01	0.08	0.01	0.01	0.01	0.01	0.10	0.11
Selenium	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Silver	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PCB mg/kg									
PCB-1016	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1221	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1232	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PCB-1242	0.1	0.1	2.7	0.1	0.1	0.1	0.1	0.1	3.6
PCB-1248	0.1	0.1	0.1	0.1	0.1	0.1	0.1	6.1	0.1
PCB-1254	2.7	0.1	4.3	0.1	0.1	0.1	0.1	0.1	8.3
PCB-1260	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.6	0.1

FIGURES



MAP REFERENCE:
USGS 7.5 MIN QUADRANGLE
TITLED: SOUTH GATE, CALIFORNIA
DATED: 1964
REVISED: 1981

SCALE
0 2000 4000 FEET

MAP REFERENCE:
GOOGLE EARTH

SCALE
0 500 1000 FEET

REED INTERNATIONAL, LTD.

Figure 1
VICINITY MAP

ATLAS METALS
10019 ALAMEDA ST. LOS ANGELES, CALIFORNIA

DATE: 2-22-07 | SCALE AS SHOWN | DRAWN BY: PPP

STAR-DATE

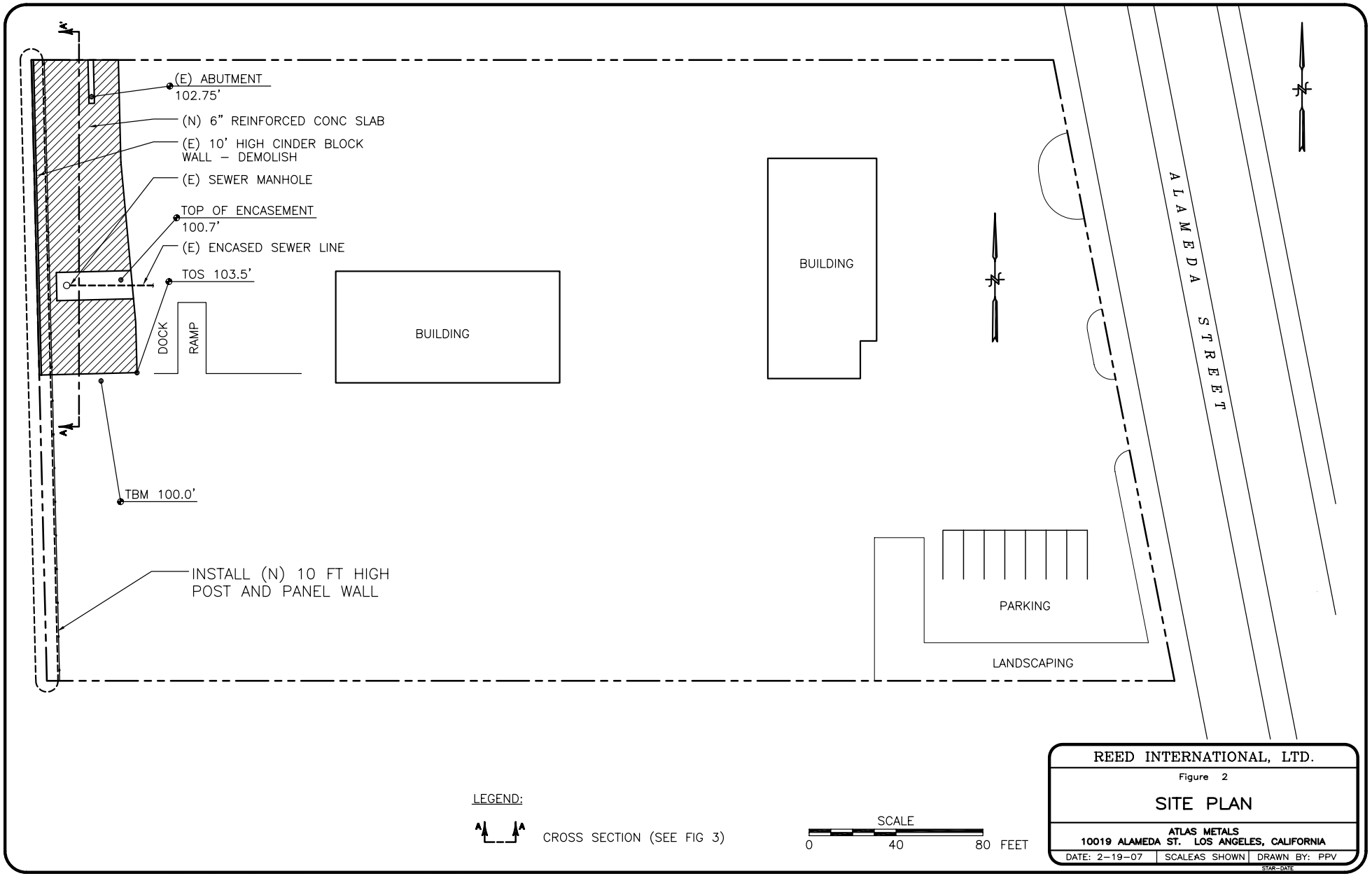


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Figure 2

SITE PLAN

ATLAS METALS
10019 ALAMEDA ST. LOS ANGELES, CALIFORNIA

DATE: 2-19-07 | SCALEAS SHOWN | DRAWN BY: PPV

STAR-DATE

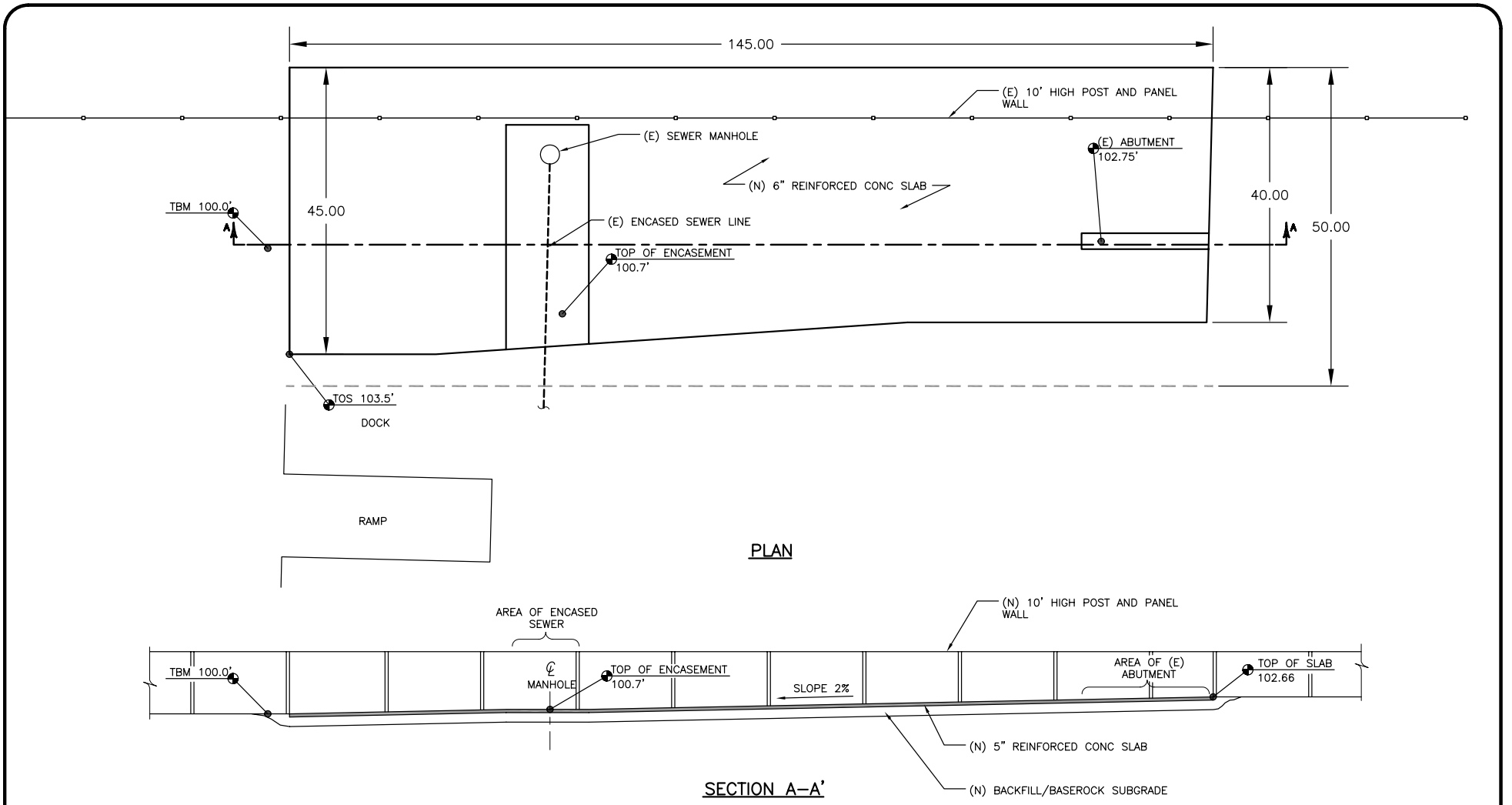

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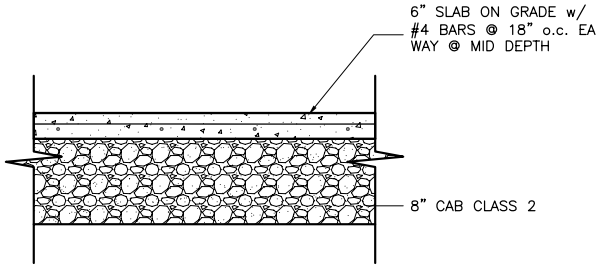
Figure 3

H-20 PAD PLAN AND SECTION

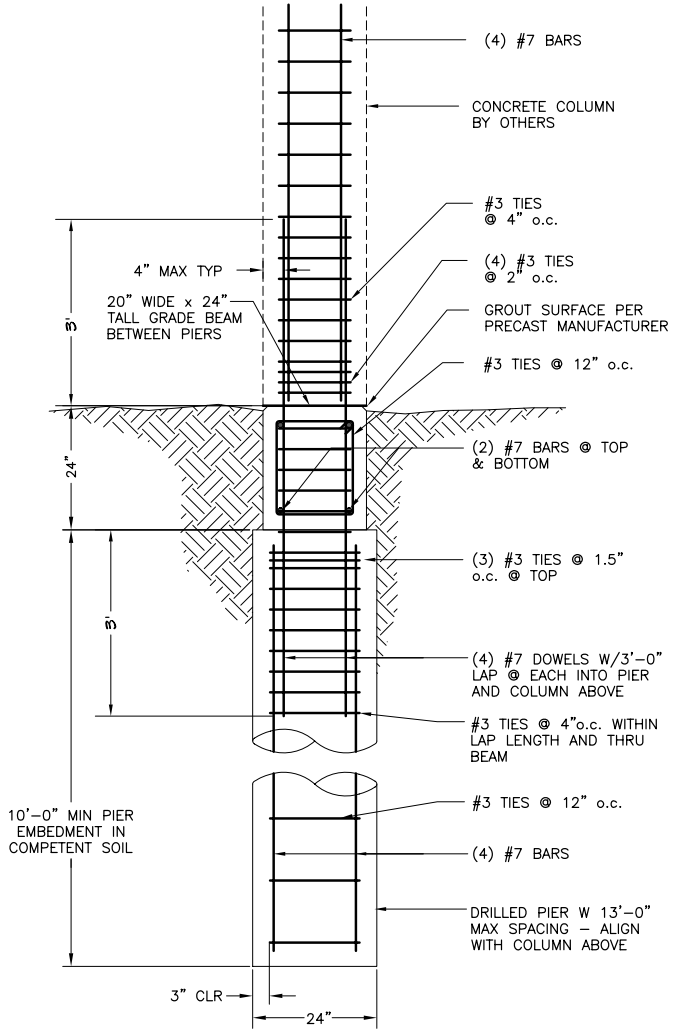
ATLAS METALS
10019 ALAMEDA ST. LOS ANGELES, CALIFORNIA

DATE: 2-19-07	SCALEAS SHOWN	DRAWN BY: PPV

STAR-DATE



1 / SK3 TYPICAL SLAB CROSS SECTION w/ H20 LOADING



1 / SK4 PIER AND GRADBEAM DETAIL

GENERAL NOTES:
1. THE NOTES APPLY TO ALL DRAWINGS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL BUILDING CODES AND SAFETY ORDINANCES IN EFFECT AT THE PLACE OF BUILDING, REF 2001 CBC (1997 UBC W/ CALIFORNIA INSERTS).
3. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN, THEIR CONSTRUCTION SHALL BE SHOWN FOR SIMILAR FEATURES.
4. ANY CONFLICTS OR DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER AND CORRECTED AS DIRECTED BY THE ENGINEER.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. CONTRACTOR ACKNOWLEDGES THAT HE HAS THOROUGHLY FAMILIARIZED HIMSELF WITH THE BUILDING SITE CONDITIONS, GRADES, ETC, WITH THE DRAWINGS AND SPECIFICATIONS, WITH THE DELIVERY FACILITIES AND ALL OTHER MATTERS AND CONDITIONS WHICH MAY AFFECT THE OPERATION AND COMPLETION OF THE WORK AND ASSUMES ALL RISKS THEREFROM.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ALL DAMAGE SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR'S EXPENSE.
8. THE DRAWINGS SCHEMATICALLY INDICATE EXISTING AND NEW CONSTRUCTION. DUE TO THE NATURE OF THE WORK ADJUSTMENTS WILL LIKELY BE REQUIRED IN THE FIELD TO MEET THE DESIGN OBJECTIVES. SUCH ADJUSTMENTS ARE PART OF THE CONTRACT AND SHALL BE INCLUDED IN THE LUMP SUM BID.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING. SHORING SHALL BE PROVIDED TO SUPPORT THE EXISTING STRUCTURE UNTIL ALL WORK ON THE DRAWINGS ARE COMPLETED.
10. SOILS REPORT INCLUDED AS PART OF WORK PLAN.
11. GEOTECHNICAL ENGINEER TO INSPECT BOTTOM OF FOOTING BEFORE POURING CONCRETE FOR MINIMUM EMBEDMENT INTO COMPETENT SOIL

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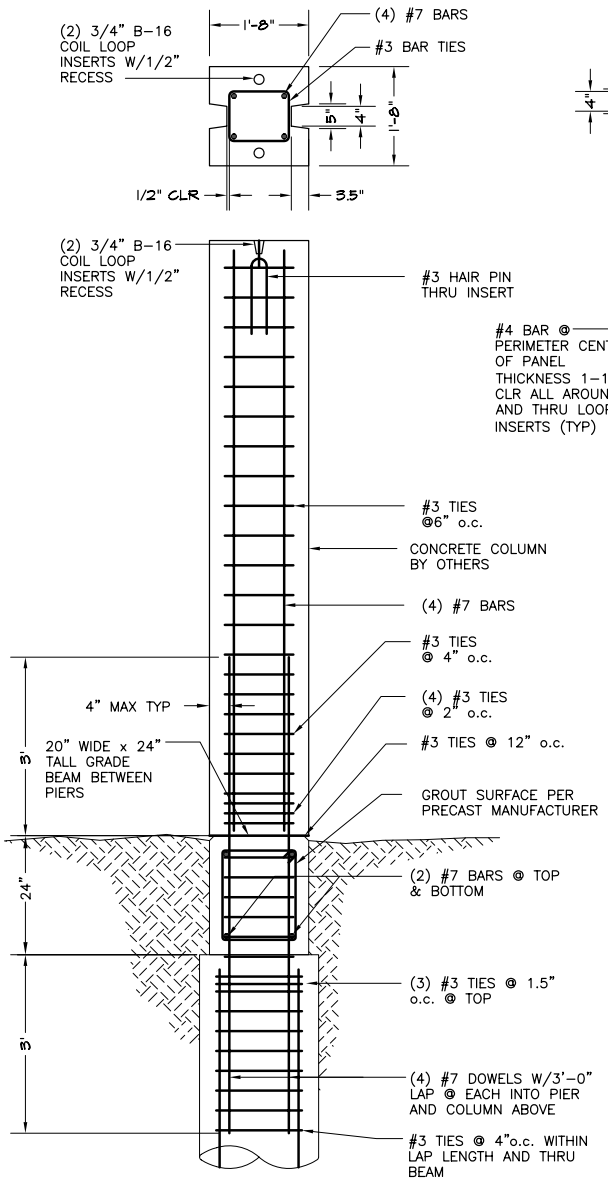
Figure 4

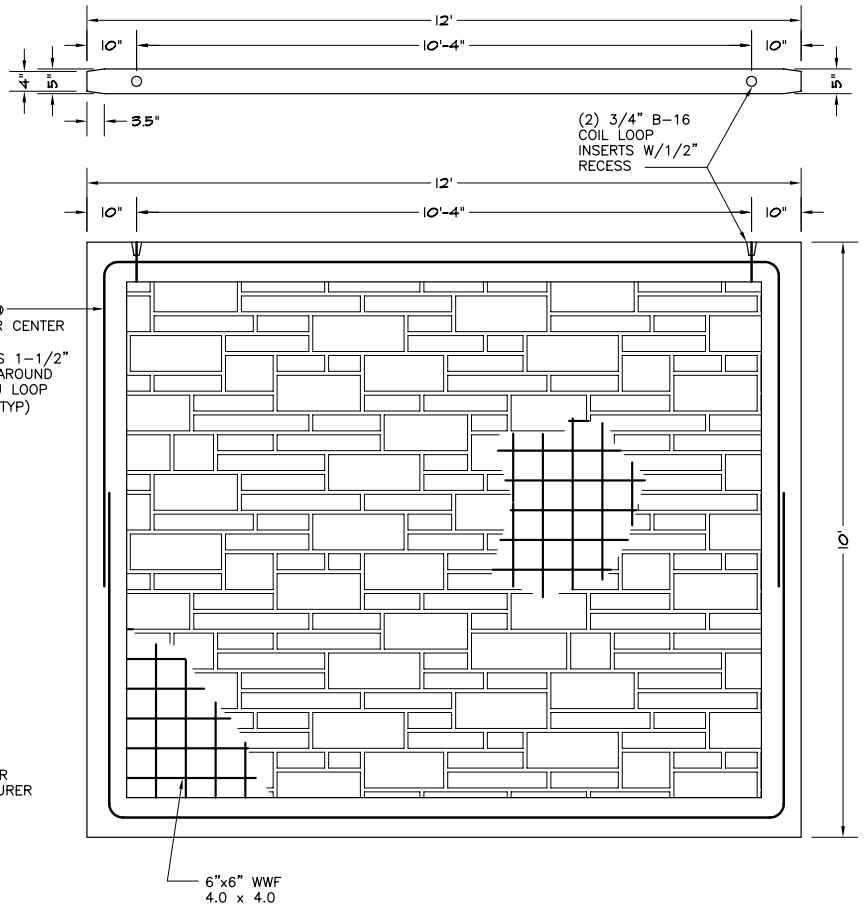
WALL/FOUNDATION/SLAB DETAILS AND NOTES

ATLAS METALS
10019 ALAMEDA ST. LOS ANGELES, CALIFORNIA

DATE: 12-10-07	SCALEAS SHOWN	DRAWN BY: PPV

STAR-DATE





GENERAL STRUCTURAL NOTES

CODE: 2003 INTERNATIONAL BUILDING CODE

DESIGN CRITERIA:
GROUND SNOW LOAD: NOT APPLICABLE
BASIC WIND SPEED: 70 MPH, EXPOSURE C
SEISMIC DESIGN CATEGORY: D
SITE CLASS: D
BUILDING CATEGORY: I

SNOW DESIGN CRITERIA:
FLAT ROOF SNOW LOAD Pf: NOT APPLICABLE
SNOW EXPOSURE FACTOR Ce: NOT APPLICABLE
SNOW LOAD IMPORTANCE FACTOR Is: NOT APPLICABLE
THERMAL FACTOR Ct: NOT APPLICABLE

WIND DESIGN CRITERIA:
WIND IMPORTANCE FACTOR Iw: 0.87
INTERNAL PRESSURE COEFFICIENT = 0.00 (OPEN)
ALL COMPONENTS AND CLADDING SHOWN ON THESE DOCUMENTS

SEISMIC DESIGN CRITERIA:
SEISMIC IMPORTANCE FACTOR IE: 1.0
SEISMIC USE GROUP: I
SPECTRAL ACCELERATION SS: 1.583g, S1: 0.615g
SEISMIC FORCE RESISTING SYSTEM: NON BUILDING SIGNS AND BILLBOARDS
DESIGN BASE SHEAR: 1001 LBS . PER COLUMN
SEISMIC RESPONSE COEFFICIENT CS: 0.26
RESPONSE MODIFICATION FACTOR R: 3
ANALYSIS PROCEDURE: EQUIVALENT STATIC

FOUNDATION:
1. PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO VERIFY LOCATION AND EXTENT OF PROPOSED NEW POST AND PANEL WALL

REINFORCED CONCRETE

1. POST AND PANEL CONCRETE TO BE 4000 PSI.
2. FOOTING CONCRETE TO BE 3000 PSI.
3. MINIMUM SOIL LATERAL BEARING ALLOWABLE: 150 PSF
4. CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM-C94 WITH A MAXIMUM SLUMP OF 4 INCHES.

STRUCTURAL STEEL

1. REBAR SHALL CONFORM WITH ASTM 615, GRADE 60

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Figure 5

POST AND PANEL WALL DETAILS AND NOTES

ATLAS METALS
10019 ALAMEDA ST. LOS ANGELES, CALIFORNIA

DATE: 12-10-07	SCALE AS SHOWN	DRAWN BY: PPV

STAR-DATE