

INTER-OFFICE MEMORANDUM

TO
AT

See Distribution

DATE

November 7, 1967

FROM

O. A. Finsand

COPIES TO

AT

O. A. Finsand

Middletown Construction

JOB NO.

7100

SUBJECT

Kaiser Engineer's Weekly Field Activity Report

Transmitted herewith is the subject report for the week
ending November 7, 1967.

OAF/sec

Distribution

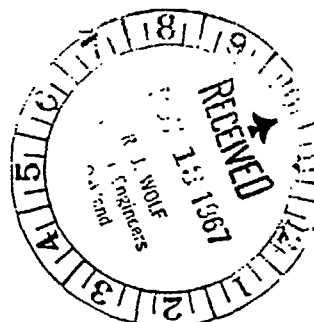
Armco

D. C. Osborne
C. G. Kramer
F. W. Barnes
T. R. Foley
P. R. Smith
D. Cox
J. S. Lots
R. L. Brannaman

Kaiser

R. J. Wolf (Oakland)
W. F. Bort (Oakland)
D. A. Daly
F. X. Kast
J. W. Irvin
V. L. Frankson
A. L. Gordon
H. C. Boucher

cc: Central File
Kaiser Reading File
Armco Reading File



KEN 003850

KAISER ENGINEERS
WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

WEATHER: Wet and cold during early part of period, continued cold with no precipitation during latter part of period.

Client: Ayrco Steel Corporation

Location: Middletown, Ohio

Job Number: 3471

TEMPERATURE: Maximum - 61 degrees
Minimum - 24 degrees

JOB VISITORS

R. J. Wolf, W. E. Burger, C. B. Blumenthal, J. F. Chajnowski,
N. R. Garder, J. Heniades, J. Zorena, T. Zygmuntowicz, F. Rapone,
J. Liptak, S. Ruvkun

SUMMARY FORCE REPORT

	Kaiser Engineers		Subcontractors	Foothill Electric	Total
	Exempt	Non-Exempt			
Management	5	3		1	9
General Supervision	16	3	21	6	46
Field Engineering	48	22	12	16	98
Warehs. & Mtl. Control	4	7		1	12
Survey	2	17	4		23
Office Srv. & Repro.	1	7			8
Clerical			19	17	36
Craft *	—	<u>1,634</u>	<u>1,189</u>	<u>627</u>	<u>3,450</u>
TOTAL	76	1,693	1,245	668	3,682

* Average for week of men on payroll.

Average for week of Crafts is as follows:

Kaiser Engineers	1,322
Subcontractors	1,140
Foothill Electric	<u>587</u>
Total Crafts Working	3,049

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

COMMENTS

The most important occurrence of this period was our announcement to the Hot Strip Mill Supervision that both Armco and Kaiser Engineers have set a date of December 1 to roll steel through the roughing train. To accomplish this, is a major undertaking. Although the schedule is extremely tight we feel that it can be done. All of those connected with the completing the necessary prerequisite are enthusiastic about making the date and are proceeding in an orderly manner to assure that the minimum requirements are being met. At the same time, we are still pursuing the effort toward 100 percent completion of areas starting with the Slab Yard.

This period through Friday, November 10, has seen an unprecedented rash of jurisdictional disputes and walkouts. The festivities started with the Ironworkers employed by Eichleay who contested cable reeving on the reject transfer car and as a result all Project "600" Ironworkers refused to come to work Tuesday morning. A meeting was held with the Representative of the Ironworkers Union and about one-third of the men reported to work at 10:30 a.m. on Tuesday. This was followed on the same day by the Operating Engineers for all Subcontractors and Kaiser Engineers who walked off the job about 10 o'clock Tuesday morning in protest to the firing of a steward during the previous week by The McGraw Company. The Operating Engineers all returned to work on Wednesday morning, November 8. On Friday morning, November 10, the Teamsters failed to come through the gate due to an assortment of miscellaneous grievances including movement of men on various rated trucks and in protest to Pettibone and like equipment making long hauls with materials. A meeting was held with the Teamster Union representatives and the men came in about 10:30 a.m. In addition to the above, there has been a considerable number of disputes between various crafts that has not disrupted the work but has caused considerable difficulty in solving.

Why this week? We can only assume that it is due to reducing the number of men slightly in two or three crafts, or possibly the knowledge that we plan to make steel soon has an effect. Another factor could be that the overtime is less recently.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

PROJECT PROGRESS

1. 7148 - HOT STRIP MILL

- 1.1 Excavation and Backfill: 39 cubic yards of backfill was completed in the Hot Strip Mill for a total to date of 894,821 cubic yards.
- 1.2 Concrete: 16 cubic yards of concrete was placed during the period for an adjusted total to date of 210,612 cubic yards. This adjusted total now includes all manholes and concrete collars for drain wells.
- 1.3 Structural and Miscellaneous Steel: A 70 man work force continued throughout the period on installation of Hot Strip Mill miscellaneous steel items. At column line 1, installation of the pipe trench covers and frames continued during the period and 25 tons remain to be installed. Progress was evident in the furnace pusher area on stiles and walkways for furnace #1 and 2. Remaining walkways in this area will complete after the temporary brick loading platforms are removed at reheat furnace #3. Installation of handrail and grating continued during the period in the downcoiler area. This work is now 97% complete. At Scale Pit #3, the handrail and access stairways to the scale pit control structure was completed during the period and progress is continuing on grating installation in the scale pit proper. In the Roll Shop, progress continued during the period on floor plate and grating at roll grinder #2 and completion of floor plating around the chock tilter. Remaining work in this area consists of grating and floor plate at roll grinder #3 which will be installed later after the grinder is set in place. This grinder will be delivered early in December. An estimated 50 tons of miscellaneous steel including cover plates remain to be installed in the Hot Strip Mill excluding extra work orders. Presently there are 50 tons of extra work order steel as well to install in numerous areas of the Hot Strip Mill. It is anticipated that the extra work order requirements will continue for sometime. In the Slab Yard, modifications were completed on transfer cars #1 and 2. These cars have been tested and are in operating condition. Erection of the slab reject car is essentially complete and electrical requirements are in progress. This car is scheduled to complete by November 20.
- 1.4 Roofing and Siding: 2,000 square feet of siding was installed in the waste heat boiler area for an overall total to date of 660,693 square feet.
- 1.5 Heating and Ventilating: At the fifteen Hot Strip Mill bag houses, power wiring and lighting for the six bag houses south of column line 33 in the slab storage area was completed this period. Piping for the steam coils continued throughout the period on these bag houses and is

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

scheduled to complete by Friday, November 10. These bag houses will be charged and ready for test operations next period. Electrical progress was also maintained in bag houses 7, 12, 13 and 14 during the period. Bag house 14 is essentially complete and should be ready for operation next period. Norm Woolley maintained an average work force of six men on heating and ventilating units for the Hot Strip Mill. During the period, his progress consisted mainly of installation of condensate drains, power and control wiring, dampers and remaining duct work at the pump house heating and ventilating system and the switchgear house heating units. At the water clarification building, installation of duct work and fresh air grilles were completed. Piping for the clarifier heating units continued during the period and it is expected these units will be in operation next week. The remaining work consists mainly of minor revisions. No progress was evident on other heating and ventilating units in the Hot Strip Mill. The ten step-down transformers necessary for permanent power at 220 volts at the air conditioning units throughout the Hot Strip Mill were delivered to the job site this period. Installation of these transformers is scheduled to begin next period by Foothill Electric. Punch list items are being prepared for all heating and ventilating units in the Hot Strip Mill in order that the work remaining on these units can be finalized. Two gas fired heaters were placed in service along "E" line and steam was released to the Roll Shop heaters during the period.

- 1.6 Mechanical: During the period, Eichleay Corporation maintained an average work force of 73 men on mechanical installation in the Hot Strip Mill. In the furnace area, progress was continued on the slab reject transfer car. The remaining work on this system consists of reeving the cable which will be completed next period. Modifications were completed this period on the flume scarfer bucket. At the east side system, remaining mechanical work consists of grouting the drive unit and connecting the cable to the bucket. On the west side, reeving of the cable will complete the system. The skip hoist structure is 80% complete. Progress is continuing on the hoist and sheave units. There is some evidence of piping interference with bucket travel in the east side scale trench. This problem is presently being investigated by the piping department. The #1 pusher rams were checked out during the period and the furnace skids are welded in place. Remaining pusher work consists of testing of rams and skid installation at reheat furnace #2 and 3. This will be accomplished as soon as electrical power and control wiring is complete, also, removal of the temporary bricking platform at unit #3 is removed. In the rougher area, the only activity during the period consisted of modification work for the #4 edger. This modification is almost complete and will finish next period. In the finisher area, the machining requirements for the quick change work roll rams at the Armco Machine Shop is complete. Rams for finishers 1 through 6 are re-installed and rams for finisher #7 are scheduled to complete next period. Three finishing mill motor 2-stator sections have

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

been returned from the Pittsburgh factory and re-installed. Stator sections for finishing mill motors #1 and 6 were shipped to the Pittsburgh factory during the period. Stator sections for finishing mill motor #4 are scheduled to return to the job site on Friday, November 10. There has been no word on the return of the fourth section for stator #2. In the hot runout area, motor installation continued throughout the period and re-drilling of motor bases was also in progress. This re-drilling has been necessary on a majority of the motor bases in order to bring the motors in alignment with the roll. The coil bander was completed mechanically this period and the testing and grouting will be accomplished after electrical and piping work is complete. Progress continued throughout the period on installation of coil conveyors with completion of the system scheduled for the end of November. The components required for modifying the radial turn on conveyor 6 have not been shipped as yet from the Link-Belt factory. This minor modification will be accomplished as soon as these parts are available. At the scale pit removal system, scale pit 3, progress was affected by wet weather during the period. There is approximately three weeks work remaining in this area to complete the mechanical portion of this system. Installation of roll grinder #3 continued during the period. This unit was grouted in place and releaving of the floating foundation is underway. The remaining work on this grinder consists mainly of electrical hookups and testing. Coupled tests were accomplished on the crop shear side guides. Uncoupled tests were accomplished for the #7 finishing mill main motor, three mill water return pumps and three flume flushing pumps. The mill low pressure water system was flushed through the mill stands and flumes during the period. Progress continued on realignment of high pressure descaling pumps under the supervision of the manufacturer's representatives. This realignment is scheduled to complete on November 24.

- 1.7 Piping: During the period, 7,162 feet of piping was installed for a total to date of 318,928 linear feet. 19,561 feet remains to be installed by Kaiser forces in the Hot Strip Mill. Major systems worked on during the period were: grease, hydraulic system 17, hydraulic system 18, high pressure descaling, mill water, plant air, steam, heating and ventilating, downcoiler air and instrumentation. Pickling and flushing of lube oil 10 was completed this period and permanent oil is scheduled to be installed in this system next period. The hydro test for hydraulic system 16 was completed and pickling was also completed this period. Flushing of this system is in progress. Flushing continued throughout the period on hydraulic system 15. A partial hydro test was initiated on hydraulic system 18 during the period. Hydro testing of grease systems 21 through 24 header piping was initiated this period. On the high pressure descaling system, the 557 1-1/2" Barkedale welds were completed this period. Four 2" and larger diameter welds were accomplished during the period with 34 remaining. Piping and electrical wiring for three of the five sump

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

pumps in pit #4 continued during the period, these three pumps will be operable by November 15. Installation of the #1 air compressor at the pump house continued during the period. Piping for this compressor is scheduled to complete next week. Worthington is presently replacing the bearings for this unit to avoid possible bearing heating conditions which was realized during their factory test runs on unit #2. This system is scheduled for flushing and testing next period. Soleplates for air compressor unit #2 were grouted in place during the period and installation of the compressor proper is scheduled for next period. The coolers for this unit are not at the job site yet. Pickling of the twelve flocculator piping systems was initiated at the close of the period.

1.8 Electrical: Foothill Electric Corporation installed 26,500 lbs. of exposed conduit during the period for a total to date of 1,363,000 lbs. or 96% complete. 300 feet of 2.4 KV power cable was installed for a total to date of 51,300 feet or 94% complete. 4 power cable terminations were accomplished for a total to date of 442 or 76% complete. 50,000 feet of low voltage cable was installed for a total to date of 1,534,000 feet or 88% complete. 1,100 low voltage cable terminations were completed for a total to date of 26,600 or 86% complete. 36,000 feet of control cable was installed for a total to date of 1,666,000 feet or 89% complete. 1,200 control cable terminations were accomplished for a total to date of 48,000 or 83% complete. 26,000 feet of computer cable was installed for a total to date of 758,000 feet or 81% complete. 400 computer cable terminations were accomplished for a total to date of 26,000 or 87% complete. 3,000 lbs. of lighting conduit and 12,000 feet of lighting wiring was installed during the period. 900 lbs. of structural grounding was installed for a total to date of 133,000 lbs. or 99% complete.

1.9 Miscellaneous Subcontracts: Walker service engineers are presently directing the installation of tank weir plates and filter plates at the six clarifiers for the clarification plant.

Moeschl-Edwards was on the job site one day during the period during which time one rolling door was installed. 4 of the 73 rolling doors for the Hot Strip Mill complex remain to be installed. The remaining doors are scheduled to complete by November 15.

Owens Corning Fiberglas Company continued with insulation of steam piping and lube oil piping during the period. During the period, 362 feet of steam line was insulated for a total to date of 14,260 feet. 850 feet of lube oil system 11 has been insulated to date and 3,000 feet of Morgoil #1 has been insulated to date. Insulation progress is continuing in the oil cellar. Metal jacket covering for lube oil 4 insulated pipe was also in progress this period. Progress continued throughout the period on insulation of steam, condensate and related tanks in the boiler house. 70% of the high pressure steam system in

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

the boiler area is insulated. Delta Pipeline Contractors installed 1,360 linear feet of service header piping during the period for a total to date of 31,579 feet. 5,308 feet of service header piping remains to be installed and 207 drops.

McGraw Construction Company completed the installation of monorails for the clarification building this period. Installation of the monorails in the Hot Strip Mill oil cellar is scheduled for next period.

FBS Builders installed brick in the emergency coil storage area near the north end of the Hot Strip Mill during the period. This area is scheduled to complete next period, he will then move to the slab transfer car area depending on area availability.

Salem-Brosius concentrated their weekly progress to completing furnace #2 and 3. Castable refractories were installed this period on furnace #2 flooring. In furnace #3, composite walls and Detrick roofing installation was continued. The oil and steam piping was in progress at furnace #2 during the period. Duct installation at furnace #1 is 80% complete and furnace #1 painting is 65% complete. Furnace progress is as follows: unit #1, 98% complete; unit #2, 86% complete and unit #3, 72% complete.

Babcock and Wilcox completed their insulation and lagging for the #1 forced draft fan system and insulation and lagging is continuing for the #1 induced draft fan system and the #2 and 3 fan systems. Installation of the #3 induced draft fan rotor and rework of the fan housing continued during the period. Installation of all related linkage, dampers and control mechanisms for this unit was in progress throughout the period. Progress on the fan and duct installation is 93% complete. The forced draft fan #1 is scheduled for check out and initial tests the week of November 13.

The Ho Piping (Contractor for the Waste Heat Boiler 2 $\frac{1}{2}$ " and over piping) is 98% complete. This contractor is maintaining a work force of 19 men in the boiler area. Pressure testing on the boiler feed piping and repairing of leaks continued during the period. At the close of the period, the boiler feed piping, 165 lb. steam piping and 425 lb. steam piping was essentially tested complete. Additional hanger supports for the steam system and anchorage installation were in progress during the period.

Norm Woolley (Contractor for the Waste Heat Boiler 2" and under piping) is 98% complete in the boiler area. A work force of 12 men continued throughout the period with testing of steam and boiler feed piping. Testing of the condensate return system from the induced draft and forced draft turbines was also initiated. They are continuing with extra work requirements as they develop in this area.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

Minneapolis-Honeywell (Instrumentation Contractor for the Waste Heat Boiler) calibrated instruments in the instrument control room throughout the period. Tubing terminations at the control room and the soot blower panel was also continued.

2. 7146 - SLAB MILL

2.1 Excavation and Backfill: 1,060 cubic yards of backfill was completed during the period for a total to date of 210,953 cubic yards.

2.2 Concrete: 148 cubic yards of concrete was placed during the period for a total to date of 45,685 cubic yards. Concrete during the period consisted mainly of the pipe tunnel walls, the C-line air filter slab and the scarfer flume stairway walls.

2.3 Structural and Miscellaneous Steel: Installation of grating under the motor generator and main motor units was completed this period. The main mill pulpit was set in place and bolted together. Glazing of this unit is scheduled to complete next period. Progress was resumed during the period on erection of bag houses 1 and 2. The mill office complex was closed in during the period. The ductwork for this unit is scheduled to begin on November 13.

2.6 Mechanical: Eichleay Corporation maintained an average work force of 53 men on mechanical installation in the Slab Mill. An estimated 3,000 tons of mechanical equipment has been installed to date. Progress was continued in all areas on mechanical installation. Table 18 and the #2 slab landing table were grouted during the period. 103 tons of Mesta equipment was received at the job site this period for a total to date of 7,235 tons or 94% complete. Transfer cars #1 and 2 are scheduled to be set on the transfer tracks Wednesday, November 8. Eichleay has been experiencing some difficulties with anchor bolt alignment and it has been necessary to make offsets in order to fit the equipment to the bolts. This has affected installation progress to some extent.

2.7 Piping: Hunter (Piping Contractor for the Slab Mill) maintained an average work force of 61 men on Slab Mill piping during the period. Progress was continued throughout the period on installation of piping for lube oil systems 3, 6, 7 and 11 along the west wall of the oil cellar. Progress was also continued on installation of hydraulic systems 1 and 2. In the main mill aisle, installation of grease, oxygen and natural gas headers on "D" line was continued including drops at column 8.1 and 9.5. This header piping is 95% complete. The 4" natural gas header on "E" line was pressure tested during the period and gas was brought in at the close of the period. The temporary gas fired heater in the motor room will be connected to this gas line next period. Hunter has installed 12,550 feet of piping to date.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

- 2.8 Electrical: 4,000 lbs. of exposed conduit was installed during the period for a total to date of 61,000 lbs. or 38% complete. 5,400 lbs. of embedded conduit was installed for a total to date of 624,000 lbs. or 96% complete. 1,500 lbs. of lighting conduit and 1,700 feet of lighting wiring was installed during the period. 1,200 lbs. of structural grounding was installed for a total to date of 16,300 lbs. or 33% complete. Foothill maintained an average work force of 70 men in the Slab Mill area during the period.
3. 7143 - SOAKING PITS
- 3.2 Concrete: 62 cubic yards of concrete was placed during the period for a total to date of 28,148 cubic yards. Concrete work consisted mainly of the east drive cable trench walls and "Z" line walls between column 11.5 and 12.5.
- 3.3 Structural and Miscellaneous Steel: The ingot buggy expediter pulpit was set in place during the period. Glazing will be accomplished next week. Progress was maintained on installation of ingot buggy track baseplates. This work is 50% complete. Louvers were installed along the 124 deck between column 10.5 and 16.5. Track beams were installed for the hoppers in the service bay during the period. This service bay erection is estimated at 70% complete.
- 3.6 Mechanical: Loftus Engineering maintained an average work force of 160 men on Soaking Pit construction during the period. The elevation 124 deck steel is complete for batteries 4, 5 and 6. At batteries 1, 2 and 3, the deck steel has been installed and bolt up is in progress. Hearth steel is complete for all batteries. Furnace steel is complete for batteries 5 and 6, 90% complete at battery 4, 70% for battery 3, 60% complete for battery 2 and 30% for battery 1. Flue liner steel is complete for all batteries. Refractory installation is 75% complete at batteries 5 and 6, 60% at battery 4, and 40%, 30% and 20% complete respectively for the remaining batteries. Recuperators are completely installed for batteries 3 through 6. Combustion air piping and natural gas piping at batteries 4, 5 and 6 is 90% complete. Furnace cooling water piping at batteries 4, 5 and 6 is 70% complete. Exposed conduit between motor control centers and remote equipment is 50% complete at batteries 4, 5 and 6. Remaining brickwork at batteries 5 and 6 is contingent on having gas to the burners in order that dry out can be accomplished.
- 3.7 Piping: No progress was evident by Delta Pipeline Contractors on service piping in the Soaking Pit area during the period.
- 3.8 Electrical: Foothill Electric installed 8,500 lbs. of exposed conduit this period for a total to date of 17,900 lbs. or 14% complete. 350 lbs. of embedded conduit was installed for a total to date of 49,500 lbs. or 93% complete. Foothill maintained an average work force of 16 men in this area during the period.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

4. 7128 - BASIC OXYGEN SHOP

- 4.1 Excavation and Backfill: 1,082 cubic yards of excavation was completed for a total to date of 198,425 cubic yards. 608 cubic yards of backfill was accomplished for a total to date of 237,522 cubic yards. Period excavation consisted mainly of excavation for the conveyor support structure.
- 4.2 Concrete: 57 cubic yards of concrete was placed during the period for a total to date of 17,706 cubic yards. The period concrete consisted mainly of the sump base at the track hopper structure.
- 4.3 Structural and Miscellaneous Steel: 80 tons of structural steel was erected at the main B.O.F. Building for an overall total of 2,538 tons. Two days of structural erection were lost due to rain. At the close of the period, Ohio Valley increased their erection rigs to two units. C B and I moved onto the job site this period to initiate erection of the nitrogen sphere. Two car loads of sphere steel arrived at the job site during the period.
- 4.4 Roofing and Siding: 5,040 square feet of siding was installed at the Mold Preparation Building for a total to date of 44,960 square feet. Installation of ridge ventilators was initiated at this building during the period.

5. 7145 - STRIPPER BUILDING

- 5.3 Structural and Miscellaneous Steel: Bolt-up continued during the period on girts, purlins and sag rods. Structural steel painting was also initiated during the period. Preparations are underway to begin roofing and siding for this building in the near future.
- 5.6 Mechanical: Erection of the Stripper Building overhead crane continued during the period. Structural erection of this crane is scheduled to complete next period.

6. 7150, 7158 and 7159 - PICKLE AREA

- 6.1 Excavation and Backfill: In the Pickle Line Building, the excavation for the #2 catenary pit is 50% complete. Backfill around the #4 pickle line wet looping and catenary pits was completed this period. Excavation was also completed during the period for the welder foundation on #5 pickle line.
- 6.2 Concrete: 55 cubic yards of concrete was placed at the Green Coil Storage Building for a total to date of 5,696 cubic yards. 97 cubic yards of concrete was placed in the Pickle Line Building for a total to date of 6,685 cubic yards. 715 cubic yards of concrete was placed in the Pickle Coil Storage Building for a total to date of 5,199 cubic yards. Period concrete for the pickle line building consisted mainly of foundation work for the #4 pickle line tank foundation and the #5 pickler tank walls.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

- 6.3 Structural and Miscellaneous Steel: In the Green Coil Storage Building, 5 tons of structural steel was erected for a total to date of 2,866 tons. The remaining roof trusses at the east end of the building was erected and the east end wind wall was also completed during the period. At the west end, erection of the wind wall columns was initiated during the period. At the Pickle Coil Storage Building, progress continued throughout the period on erection of "J" line columns, crane girders and roof trusses. All but four of the "J" line columns are in place and one-third of the roof trusses have been erected. Structural erection of this building is estimated to be 45% complete.
- 6.4 Roofing and Siding: At the Green Coil Storage Building, 3,500 square feet of siding was installed for a total to date of 39,086 square feet. 2,000 square feet of roofing was installed for a total to date of 105,800 square feet. Progress was also continued throughout the period on installation of roof ventilators. 30% of the roof ventilator framing has been completed and progress will continue as weather permits.
- 6.6 Mechanical: Installation of the cab and stairways for crane 404 in the Green Coil Storage Area was completed during the period.
- 6.7 Piping: Progress continued throughout the period by McGraw Construction Company on installation of roof drains for the Green Coil Storage Building. These roof drains are 85% complete.
- 6.8 Electrical: In the Green Coil Storage Building, installation of cable tray continued during the period. The crane disconnect switches for cranes 401 and 402 were installed and progress was evident on the vertical cable tray to the cranes. In the maintenance and conveyor aisles, the cross truss wiring and high bay lighting is complete. Installation of fixtures in the maintenance area was also completed during the period. In the Pickle Line Building, installation of support brackets for high bay lighting feeder conduit is complete and lighting conduit installation is 60% complete. In the Pickle Coil Storage Building, progress continued during the period on installation of crane collector rail support brackets. These brackets are 95% complete.

7. UTILITIES

7109 - Pipeline: Delta Pipeline Contractors tested the coke oven gas pipes successfully during the period. Some progress was experienced on construction work in the valve station pit on additional support requirements.

7110 - Power Distribution: R. H. Bouligny maintained progress on power distribution in the Melt Area and the cold finish station. At the Melt Area switch station, all electrical equipment has been installed on the concrete base except for tie and disconnect switches. Support columns for the equipment canopy were also installed. Backfill around the side yard was initiated during the period and the 13.8 KV

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

switchgear will be set as soon as the backfill work is complete. The 13.8 high voltage lines were strung between tower 22 and 24 leading to the Mold Preparation Building. Pull boxes and riser conduits were installed during the period at tower 22. At the cold finish substation, the checkout of control and supervisory circuit systems was completed except for the supervisory circuits going to the main Hot Strip substation. A meeting was held during the period with Ohio Bell Telephone Company to determine the type and location of terminal boxes for remote circuits. Design revisions for this requirements are now in progress.

7112 - Drainage and Site Development: 3,370 cubic yards of excavation was completed for a total to date of 680,730 cubic yards. 9,763 cubic yards of backfill was accomplished for a total to date of 923,885 cubic yards. Delta Pipeline Contractors installed 275 linear feet of 36" corrugated metal pipe in the Steelmaking Area during the period. A meeting was held during the period with Armco, Westinghouse, McGraw and Kaiser representatives to determine the scope of the outdoor lighting requirements. Periodic meetings are scheduled to determine design progress on this portion of the yard development program. John R. Jurgensen Company (road paving contractor) initiated physical progress on November 7, 1967.

7113 - Trackwork: During the period, DHS Corporation installed 274 feet of track between the Soaking Pit and Stripper Building. 603 feet of flangeway was installed on the east side of the Hot Strip Building. Some ballast installation was accomplished on tracks between the Soaking Pit and the Stripper Building during the period. Progress was continued on excavation and foundation preparation work for the Weighing-In-Motion scale pit.

7114 - Locker Rooms: In the south area locker room, all interior blockwork has been completed. Installation of lockers and benches is 40% complete. Heating and ventilating duct work continued during the period and is 70% complete. Completion of this locker room is expected by the first of December. At the Steelmaking locker room building, blockwork continued throughout the period. The two end walls are complete and interior blockwork is 25% complete. All window frames are installed but no glazing has been accomplished. Satisfactory progress is being experienced in this area.

7186 - Waste Disposal for the Pickle Facility: 37 cubic yards of concrete was placed in the Waste Disposal Building foundations. During the period, forming of walls for the clarifier tunnel was in progress. Rebar installation for the base slab and walls in the tank farm area continued during the period. This base slab will be ready for concrete next period.

WEEKLY FIELD ACTIVITY REPORT
Week Ending November 7, 1967

Railroad cars unloaded for Project "600".

During 1967 ---

First Quarter:

Kaiser Engineers unloaded . . .	276 cars
Subcontractors unloaded	<u>133 cars</u>
	409 cars

Second Quarter:

Kaiser Engineers unloaded . . .	197 cars
Subcontractors unloaded	<u>415 cars</u>
	612 cars

Third Quarter:

Kaiser Engineers unloaded . . .	289 cars
Subcontractors unloaded	<u>231 cars</u>
	520 cars

October:

Kaiser Engineers unloaded . . .	114 cars
Subcontractors unloaded	<u>127 cars</u>
	241 cars

TOTAL FOR 1967 (JAN. - OCT.) 1,792 cars

Since the beginning of Project "600"

Kaiser Engineers	2,157 cars
Subcontractors	<u>1,898 cars</u>

GRAND TOTAL THRU OCT.31,1967 4,055 cars

Prepared by O. A. Finsand
O. A. Finsand

Approved by G. L. Roberts
G. L. Roberts
Construction Manager

OAF/sec