INTER-OFFICE MEMORANDUM

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DATE September 17, 1968

FROM O. A. Finsand
O. A. Finsand
Construction
AT Kaiser, Middletown

JOB NO. 7100

SUBJECT Kaiser Engineers' Weekly Field Activity Report

Transmitted herewith is the subject report for the week ending September 17, 1968

OAF:VRC:mcm

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KAISER ENGINEERS, INC.
WEEKLY FIELD ACTIVITY REPORT
Week Ending September 17, 1968

Weather: Cool with scattered showers

CLIENT: Armco Steel Corporation

LOCATION: Middletown, Ohio

JOB NUMBER: 6471

Temperature: 50 degrees - minimum
78 degrees - maximum

JOB VISITORS

None

SUMMARY FORCE REPORT

	Kaiser Engineers Exempt	Non-Exempt	Subcontractors	FEC	Total
Management	4	3		1	8
General Supervision	10		14	3	27
Field Engineering	34	11	11	7	63
Warehouse & Material Control	3	5		2	10
Survey	1	15	5		21
Office Services & Reproduction	1	4			5
Clerical			9	4	13
Craft*	—	690	667	190	1,547
TOTAL	53	728	706	207	1,694

*Average for week of men on payroll.

Average for week of Crafts is as follows:

Kaiser Engineers	640
Subcontractors	647
Foothill Electric	178
Total Crafts Working	1,465

WEEKLY FIELD ACTIVITY REPORT

Week ending September 17, 1968

PROJECT PROGRESS

1. 7148 - HOT STRIP MILL

Project completed and in operation.

2. 7146 - SLAB MILL

Project completed and in operation.

3. 7143 - SOAKING PITS

Project completed and in operation.

4. 7128 - BASIC OXYGEN FACILITY

4.1 Excavation and Backfill: 1,732 cubic yards of excavation was completed this period for a total to date of 235,950 cubic yards. Excavation consisted mainly of the transfer track area north of furnace #1, duct support foundations near the fan bases, and grade beam requirements along the furnace aisle columns. 1,365 cubic yards of backfill was completed for a total to date of 272,439 cubic yards. Backfill was comprised mainly of selected fill in the clarifier area and along the walls of the transfer car foundation for furnace #1.

4.2 Concrete: 501 cubic yards of concrete was placed this period for a total to date of 25,619 cubic yards. Concrete consisted of a portion of the operating floor elevated slab between column #20 and #21, grade beams, the sump pit for the quencher east of #2 furnace, the electrical control room floor slab and the inclined slab in the furnace #1 slag removal area.

4.3 Structural and Miscellaneous Steel: Structural steel amounting to 53 tons was erected this period for a total to date of 14,126 tons in the BOF Building. Structural steel for the filter building was 80% complete at the close of this period. Installation of platforms and bolt-up continued on the flare stack support structures. A majority of the roof purlins over the teeming and service aisles are now complete east of column line #20 thus allowing roofing and siding work to proceed in this area. All major structural steel has been erected except for the west end walls. Bolt-up and installation of internal platforms and walkways are of major concern now, in order that all areas can be completed and released for mechanical equipment installation. The structural steel enclosure over the Hot Metal unloading area was essentially complete apart from the walkway which extends to the office building. During this period, Ohio Valley Riggers maintained an average work force of 78 men on structural steel erection in the BOF Area.

WEEKLY FIELD ACTIVITY REPORT
Week ending September 17, 1968

4.4 Roofing and Siding: 6,031 square feet of siding was installed this period for a total to date of 87,870 square feet. This siding was installed mainly on the incline conveyor enclosure, the south wall of the charging aisle, and the high bay along the north side, beginning at column #20. 7,077 square feet of roofing was installed this period for a total to date of 89,123 square feet. Roofing progress was confined mainly to the inclined conveyor enclosure and the teeming and service aisle between columns #21 and #24. Framing for the high bay monitor ventilators was continued along the south side. This side now has ten frames remaining to be installed.

4.6 Mechanical: Chemico Engineering maintained an average work force of 70 men on hood and duct installation this period. Combustion Engineering completed welding together sections for the upper hood unit. The lower hood and skirt has been raised into its permanent location. Progress on #2 unit was continued for the installation of the gas cooler door and insulation. Furnco, lower tier for the duct work, is now 83% complete with the erection of the flare stacks. Progress was continued on ventilation ducts at the #2 furnace and sections of duct were installed above elevation 169 between the units.

4.7 Piping: 916 linear feet of piping was installed in the BOF Area this period for a total to date of 17,350 linear feet. 39,714 feet of piping remains to be installed by KE piping forces in this area. Major piping systems worked on during the period were natural gas, plant air, oxygen, well water, and roof drains. The roof drainage system is now 53% complete; the compressed air system, 42% complete; natural gas, 42% complete; well water, 42% complete; oxygen, 30% complete; sanitary sewers, 64% complete; storm sewers, 51% complete; and nitrogen piping, 83% complete. These percentages excluded the Chemico piping which will be installed by Hunter Corporation.

4.8 Electrical: Foothill Electric maintained an average work force of 100 men this period. 5,800 lbs. of exposed conduit was installed this period for a total to date of 54,600 lbs. or 17% complete. 4,500 lbs. of lighting conduit was installed together with 10,500 feet of lighting wiring. 20 feet of crane feeder bus was installed for a total to date of 660 feet or 46% complete. The lance crane is in great demand by the electrical workers together with other crafts and subcontractors for hoisting material and equipment to the upper floors. Earliest possible operations of the freight elevator will improve this condition.

4.9 Miscellaneous Subcontractors: Otis Elevator Company completed the elevator cage installation and are now working a two-man force on remaining control wiring and operational checkout of the elevator.

Rex Chainbelt, Inc., are making preparations for the vulcanizing of the tripper conveyor belt and the inclined conveyor belt. At the batching floor, installation of the reversing conveyor and bin feeders is in progress.

Most of the batching floor equipment has been hoisted into place with the exception of eight weigh-feeders and two batch hopper chutes. Satisfactory progress is being maintained by this contractor.

At the lab and office building, McGraw Construction Company completed the installation of ceiling grids for the second floor. Installation of light fixtures is in progress, and overhead wiring for the spectographic and sample lab is now complete. Insulation of water and steam lines is in progress and the painters continued with finished coat applications at the second floor and priming of masonry walls on the first floor.

Lake Erie Electric began wiring of scrap aisle cranes #514 and #515 on September 12. Bolt-up of these cranes by Ohio Valley Riggers is now complete.

Chicago Bridge and Iron discovered that their temporary transfer car, which has been assembled does not span correctly to be supported by the transfer car rail foundations in the furnace area. A temporary concrete footer 38" wide and 24' long is now being constructed on a request for service to meet their needs. Furnace #1 is scheduled to be moved into its permanent position within the next two weeks. The machined spacer blocks and filler strips for the #1 furnace trunnion ring are now being installed. Realignment of the furnace drive anchor bolts was also continued during the period.

McGraw Construction Company completed driving of sheet piping for the slag pit at the east end of the service aisle with the exception of 14 piles. Driving of sheet piping for the additive bins began on September 17, 1968.

5. 7156 - 7159 PICKLE AREA

5.2 Concrete: McGraw Construction Company increased their work force to an average of 133 men on Pickle Line concrete work. 126 cubic yards of concrete was placed at Pickle Line # 4 for a total of 14,927 cubic yards. 305 cubic yards of concrete was placed in Pickle Line #5 for a total of 7,856 cubic yards. Concrete pours on #4 Line included hydraulic trench slab, acid tank foundation, and the entry coil car foundation. At #5 Line concrete pours consisted of baghouse "E" foundation and conduit encasement.

5.3 Structural and Miscellaneous Steel: KE ironworkers continued with platform and handrail installation along equipment foundations at #5 Pickle Line. Steelox siding installation was continued on the south wall of the Pickled Coil Storage Building with 3,590 square feet installed during the period.

5.6 Mechanical: Ohio Valley Riggers maintained an average work force of 60 men on Pickle Line mechanical equipment erection. Equipment setting during the period included #1 and #2 side trimmers, #5 Bridle, and the strip oiler. Equipment grouting for the period included #4 and #5 pinch roll lower drive motors, weld detector stand, #2 processor drive motor, entry side guides for the double-cut shear and #4 Bridle. Leveling and aligning of various pieces of equipment was continued during the period. Handrail and grating progress was also evident along #4 and #5 Pickle tanks.

KE boilermakers have completed as much of the fume scrubber system for #4 Line as possible until the covers are installed on the Pickle tanks. Therefore, the work effort is now being concentrated on #5 line duct work.

Chemsteel Construction Company have completed the equivalent of 95% of the acid resistant brickwork in #4 Pickle tanks. Brickwork was initiated in the #5 Pickle tanks during the period. This contractor had an average of 23 workers during the period.

5.7 Piping: Delta Pipeline Contractors maintained an average of 34 men on Pickle Line piping. 875 feet of piping was installed during the period for a total to date of 25,715 feet. Major systems worked on were plant air, natural gas, well water, and steam. The estimated footage at completion is 70,000 feet. 174 feet of spent pickle liquor and pickle rinse water piping was installed by Kaiser pipefitters along #4 and #5 Pickle tanks.

5.8 Electrical: Lake Erie Electric continued with Pickle Line electrical work during the period with an average work force of 61 men. Exposed conduit installation is proceeding at the #4 Line payoff reel, #1 catenary pit, and #1, #2, and #4 Bridles. Cable pulling and terminating was continued between the delivery motor room and operator stations 2A and 2B, together with terminations at the welder. Wire pulling continued for high bay lighting in the Pickled Coil Storage Building along with conduit and fixture installation.

6. 7160 - COLD MILL

Concrete in the amount of 256 cubic yards was placed during the period for a total of 5,721 cubic yards (including 2,182 cubic yards transferred from Project 7159). This concrete pour consisted of a wall section on "K" Line. Formwork was continued for "K" and "L" Line walls together with columns and base slabs. 137 tons of rebar was installed during the period in Cold Mill foundations. A total of 1,198 tons of structural steel has now been received at the jobsite.

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Week ending September 17, 1968

7. 7186 - 7182 WASTE DISPOSAL

Concrete in the amount of 101 cubic yards was placed at the Waste Disposal Facility for a total to date of 2,735 cubic yards. Concrete pours consisted of conduit encasement at the substation, the conduit bank pad to #1 disposal well, and support piers for pipe bridges between the tank farm and the waste disposal wells. Formwork and rebar installation was continued for equipment bases and the #2 clarifier. KE ironworkers also continued installation of insulated liner panels in the Waste Disposal Building. Piping in the amount of 932 feet was installed during the period by Kaiser pipefitters including 770 feet on the pipeway. Major systems worked on were plant air, steam, pickle rinse water, acid, and well water. Piping work was initiated on the precoat filters together with the continuance of sludge filter and vacuum receiver piping. Pipe supports were also being installed between the Waste Disposal Building and the two deep disposal wells. Foothill Electric installed 1,500 lbs. of exposed conduit during the period for a total to date of 14,900 lbs. or 40% complete. Other work in progress included disconnect switch and push button station installation throughout the disposal building.

8. UTILITIES

7112 - Drainage and Site Development: Excavation in the amount of 2,616 cubic yards was accomplished during the period for a total of 909,847 cubic yards. Backfill amounting to 5,141 cubic yards was placed for a total of 1,149,327 cubic yards. Major earthwork activities consisted of site work and subgrade in support of the trackwork subcontractor.

Westinghouse Electric Corporation continued with trenching and cable installation in the steelmaking area on their outdoor lighting contract. All poles and towers have been installed except two poles which are being held up at this time by other construction.

7113 - Trackwork: DHS Corporation maintained an average of 20 men on trackwork during the period. 550 feet of track and one turnout was installed in the steelmaking area. Major progress consisted of work on the north and south blast furnace Hot Metal tracks together with flangeway installation south of #2 Open Hearth.

9. 7164 - ANNEALING

Excavation amounting to 5,130 cubic yards was accomplished at this facility for a total of 11,200 cubic yards.

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

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

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