November Tenth 1927

Athletic Association University of Illinois Urbana, Ill'hois

Gentlemen:

SITY OF ILLINOIS

ATTENTION: Mr. Ben Crackel

Mr. H. E. Degler has worked out several schemes for removing the ashes from the base of the boiler room in the northwest Tower.

It is my opinion that his Method 7 is the best because it eliminates hand labor on top. The elevator delivers the ashes directly into the truck. Hand labor is the most expensive item in any operating budget. If the work can be done by power it will be much cheaper. Objection may be raised to the portable conveyor. My idea is that it would be kept in the garage at all times except when in actual use.

Method 6 is like Method 7 except that the ash is dumped on a concrete slab and then shovelled into the truck. Placing the ash elevator against the west wall as shown in methods 6 and 7 is by far the best. Continual trouble will arise if ash is delivered at the same point that coal is received.

We will await your further orders before we proceed. lev

Very truly yours,

J. a Poleon Professor, Steam Engineering

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Athletic Association University of Illinois Urbana, Illinois

Gentlemen:

ATTENTION: Mr. Ben Crackel

The removal of ashes from the boiler room of the Illinois Stadium may be done in a number of ways, as shown by the accompanying blue prints. Comments on each layout are as follows:

<u>Method 1.</u> The installation of a permanent enclosed inclined ash elevator (motor driven) against the north wall of the present coal bin. The ashes to be put into wheelbarrows, pushed up the ramp, dumped into loading hopper of elevator, carried to top, and delivered through present window in north wall to the concrete roadway, then to be shoveled into motor truck.

Method 2. A permanent enclosed vertical ash elevator (motor driven) against the north wall of the present coal bin. The ashes to be put into wheelbarrows, pushed up the ramp, dumped into loading hopper of elevator, carried to top and delivered through a new opening in north wall to concrete roadway, then to be shoveled into motor truck.

Method 3. A permanent enclosed inclined ash elevator (motor driven) against the north wall of the present coal bin. The ashes to be put into wheelbarrows, pushed up a ramp, dumped into loading hopper of elevator, carried to top and delivered to portable conveyor, the latter discharging the ashes into motor truck. The portable unit to be supported on tracks, so that when unit is not in use it can be put inside of building.

Method 4. Using a portable enclosed ash elevator, pivoted on its bottom support. This elevator would extend through the proposed coal storage space under the roadway and discharge ashes directly into the motor truck.

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Method 5. The installation of a side walk elevator, electric or hydraulic, to be high enough so that ashes can be dumped directly into motor truck. When not in use the upper part would be under the roadway out of sight.

<u>Method</u> 6. Installing a permanent enclosed vertical ash elevator against the west wall of the boiler room. The ashes to be put into wheelbarrows, pushed up a ramp, dumped into loading hopper of elevator, carried to top and delivered through present window opening near northwest corner of boiler room to ground level, then to be shoveled into motor truck.

<u>Method</u> 7. A permanent enclosed vertical ash elevator against the west wall of the boiler room. The ashes to be put into wheelbarrows, pushed up a ramp, dumped into loading hopper of elevator, carried to top and delivered to a portable conveyor, the latter discharging the ashes into a motor truck. The portable unit to be supported on wheels and stored in the Stadium garage when not in use.

It is the opinion of the writer that methods 1 to 5 inclusive will not prove very satisfactory, because of (a) interferring with the storing and handling of the coal, (b) some ashes dropping into the coal, (c) the motor and elevator installed in close quarters will hinder repairs, and (d) methods 3 and 5 will be quite costly. On the other hand, methods 6 and 7 offer a number of advantages such as, (a) not affected by storing or handling of coal, (b) more easily installed and maintained, (c) nearer boilers, (d) possibility of shoveling directly into elevator hopper, and (e) better motor truck facilities on west than on north side of Stadium, and others.

Submitted by

Howard E. Degler.

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