DESIGN CRITERIA
Sanitary Sewer Relocation
and Lift Station
CEA 1430

I. Introduction

This project covers the relocation of a sanitary sewer and the installation of the lift station at the Anniston, Alabama plant.

II. Summary

The proposed construction of a warehouse on CEA 1452, and a tank form and bagging area on CEA 1430 make it necessary to abandon three disposal fields and one septic tank. In order to accomplish this, the respective flows will have to be diverted to a common sump where a lift station will convey the total flow by way of a 4 inch force main to the city sanitary sewer some 700 feet away.

III. Facilities

A.) Lift Station

changed to with alternation per conversation w/ Stadt 11/16/67

The lift station shall consist of a duplex unit containing two 50GPM pumps at 20 foot TDH capable of passing 3 inch solids. Float controls will be utilized without alternation equipment, but with manual selection of base pump. The pumps will be cast iron construction and cast iron fitted. The motors (2) will be totally enclosed fan cooled, and controls will be NEMA4.

B.) Lift Station Sump

Sump for the lift station shall be constructed of a poured concrete base and 48 inch diameter concrete pipe terminating above ground with a connection suitable for excepting the cover of the lift station.

A 48 inch diameter sump with a collection capacity of 150 gallons and a depth of 9 feet is to be installed adjacent to and on the westside of an existing sanitary sewer manhole located on the southside of Fifth Street at Gate 2.

C.) Manholes

1. Manholes shall be constructed in accordance with Monsanto Standard A8.2 Standard 7, Page 2.

2. One manhole will be required, located over an existing 6 inch gravity main where the proposed 4 inch force main terminates.

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III. Facilities - Continued

D.) Piping

1. All new gravity flow lines shall be constructed of 6 inch vitrified clay pipe ASTM C200 with molded plastic compression joints ASTM C425.

2. All force mains shall be constructed of 4 inch cast iron cement lined mechanical joint pipe ASA A21.11, thickness class 22.

3. Effluent from a septic tank located at the northwest corner of Building 27 will be carried by an existing 4 inch gravity line north to the south edge of Fifth Street and east along Fifth Street for a distance of 40 feet. At this point, a 6 inch lateral gravity line running south from the Aroclor office building will be brought in. From this point, the existing 4 inch line will be abandoned, and a new 6 inch gravity line will continue east 170 feet to the sump. The effluent from septic tanks located on the southeast corner and northside of Building 28 will terminate in an existing manhole adjacent to Gate 2. From this manhole, flow will be taken due west approximately 4 feet to the sump.

   The flow will then be forced through a 4 inch mechanical joint cast iron force main for 720 feet to a point 106 feet west of Duncan on the southside of Sixth Street where it will enter a manhole to be constructed over an existing 6 inch sanitary sewer.

E.) Flexibility and Provisions for Expansion

The lift station is being located and sized such that it will be capable of handling future flow capacity plus existing sanitary waste from building 28A and the main office which will not be tied into the system at this time.

IV. Building, Utility and Service Requirements

Electrical power will be required for operation of the lift station.

240 Volt, 3 Phase Service is available from a substation 60 feet south of the lift station.

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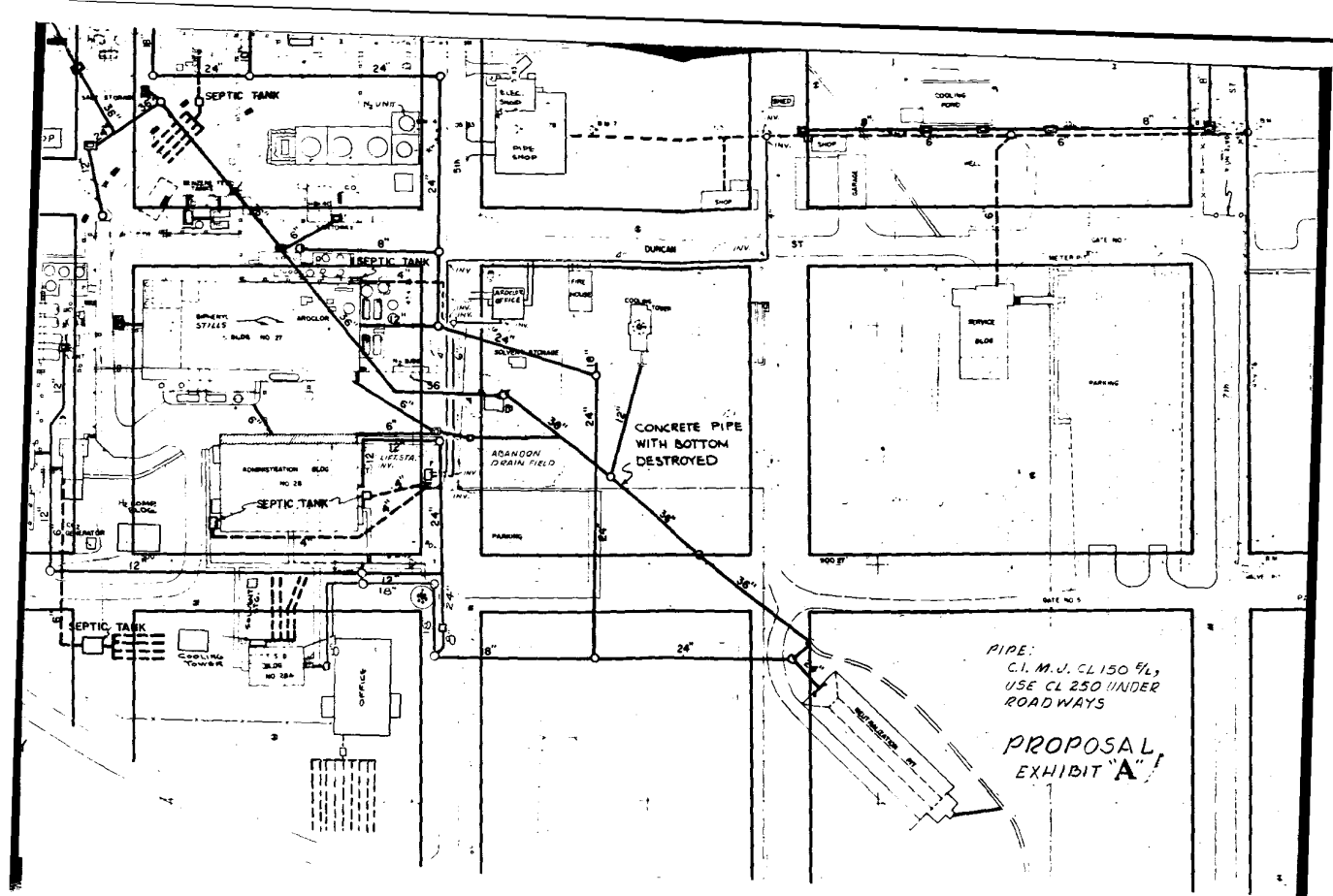
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CONCRETE PIPE WITH BOTTOM DESTROYED
ABANDON DRAIN FIELD
PIPE:
C.I. M.J. CL 150 F/L,
USE CL 250 UNDER ROADWAYS
PROPOSAL
EXHIBIT "A"

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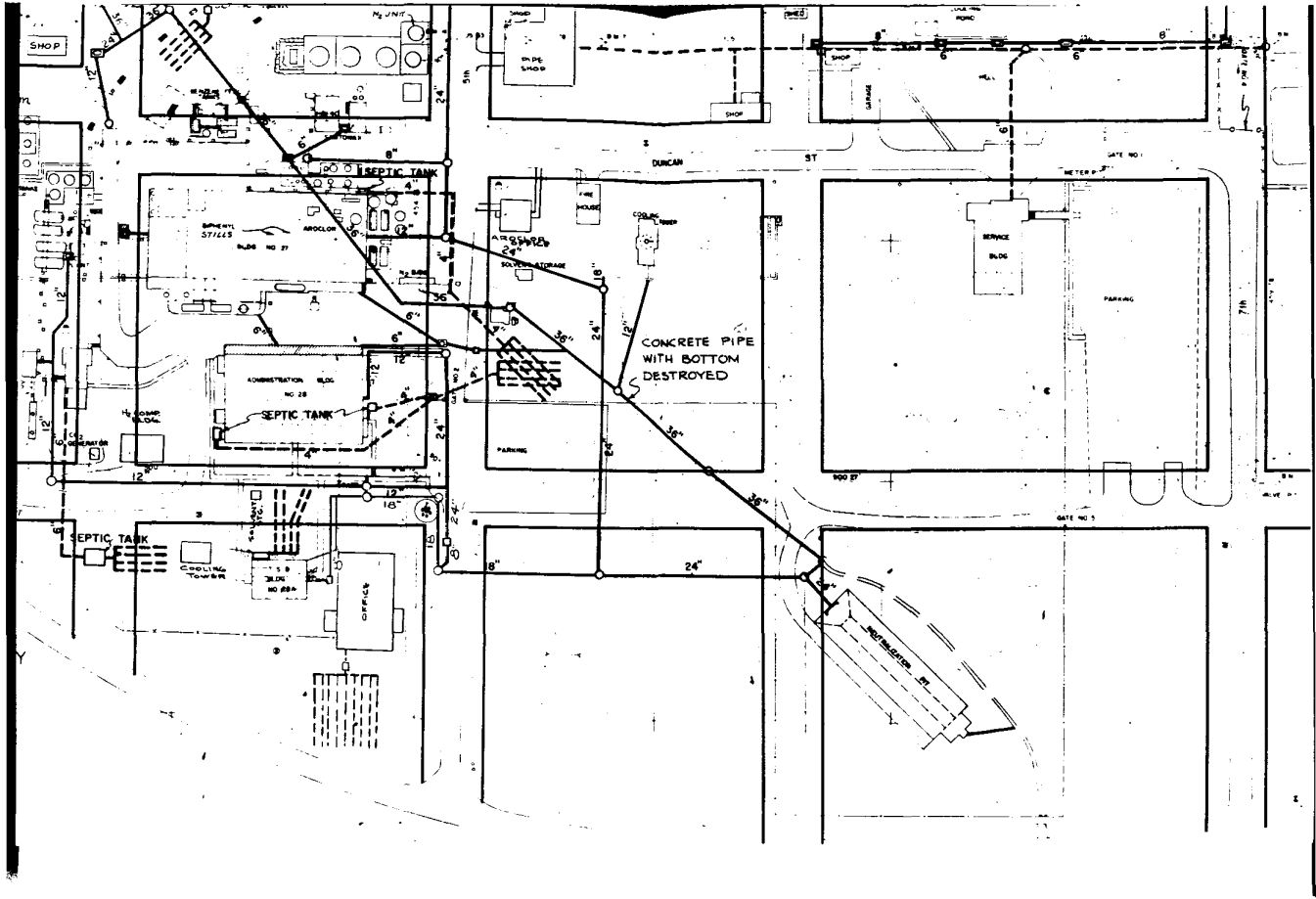
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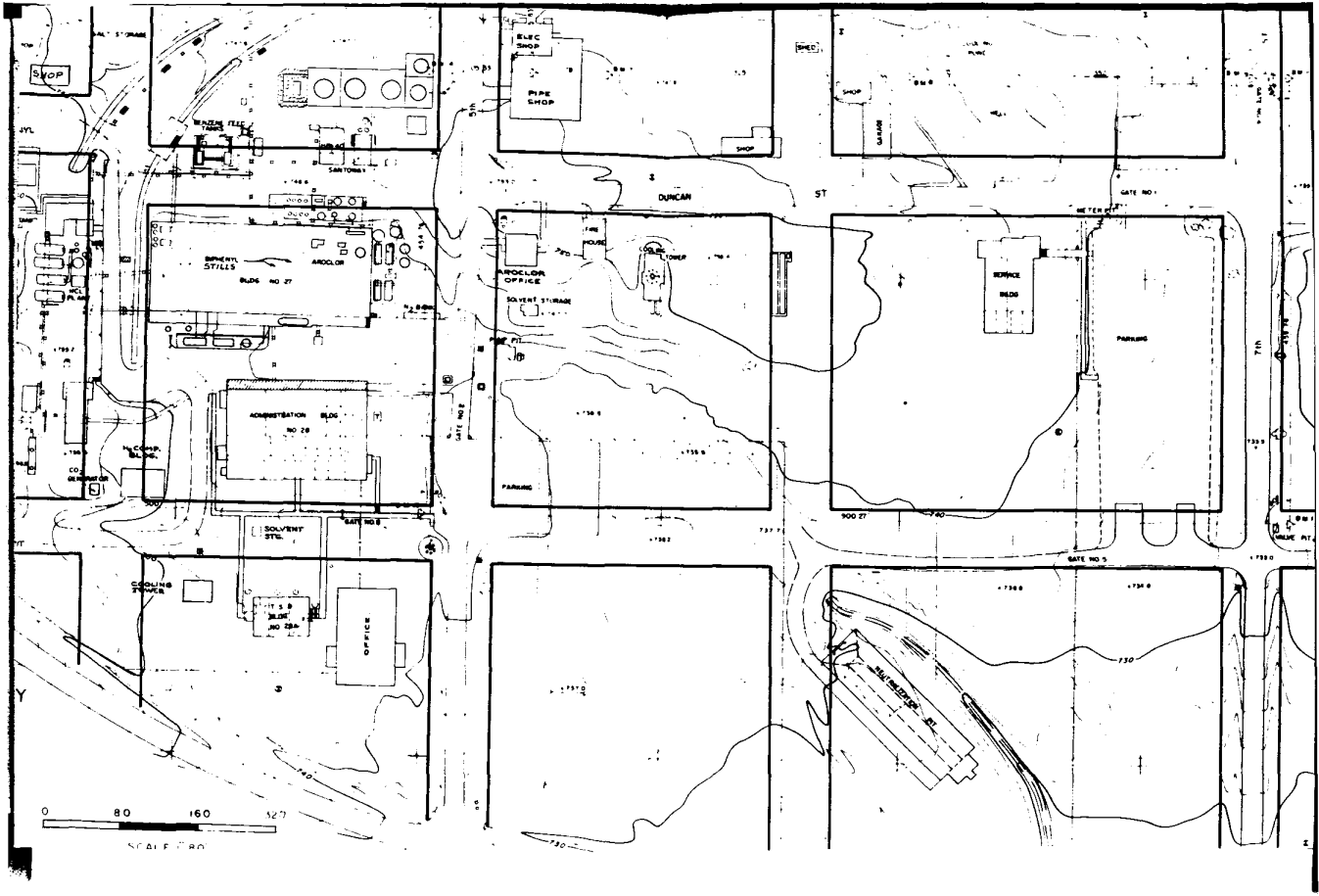
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ADMINISTRATION BLDG NO 28
ARODLOR OFFICE
SOLVENT STORAGE
FIRE HOUSE
SOLVENT STG.
COOLING TOWER
OFFICE
SERVICE BLDG
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