PRELIMINARY TITLE I REPORT
ON
CRYOGENICS FACILITY

REPORT TO STANFORD LINEAR ACCELERATOR CENTER - NO. ABA-98
STANFORD UNIVERSITY - ABA SUBCONTRACT S-136
UNDER STANFORD - AEC CONTRACT AT(94-3)-400

Submitted by E. D. Leys  Approved by R. L. Sharpe
E. D. Leys  R. L. Sharpe

AETRON-BLUME-ATKINSON
A Joint Venture
ARCHITECT-ENGINEER-MANAGER
Palo Alto, California

CHARLES LUCKMAN ASSOCIATES
Architectural Associates

August 28, 1964
TITLE I REPORT
ON
CRYOGENICS FACILITY

CONTENTS

I. INTRODUCTION 1
II. BASIS FOR DESIGN 2
III. OUTLINE SPECIFICATIONS 10
IV. SCHEDULE 16
V. COST ESTIMATE 17
VI. DRAWING LIST 18
I. INTRODUCTION

A. SCOPE

This report presents the Title I work performed in regard to the Cryogenics Facility. Included are preliminary drawings of a site plan, building plans and elevations and mechanical and electrical schematics. Also included are outline specifications, schedule of work and a preliminary construction cost estimate.

B. FACILITY

The Cryogenics Facility building will be located near the Target Area on a site north of the Beam Switchyard and west of End Station "A", on the Stanford Linear Accelerator project site.

The building will house research laboratories, utility areas, offices and toilet facilities in a low, one-story area and will have a high bay area for purposes of assembling and testing Cryogenics devices. Storage for non-flammable gases and space for equipment required to operate the facility will be provided in adjacent outside areas. Part of this outside area will be roofed over for protection of equipment

The high bay Assembly and Test Area will be provided with an overhead crane.
II. BASIS FOR DESIGN

A. SITE

1. Location

The Cryogenics Facility is located centrally in consideration of its principal user groups who are in the Central Laboratory, Heavy Assembly Building and the Target Area. End Station "A" and "B" buildings, Future expansion is possible in the areas east and west of the building.

2. Preparation

The site will be rough graded as a change order to the Accelerator Housing contract. Similarly, yard and access road surfacing will be part of another contract.

B. BUILDING

1. General

Four research laboratories are provided in the building. Two will be used for development of cryogenics devices which use small quantities of liquid hydrogen. The other two will be used for development of devices using non-explosive liquids and gases. The two types will be separated by a utility corridor from which utilities will be stubbed into each of the laboratories.

The laboratories utilizing liquid hydrogen and the Assembly and Test Area, which also uses liquid hydrogen, are separated by another utility corridor. All indoor non-explosion proof equipment such as distribution panels, circuit breakers, motor starters, instrumentation and control equipment required during hydrogen runs will be located in this corridor and in the adjoining Utility Room.
Office areas are intended for single and multiple occupancy. Toilet facilities are provided for 22 men occupants and two women occupants.

### Pertinent Data

<table>
<thead>
<tr>
<th>Element</th>
<th>Length</th>
<th>Width</th>
<th>Gross Area</th>
<th>Net Area</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab-Office-Utility Area</td>
<td>100</td>
<td>50</td>
<td>5187</td>
<td>4499</td>
<td>88,180</td>
</tr>
<tr>
<td>Assembly and Test Area</td>
<td>60</td>
<td>8</td>
<td>2400</td>
<td>--</td>
<td>87,800</td>
</tr>
<tr>
<td>Covered Utility Area</td>
<td>50</td>
<td>20</td>
<td>1000</td>
<td>--</td>
<td>8,500</td>
</tr>
</tbody>
</table>

The height of the Lab-Office-Utility Area is predicated upon the requirement for 14 feet of minimum clear head room under all beams and services in the four laboratories.

Height of the Assembly and Test Area is based upon a clearance requirement of 25 feet under the crane or a 25 foot hook height above finished floor, whichever governs.

2. **Architecture**

The design of the building incorporates several elements of the architectural vocabulary proposed to and approved by the Stanford University Board of Trustees for use in the industrial type buildings found on the project site. Components of the vocabulary used include typical exterior walls of pressed metal siding, standard metal sash, exposed steel columns, pressed metal sight screens for concealment of mechanical equipment on the low roof, and roof overhangs for protection from sun and rain.

Ceilings will not be provided in the four laboratories, utility corridors, utility room or Assembly and Test Area. Offices and toilet rooms, however, will be furnished with ceilings.

The high bay Assembly and Test Area will be provided with a large roll-up door to permit passage of heavy equipment in and out of the building.
3. **Structure**

The building will have rigid structural steel frames supported on reinforced concrete spread footings.

A reinforced concrete blast wall separates the high bay from the remainder of the building. The wall is intended to protect occupants of the laboratory and office areas from possible explosions resulting from use of explosive liquids and gases in the high bay. Design pressures for this wall will be greater than the conventional loading used for the metal wall panels or the metal roof deck. It is intended that the siding and roof deck should blow out first in the event of an explosion, thus relieving pressure on the blast wall and lessening its likelihood of collapse.

Viewing ports will be provided in the blast wall to permit observation of tests in the high bay from the utility corridor.

A 10% roof slope to a center ridge will be provided in the Assembly and Test Area to facilitate the flow of accidentally released hydrogen gas to the exhaust fans located in each bay of the roof.

4. **Mechanical**

a. **Air Conditioning**

Only the office areas will be provided with air-conditioning. Air conditioning will be by means of package units having the capacity to maintain the temperature at 75°F ± 3°F.

b. **Heating and Ventilating**

All heating will be electric. The two laboratories using hydrogen and the Assembly and Test Area will be heated by low temperature elements such as the type available in indirect systems using electrically heated water.
Heating of the four laboratories and Assembly and Test Area will be sufficient to maintain a minimum temperature of 70°F at an outside temperature of 35°F. Normal ventilation in these areas will provide for a complete air change in three to five minutes. Outside air will be reduced to about 20% of total circulation during cold weather.

In order to meet safety requirements in the Assembly and Test Area and the two labs where hydrogen is used, the ventilation system will be provided with the capability of exhausting the room in two minutes. This emergency ventilation will be activated upon hydrogen detection.

The Assembly and Test Area will be provided with vents for hydrogen boil off and for mechanical vacuum pump exhaust.

Toilet rooms and corridors will also be heated and ventilated. The toilet rooms and Utility Room will be exhaust ventilation with air from adjacent areas.

c. Plumbing

Plumbing will be conventional with office building type fixtures.

d. Utilities

Low conductivity water, compressed air, domestic water and cooling tower water will be located at the Utility corridor ceiling and stubbed into the four laboratories. Distribution within the laboratories will be by the occupant. These same utilities will be distributed to the adjacent outside storage and equipment areas as required.
Each of the utilities will be brought to a point 5 feet outside the building from the Beam Switchyard Utilities as part of another contract.

Compressed air and domestic water will be supplied to the Assembly and Test Area from the Utility corridor at intermediate columns on each wall, terminating at valved outlets approximately 10 feet above the floor. Domestic water will be connected to the various plumbing fixtures and base bibs.

Two floor drains will be provided in each laboratory. The floor drains in the two laboratories using hydrogen and those in the Assembly and Test area will be provided with screw-in sleeves for the purpose of preventing the entrance of liquified explosive gases into the sewer system.

e. Fire Protection

No sprinkler system is to be installed. Portable fire extinguishers will be provided by SLAC.

5. Electrical

a. Electrical Service

(1) Power. Electrical power will be supplied from the Research Area Substation at 480 volts, 3 phase, 4 wire, 60 cycles. Distribution of power will be made from a Control Center located in the Utility Room. The estimate does not include the cost of the 480 volt service from the Research Area Substation to the Cryogenics Facility.
(2) Power Distribution. Power at 480 volts, 3 phase will be provided for the 480 volt receptacles, heating and ventilation, crane service, roll-up door service, and for the adjacent outside storage and equipment areas as required. The 480 volt power will also be transformed to 208Y-120 volts for the 120 and 208 volt receptacles and for the 120 volt lighting. The 480 volt panelboards and the 120/208 volt panelboards will be located in the Utility Corridor adjacent to the Assembly and Test Area and the laboratories which utilize liquid hydrogen. The positive lock-out type circuit breakers will be used for control of circuits feeding conventional equipment and devices in these hazardous areas. Conventional type, general purpose enclosed panelboards for 480 volts and for 120/208 volts will be located in the two laboratories which do not utilize explosive liquids and gases. Additional conduit runs will be provided from the magnet power supply center to these laboratories and to the Assembly and Test Area. The number, size, and location of these conduits will be specified later.

b. Receptacles

(1) Laboratories will be provided with surface metal raceway type 120 volt receptacles with outlets on approximately 5 foot centers. Each room will be supplied with 10 volt-amperes per square foot of room area in this manner. Also, one 480 volt, 100 ampere, 3 phase and two 208 volt, 3 phase receptacles will be provided in each of the laboratories.

(2) Assembly and Test Area will be provided with 120 volt duplex receptacles on 20 foot centers around the periphery of this area. Four 480 volt, 100 ampere, 3 phase receptacles will
also be installed in the Assembly and Test Area.

(3) Office Areas will be provided with at least one 120 volt duplex receptacle for each office in accordance with code requirements.

(4) Hazardous Areas, such as the laboratories utilizing hydrogen and the Assembly and Test Area, will have additional power supplies in accordance with code requirements from the Utility Corridors outside these areas for service during experiments. The exact requirements for this power will be specified later.

c. Lighting

(1) The two laboratories and the Assembly and Test Area where the use of explosive liquids and gases are involved will be provided with 25 foot candles of explosion proof lighting at 30 inches from the floor. Supplemental, conventional lighting on lock-out type circuit breakers will provide lighting level intensities of 70 foot candles for the laboratories and 50 foot candles for the Assembly and Test Area.

(2) The two laboratories not using explosive liquids and gases will be provided with a lighting intensity of 70 foot candles.

(3) Offices will be provided with a lighting level intensity of 80 foot candles.

(4) All other areas will be provided with an illumination intensity of 25 foot candles.

(5) Exterior building lighting shall be installed to match that of existing buildings.

d. Grounding System

A complete grounding system will be installed as required by the California Safety Orders and the National Electrical Code. This
and installed under a separate contract. The building contract package, the crane itself will be furnished and the electric overhead bridge crane rails will be provided as part of the crane.

8. Communications Alarm box will be provided at an exterior location. A master fire alarm box and manual fire alarm boxes will be located for adequate fire detection system, using voice of fire detectors, will be installed. The project fire alarm system will be extended into the building. A fire alarm system will be provided with the emergency ventilation system.

7. Hydrogen Detection System

6. Power Generator set. No equipment is included in this report. Conduit stub-ups only will be provided at the pad for the emergency power. It’s emergency Power M.G. Set

tions will be determined later.

5. Conduits for the feeders. The number of outlets, feeders and location a part of this report. Provisions shall be made for supplying one of the duct and cable system for the Magnetic Power Supplies are not

e. Magnetic Power Supplies

Grounding in the research areas are to be provided by SLAC.

G. Electrical equipment as well as the building steel. Requirements for including a ground loop to provide for grounding of all electrical equipment. 

SLAC AHO 1991-012B14
III. OUTLINE SPECIFICATIONS

A. GENERAL


2. Type of Construction - Type IV(N)

3. Number of Stories - One

4. Location on Property - Separated on four sides

5. Area Limitations
   b. Per Atomic Energy Commission Criteria. Maximum allowable area = 15,000 square feet, unsprinklered.

B. FOUNDATIONS

Reinforced concrete spread footings. Concrete slabs on grade.

C. STRUCTURAL FRAME

Rigid steel frame carrying metal deck roof system.

Live Loads:

<table>
<thead>
<tr>
<th>Component</th>
<th>Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof</td>
<td>20 psf + equipment</td>
</tr>
<tr>
<td>Hoist in each laboratory</td>
<td>1000# from roof beam</td>
</tr>
<tr>
<td>Laboratory floors</td>
<td>500 psf</td>
</tr>
<tr>
<td>Assembly and Test Area floor</td>
<td>1000 psf</td>
</tr>
<tr>
<td>Office area floors</td>
<td>150 psf</td>
</tr>
<tr>
<td>Blast wall</td>
<td>75 psf normal to surface</td>
</tr>
<tr>
<td>Wind and seismic</td>
<td>UBC</td>
</tr>
</tbody>
</table>

Wind, seismic and lateral pressures on blast wall will be taken by the rigid frames in the lateral direction. The blast wall will serve as a shear wall in the longitudinal direction.
D. ROOF

Built up roof and gravel (colored granular material) over rigid insulation on metal deck.

E. EXTERIOR WALLS

Pressed metal panels similar to Robertson, Mahan, or equal. Panels are insulated and provided with interior finish of painted sheetrock in office, laboratory toilet and utility areas. The interior surfaces of metal panel siding will be exposed and painted in the Assembly and Test Area.

Windows will have fixed glass in metal sash.

Exposed structural columns and beams will be rolled steel sections, painted.

F. INTERIOR PARTITIONS AND WALLS

Sheetrock on wood studs. Toilet rooms to have tile wainscot behind fixtures. Blast wall between Assembly and Test Area and Utility Corridor will be reinforced concrete, painted.

G. FLOORS

Vinyl asbestos tile on concrete with rubber base in offices, Utility Room and Corridors, and the two laboratories where non-explosive liquids and gases will be used.

Ceramic tile and base in toilet rooms.

Conducting vinyl tile and rubber base in the two laboratories where hydrogen will be used.

One forth inch conducting topping over concrete slab in the Assembly and Test Area.
H. **CEILINGS**

Sheetrock in toilet and offices. Exposed metal deck and steel roof beams in all other areas, painted.

I. **DOORS**

Hollow core flush panel wood for interior doors and metal and glass exterior doors in the Office-Lab-Utility Area of the building.

Hollow core metal and metal roll-up door for the Assembly and Test Area.

J. **WINDOWS**

See "E. EXTERIOR WALLS."

One fourth inch plate glass in all glazed entrance doors. DSB clear glass in sash.

K. **MECHANICAL**

1. Air conditioning for office areas:

   Package water cooled air conditioners with electric heating elements.

2. Heating and ventilating units for Assembly and Test Area and two laboratories using hydrogen:

   Roof mounted cabinet centrifugal units with aluminum wheels, replacable media filters, electric heating elements with surface temperature below 500°F, time modulated control, overheat protection. Units are interlocked to shut off when hydrogen is detected.

   Emergency exhaust fans in these areas will be roof mounted, low silhouette dome, centrifugal exhausters with aluminum wheels, static proof belt drive, explosion proof motors and gravity dampers.
3. Heating and ventilating units for the two laboratories using non-explosive liquids and gases:
   Same as for the other two laboratories except with standard electric heating elements and without interlock to hydrogen detection system.

4. Plumbing:
   In accordance with Uniform Plumbing Code. Office building type fixtures.

5. Hot domestic water:
   Electric water heater.

6. Piping:
   Piping for compressed air at 100-110 psig will be threaded galvanized iron pipe with bronze valves. Domestic water piping will be threaded galvanized iron pipe with bronze fittings.

Low conductivity water piping will be silver soldered copper tubing in 4 inch and smaller sizes and welded stainless steel in larger sizes. Ball valves will be used. Piping will be sized for three megawatts of cooling capacity based upon a temperature rise of $30^\circ$F with a supply temperature of $95^\circ$F and a supply pressure of 300 psig.

Cooling tower water piping will be threaded black iron in sizes under 3 inch, welded black iron pipe for larger above-grade pipe, and class 100 asbestos cement for larger buried pipe.

L. ELECTRICAL

Electrical power will be supplied from the Research Area Substation at 480 volts, 3 phase, 4 wire, 60 cycles.

Lighting levels:

<table>
<thead>
<tr>
<th>Area</th>
<th>Lighting Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly and Test Area</td>
<td>50 fc</td>
</tr>
<tr>
<td>Two labs using hydrogen</td>
<td>70 fc (25 fc explosion proof and 25 fc conventional)</td>
</tr>
<tr>
<td>Two labs using non-explosives</td>
<td>70 fc</td>
</tr>
<tr>
<td>Offices</td>
<td>80 fc</td>
</tr>
<tr>
<td>All other</td>
<td>25 fc</td>
</tr>
</tbody>
</table>
0. COMMUNICATIONS SYSTEMS

Detector will be located near each exhaust opening in the roof.

1. HYDROGEN DETECTION

Portable hand extinguishers will be provided by SIA.

2. FIRE PROTECTION

Fire alarm system with a fire detection system using a temperature rise detector,
the project fire alarm will be extended into the building, also provided.

<table>
<thead>
<tr>
<th>476</th>
<th>763</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>47</td>
</tr>
</tbody>
</table>

Hydrogen storage area (apart from building)

- Electrical heat
- Exhaust fans
- Air conditioning
- Heating and ventilation units
- Hot water heater
- Roll up door motor
- Crane
- Exhauster lighting
- Conventional lighting
- Explosion proof lighting
- 480 volt receptacles
- 208 volt receptacles
- 120 volt receptacles

Building load requirements in kVA:
similar. Cable and equipment will be part of another contract.

P. All utilities to the Cryogenics Facility will be brought underground to within five feet of the building as part of the Target Area Site Improvements and Utilities package.

Q. The crane will have a 20-ton capacity with provision for adding a five ton auxiliary hoist at a later date. Hook height, lift and clearance under the bridge are to be 25 feet minimum. The crane is to be pendant operated and is to be furnished as part of a separate contract.
<table>
<thead>
<tr>
<th>Title</th>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title I</td>
<td>Preliminary Draft Submittal</td>
<td>28 August 1964</td>
</tr>
<tr>
<td>Title I</td>
<td>Draft Review Completed by SLAC</td>
<td>14 September 1964</td>
</tr>
<tr>
<td>Title I</td>
<td>Final Submittal</td>
<td>28 September 1964</td>
</tr>
<tr>
<td>Title I</td>
<td>Review and Approval by SLAC &amp; AEC</td>
<td>19 October 1964</td>
</tr>
<tr>
<td>Title II</td>
<td>50% Submittal</td>
<td>21 December 1964</td>
</tr>
<tr>
<td>Title II</td>
<td>90% Submittal</td>
<td>15 February 1965</td>
</tr>
<tr>
<td>Title II</td>
<td>Revised and Ready For Bid</td>
<td>26 March 1965</td>
</tr>
<tr>
<td></td>
<td>Bid Opening</td>
<td>27 April 1965</td>
</tr>
<tr>
<td></td>
<td>Notice to Proceed</td>
<td>25 May 1965</td>
</tr>
<tr>
<td></td>
<td>Construction Completed</td>
<td>31 December 1965</td>
</tr>
</tbody>
</table>
## V. TITLE I ESTIMATE-DETAILS

**CRYOGENICS FACILITY**

<table>
<thead>
<tr>
<th>ACCT. NO.</th>
<th>ITEM</th>
<th>QUANTITY</th>
<th>COMPOSITE UNIT COST</th>
<th>ITEM COST</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-060</td>
<td>STRUCTURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Earthwork</td>
<td>392 CY</td>
<td>$6.00</td>
<td>$2,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete</td>
<td>310 CY</td>
<td>53.00</td>
<td>16,400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blast Walls</td>
<td>2,100 SF</td>
<td>5.00</td>
<td>10,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structural Steel</td>
<td>67 Tons</td>
<td>490.00</td>
<td>32,800</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sheet Metal</td>
<td>---</td>
<td>LS</td>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Miscellaneous Metal</td>
<td>---</td>
<td>LS</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operable Louvers</td>
<td>480 SF</td>
<td>7.50</td>
<td>3,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metal Siding &amp; Deck'g.</td>
<td>17,300 SF</td>
<td>0.84</td>
<td>14,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roofing</td>
<td>10,340 SF</td>
<td>0.60</td>
<td>6,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Windows-Glasswork</td>
<td>1,400 SF</td>
<td>4.00</td>
<td>5,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doors</td>
<td>35 EA</td>
<td>120.00</td>
<td>4,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rolling Door</td>
<td>600 SF</td>
<td>6.40</td>
<td>3,800</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dry Walls &amp; Ceiling</td>
<td>8,900 SF</td>
<td>0.92</td>
<td>8,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Floors-Resil.&amp; Ceramic</td>
<td>4,300 SF</td>
<td>0.72</td>
<td>3,100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conductive Flooring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete Surfacing</td>
<td>2,400 SF</td>
<td>1.50</td>
<td>3,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vinyl Tile</td>
<td>800 SF</td>
<td>4.50</td>
<td>3,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paint Work</td>
<td>68,000 SF</td>
<td>0.15</td>
<td>10,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building Accessories</td>
<td></td>
<td></td>
<td>2,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>STRUCTURE, SUB TOTAL</strong></td>
<td></td>
<td></td>
<td>$144,100</td>
<td></td>
</tr>
<tr>
<td>5-060</td>
<td>MECHANICAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plumbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heating, Ventil., A.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Piping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MECHANICAL, SUB TOTAL</strong></td>
<td></td>
<td></td>
<td>$67,600</td>
<td></td>
</tr>
<tr>
<td>5-060</td>
<td>ELECTRICAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lighting &amp; Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grounding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fire Alarm System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel. &amp; Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydrogen Detection System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ELECTRICAL, SUB TOTAL</strong></td>
<td></td>
<td></td>
<td>$70,000</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL COST, BUILDING**

$281,700
### VI. DRAWING LIST

<table>
<thead>
<tr>
<th>Drawing Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK-506-001</td>
<td>Location Plan</td>
</tr>
<tr>
<td>SK-506-101</td>
<td>Floor and Roof Plan</td>
</tr>
<tr>
<td></td>
<td>H.V.A.C. Plan</td>
</tr>
<tr>
<td>SK-506-102</td>
<td>Exterior Elevations</td>
</tr>
<tr>
<td>SK-506-103</td>
<td>Building Sections</td>
</tr>
<tr>
<td>SK-506-701</td>
<td>Single-Line Diagram</td>
</tr>
</tbody>
</table>