



UNIVERSITY OF SINDH

Campus Thatta, Sindh, Pakistan
Centre for Coastal and Deltaic Studies



Prof. Dr. Mukhtiar Ahmed Mahar
Director

Ref. CCDS/UoS-TC/____
Dated: 13 th March 2024

REQUEST FOR QUOTATION (for Engineering Consulting Services)

Reference: "Establishment of Marine Research Laboratory and Survey Unit: Population Dynamics, Pollution Impact Assessments, and Way-Forward of Coastal and Marine Biodiversity in Creeks of Sujawal Sindh Pakistan"

Description : RFQ # 01 (Services)
Date of Issue : 14th March 2024 10:50 AM
Date of Submission of Quotation : 20th March 2024 12:00 PM
Place of Delivery : Focal Person CCDS University of Sindh, Thatta Campus, Thatta
Contact Person & Telephone : **Prof. Dr. Mukhtiar Ahmed Mahar,(03337266153)**

The University of Sindh, Campus Thatta intends to hire services of Engineering Consulting Firm(s) in relevant category and registered with PEC/PCATP, FBR and SRB for Detailed Design for the works as set forth herein under:-

1. Establishment of Marine Research Laboratory Sujawal, University of Sindh Campus Thatta

The consultancy services must include but not limited to the following:

- Preparation of Conceptual Plans.
- Preparation of Master Plan.
- Geotechnical Investigation and Topographical Survey.
- Preparation of Architectural and Structural Drawings/Designs.
- Preparation of Electrical and Public Health (Water Supply, Sewerage, Sui Gas) Designs/Drawings
- Preparation of Engineer's Cost Estimates including BOQs as per Design, Drawings and Specifications.
- Any other relevant services.

Terms & Conditions:

- PEC/PCATP, FBR and SRB Tax Registration Certificate must be provided at the time of submission of quotation.
- Payment will be made through crossed cheque after the receipt of the bill and submission of the above mentioned item(s).
- Government tax(s), levi(es) and charge(s) will be charged at actual as per SRO.
- Competent Authority reserves the right to change / alter / remove any item or article or reduce /enhance quantity without assigning any reason.
- Advance Payment subject to Bank Guarantee Preferably National Bank of Pakistan.
- All Government Taxes (including Income Tax and Stamp Duty), Levies and charges will be charged as per applicable rates / denomination of Work Order.
- University of Sindh, reserves the right to issue Work order for any single item(s) to different lowest responsive bidders or issue Purchase Order for all the items to most advantageous bidder.

Introduction

- 1) **Name of Project: -** **Establishment of Marine Research Laboratory Sujawal, University of Sindh Campus Thatta**
- 2) **Location: -** Sujawal
- 3) **Authority responsible for: -**
- a) **Sponsoring: -** PMDC Sujawal
- b) **Execution: -** University of Sindh
- c) **Operation & Maintenance: -** University of Sindh

4. Total Block Provision	Amount already Committed	Amount Proposed for this Project	Balance available
Rs. 62,129,000.000 million	----	Rs. 20,000.00 million	----

- 5) **Project Introduction:-** The establishment and development of Marine Research Laboratory at Sujawal is to provide quality research, training and education related to the fields of marine, coastal and deltaic regions of Pakistan with aim to produce trained human resource for protection, conservation, development of coastal belt of Sindh and Balochistan Pakistan. Hence the PC-1 has been prepared for its establishment and development.
6. **Objectives of the sector and sub sector.**
1. The Project is well coordinated and co-related with other research and education sectors. In order to meet the pressing needs of strengthening, expanding and imparting Higher Education, Advanced Research and training facilities to the students / scholars of this region i.e. Sindh province in particular and whole country in general.

2. To improve / enhance the facilities by providing quality research and education at the door step of remote areas in Sujawal, Badin and Thatta, Sindh.

3. As one of the priority of the Government of Pakistan is to develop the infrastructure, faculty & allied facilities at Higher Education Institutions to impart International Standard Education within the country, hence the proposed project is directed to achieve the same objectives of the Government for the development of higher education and establishment of Research & Development culture in the higher education institutions of the country to produce quality research findings and education to manpower in the fields of Natural Sciences.

7. Benefits after completion:

It will provide basic and applied nature research findings, education and facilities of highly specialized nature, inclusive of diagnostic interventional trainings, promote the local professional trends for community and addressing the current issues and resolving the problems through organizations of seminars, workshops conferences etc.

It will train local community and through trainings.

It will be a central point of dissemination of knowledge and research.

It will provide national and international literature, booklets, news, scientific information related to marine biodiversity, ecology and human related options and deliverables.

Early warning system related to DRR, Resilience related to the sectorial issues. The Marine Research Laboratory will be created collaboration with national and international organizations for quality research and intends to produce trained human resource and address core issues of coastal and deltaic regions. The laboratory

unit will provide research facilities for coastal development and production through local and foreign projects.

- To conduct research studies for solutions of the problems, suggestions and recommendations.
- To produce the post-graduate research scholars with awards of MS /M.Phil /Ph.D degrees.

8) Description and Justification of Project:-

Description:

The Marine Research Laboratory providing trained human resource and research based solutions related to coastal, deltaic and marine region of Pakistan. The purpose of the Centre is to strive for the improvement, management and socio-economic development of coastal community, fisheries sector, mangrove vegetation, reduction of rapidly changing ecosystem by seawater intrusion, natural disasters and climate change and their impact on natural ecosystems/resources and threats to coastal communities and infrastructures.

Justification:

The feasibility report, scope and demand of building infrastructure of Marine research Laboratory is hereby submitted to the Competent Authority for consideration the approval and releasing funds.

Project Rationality:

Pakistan is blessed with a very long coast and one of the largest River Delta occurring in Thatta and Sujawal districts of Sindh. For many decades now the delta is facing the process of degradation due to decreased annual water/slit flow and rising sea level. The coastal Sindh is particularly vulnerable to erosion and sea intrusions due to its soft sediment composition and flat topography. In addition enhanced wave activity in monsoon season further increases the

pressure on coastal environment. Hence it was felt that there is desperate need of academic and research facility in the area. Under this scenario, establishment of the Centre for Coastal and Deltaic Studies at Thatta Campus will go a long way in providing much needed area specific academic and research facilities. This will help in building indigenous human resource capacity for providing research based solutions to protect and develop coastal and Deltaic resources and communities.

Initially two major disciplines are to be opened for conducting studies in the grounds of:

- i. Marine biological Science Section
- ii. Marine physico-chemical and Geomorphological Science Section

i). Marine Biological Section in the laboratory will be deal the research studies and development of different components of ecosystems, fisheries, aquaculture, meri-culture, mangrove forestry, aquatic biodiversity, zoology, botany and biotechnology.

ii). Marine Physico-chemical and Geomorphological Science Section will deals the research studies in water chemistry (Physico-chemical parameters of water), soil chemistry, tidal action and biochemistry. Geological aspects, climate change, environmental impacts, GIS systems, weather formats, physical situations.

9). Details of civil works

A). Infrastructure and Civil works:

1. Main Building:

- (i). Two Research Laboratories
(25'6"x14'0") with attached
bathroom (6'5"x6'0") and dressing
(6'0"x5'0"). Total 1000 sq ft each.
- (ii). One Conference Room (43'0"x22'0")
with attached bathroom (6'0"x6'0")
(total=1000 sq ft).
- (iii). One Seminar Library (21'0"x14'0")
(total=100 sq ft).
- (iv). One Director Office (12'0"x14'0")
with attached bathroom (6'8"x6'8")
(total=200 sq ft).
- (v). One Staff Common Room (18'0"x14'0")
with attached bathroom
(6'0"x10'0") (300 sq ft).
- (vi). One Store Room (100 sq ft).
- (vii). One general Bathroom (5'0"x10'0")
- (viii). Corridor (10'5" wide)
- (ix). Verandah (24'0"x18'0")
- (x). Car Parking (33'0"x18'0")

1. Additional required components associated with building:

- i. Corridor shed place
- ii. Boundary Compound Wall with
2 Nos. Gate and Gate Pillar
- iii. Underground water tank 20x20ft
- iv. Over Head Water Reservoir
Tank
- v. Turbine Pump room

- vi. Construction of Parking Sheds
- vii. Electric Sub Station/ Fire Alarm / Fire Fighting System room
- viii. 250 KVA Generator Room
- ix. Provision of Close Circuit electric system/ Networking room
- x. Cost for deep foundation
- xi. Electric Installation with Transformer
- xii. Sui Gas external connection with internal fitting
- xiii. Water and sanitation sewerage connection.

Details of Civil Works

Construction of Research Laboratory

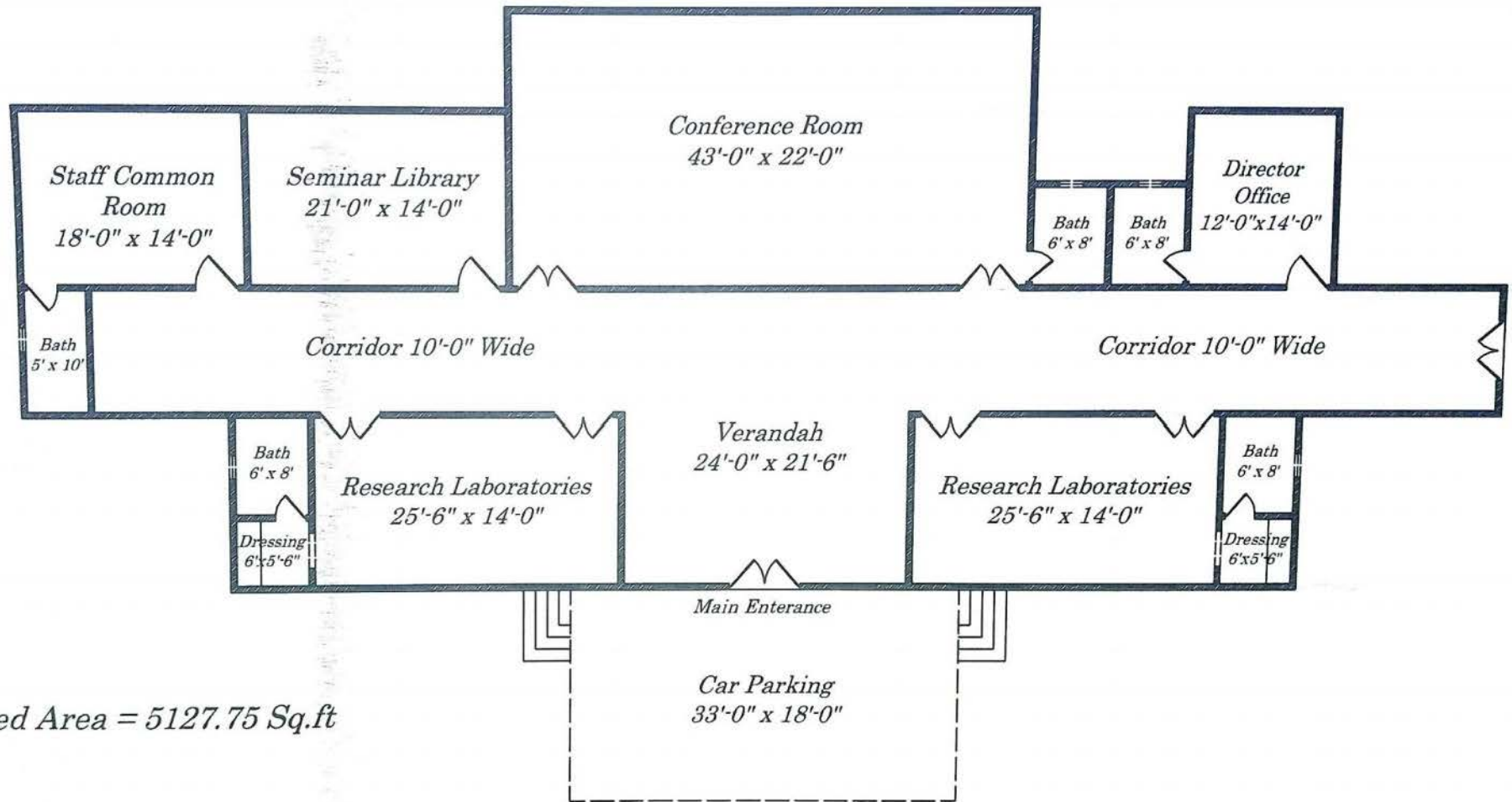
S.No:	Description	Qty	Unit Area (Sqft)	Total Sqft
1	Research Laboratories with attached washroom	2	1000	2,000
2	Conference Room with attached bathroom	1	1000	1,000
3	Seminar Library	1	300	300
4	Director Office with attached bathroom	1	200	200
5	Staff Common Room with attached bathroom	1	300	300
Sub Total				3,800
Add 35% thickness of wall & Verandah e.t.c.				1,330
Grand Total				5,130

External Development

S.No:	Description	Unit	Area	Rate (Rs.)	Amount
External Development					
1	Drainage	Sq. Ft	2,000	125	0.250
2	Water Supply	Sq. Ft	2,500	250	0.625
3	Gas Installation	Job	3,000	270	0.810
4	Soft Hard Landscaping	Sq. Ft	1,500	210	0.315
Grand Total					2.000

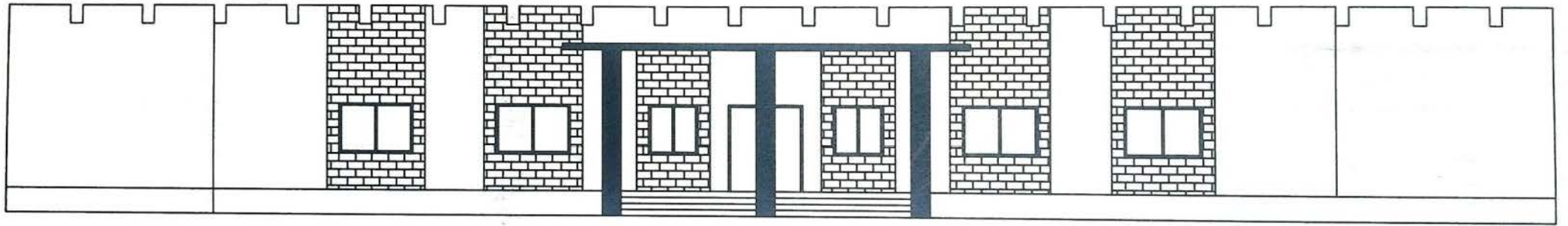
Summary of Civil Works Cost

S.No.	Description	Total Sq.Ft	Cost Per Sq.Ft	Total Cost Rs. In Million
1	Research Laboratory	5,130	3,000.000	15.390
Sub Total				15.390
2	Compound Wall	500	3,500	1.750
3	Gate			1.000
4	External Development			2.000
Sub Total				20.140
5	2% Contingency Charges			0.308
Grand Total				20.448

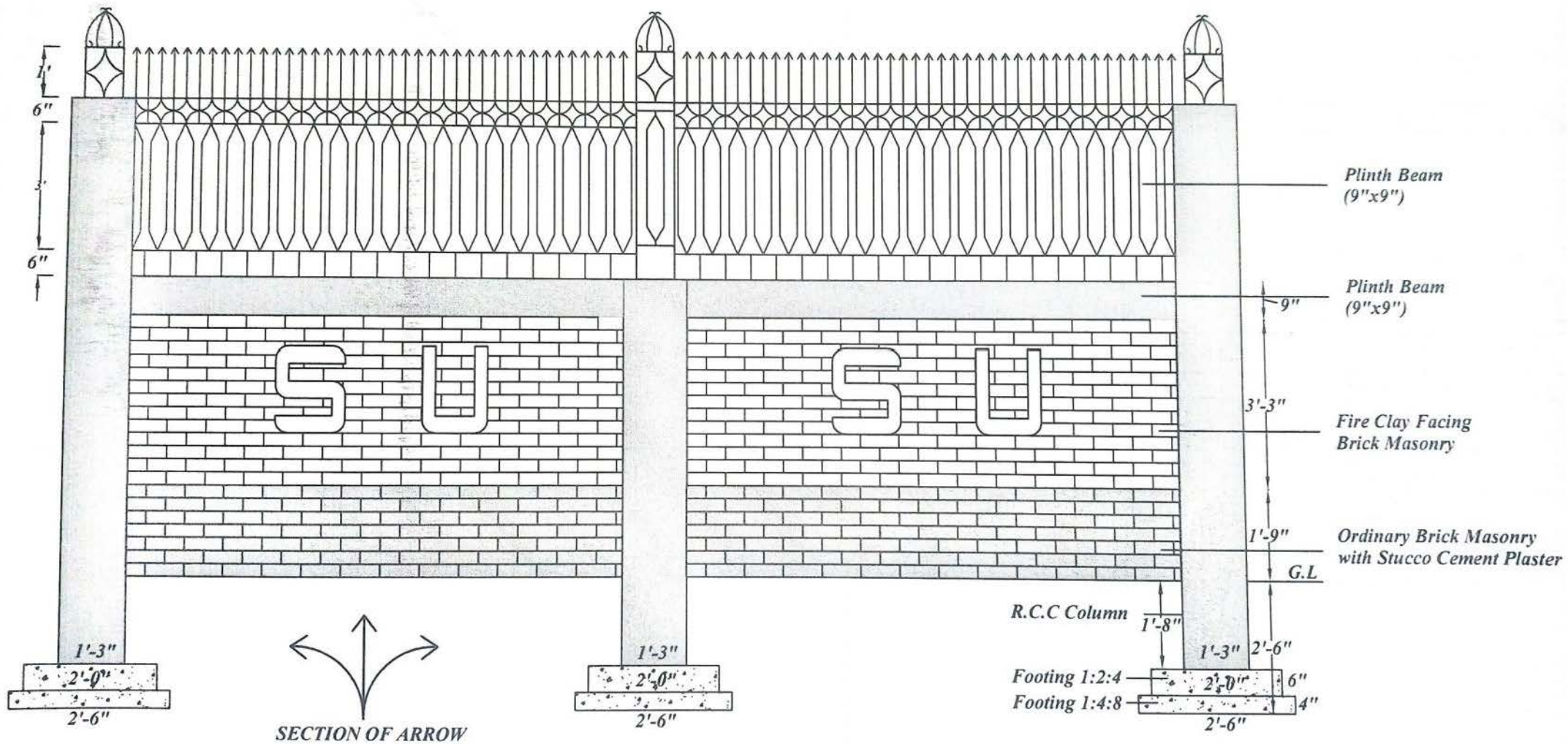


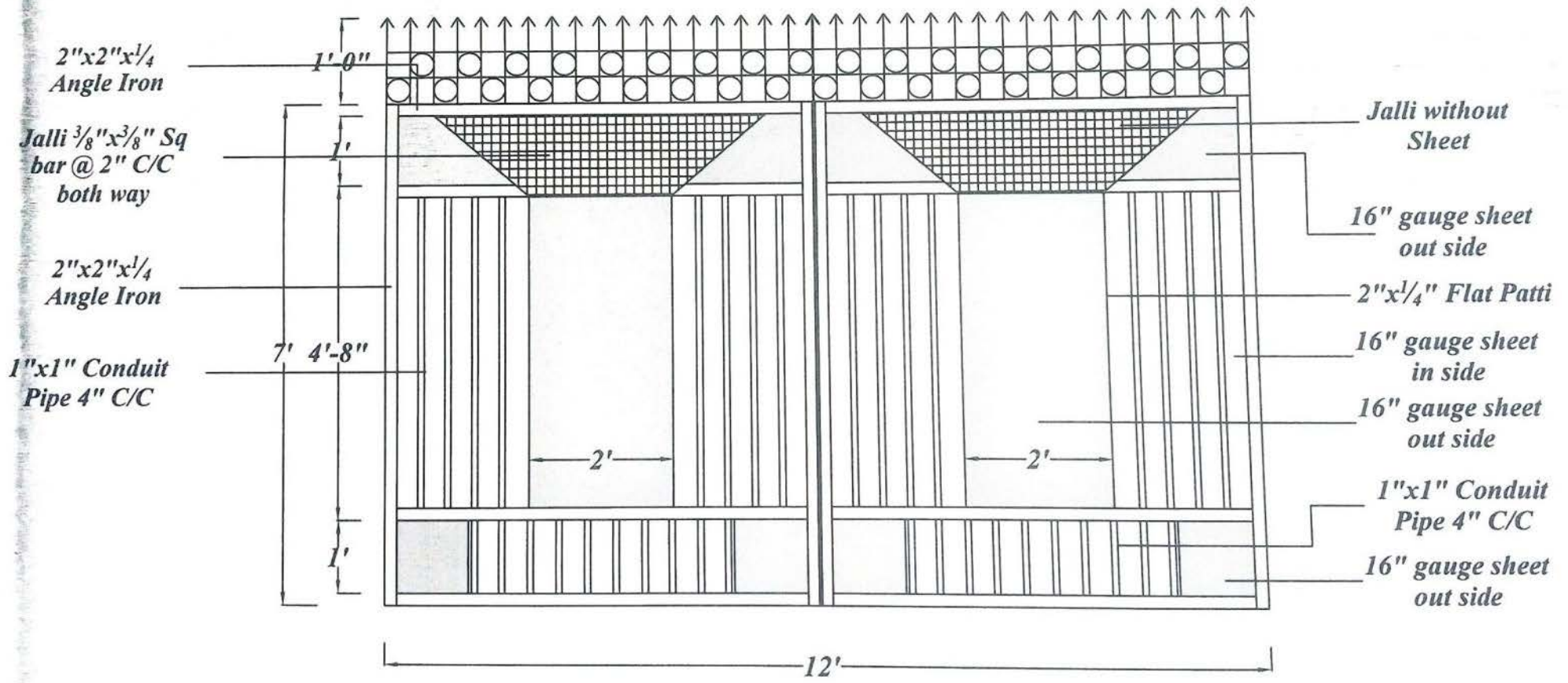
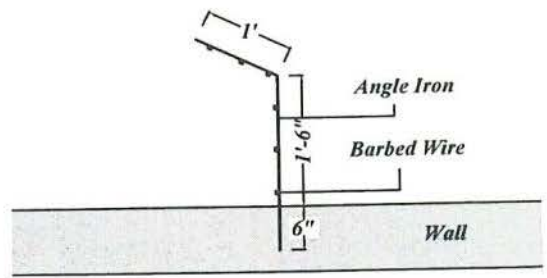
Total Covered Area = 5127.75 Sq.ft

Construction of Research Laboratory



Front Elevation





MAIN GATE