

PROJECT CHANGE APPROVAL

Name of Project: Energy Technology Facility Test Modules

Project Number: 2010134 ETTM

Location of Project: University of Alaska, Fairbanks Campus

Date of Request: August 18, 2010

Total Project Cost: \$3,000,000

\$4,000,000

Approval Required: Change Approval by F & LMC

Prior Approvals/Actions: Formal Project Approval: April 9, 2009 (ETWP)

Schematic Design Approval: February 18, 2010

Reference Materials

One Page Budget Floor Plan Layout

UAF FACILITIES SERVICES DESIGN AND CONSTRUCTION			
Uľ	NIVERSITY OF ALASKA		
	Seet Name of STE Task on a dialog		
	oject Name: ETF Test modules		
MA			
	ilding: 0	Date:	August 18, 2010
		Prepared By:	JLC
	oject #: 2010134 ETTM	Account No.:	0
Total GSF Affected by Project: 5400			
PROJECT BUDGET			FPA Budget
A.	Professional Services		
	Advance Planning, Program Development		\$254,186
	Consultant: Design Services		\$0
	Consultant: Construction Phase Services		\$50,000
	Consul: Extra Services (List:)		\$0
	Site Survey		\$0
	Soils Testing & Engineering		\$0
	Special Inspections		\$0
	Plan Review Fees / Permits		\$14,500
	Other		\$0
	Professional Services Subtotal		\$318,686
В.	Construction		
	General Construction Contract (s)		\$2,973,436
	Other Contractors (List:)	\$0
	Construction Contingency		\$267,609
		Construction Subtotal	\$3,241,045
	Construction Cost per GSF		\$600.19
C.	Building Completion Activity		
	Equipment Fixtures Furnishings		\$0
			\$0
			\$0
Signage not in construction contract			\$0
	Move-Out Cost/Temp. Reloc. Costs		\$0
	Move-In Costs		\$0
	Art		\$0
	Other (List:	_)	\$0
	OIT Support		\$0
	Maintenance/Operation Support		\$0
	Building Complet	ion Activity Subtotal	\$0
D.	Owner Activities & Administrativ	e Cost	
	Project Planning and Staff Support		\$160,188
	Project Management		\$275,047
	Misc Expenses: Advertising, Printing, Su	pplies	\$5,000
	Owner Activities & Administ	trative Cost Subtotal	\$440,235
E.	Total Project Cost		\$3,999,966
	Total Project Cost per GSF		\$740.73
F.	Total Appropriation(s)		\$4,000,000



BETTISWORTH NORTH



ENGINEERING STRUCTURAL CIVIL MECHANICAL ELECTRICAL PDC Engineers, Inc 2700 Gambell Street Suite 500 Anchorage, Alaska 9950

LAB CONSULTANT X-nth 5670 Oberlin Drive San Diego, California 92121

University of Alaska Fairbanks Energy Technology Facility

Fairbanks, Alaska

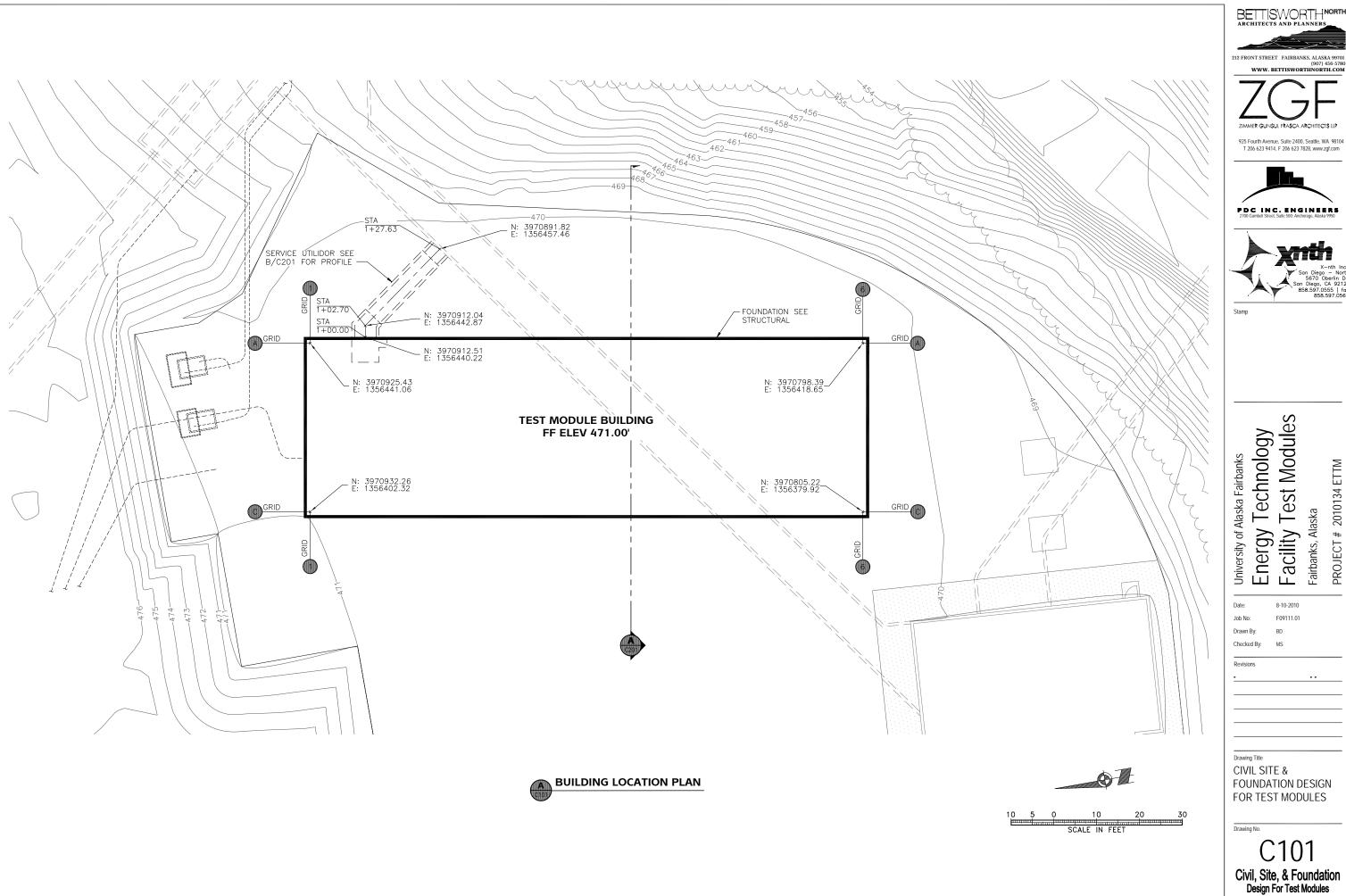
Drawing Title

SITE PLAN

Checked By:

A1.01

15% Design

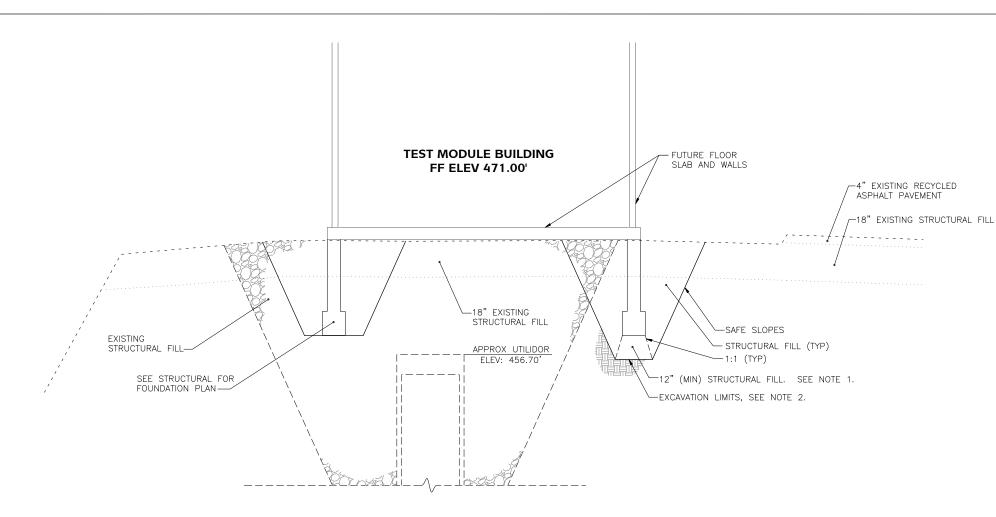


BETTISWORTH NORTH ARCHITECTS AND PLANNERS

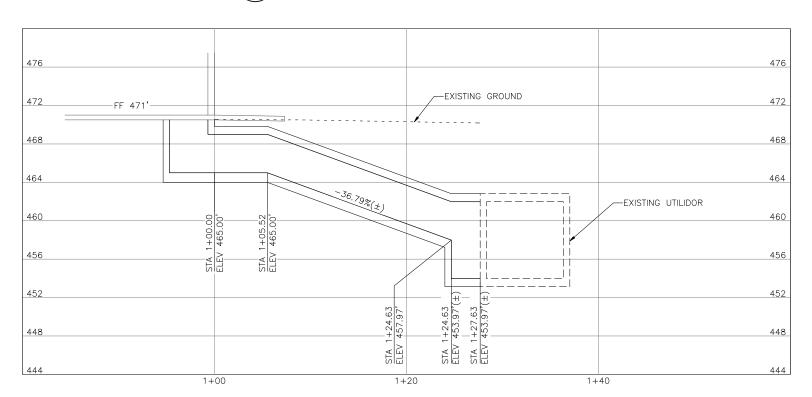
925 Fourth Avenue, Suite 2400, Seattle, WA 98104







SECTION: TEST MODULE BUILDING NOT TO SCALE



PROFILE: SERVICE UTILIDOR

TYPICAL SECTION NOTES

 STRUCTURAL FILL SHALL CONSIST OF FREE DRAINING GRAVELLY SAND OR SANDY GRAVEL THAT IS FREE OF COBBLES AND BOULDERS. THE MATERIAL SHALL BE UNFROZEN, FREE OF VEGETABLE MATTER, LUPS, OR EXCESSIVE AMOUNTS OF CLAY AND OTHER OBJECTIONABLE FOREIGN SUBSTANCES. PIT RUN MATERIAL WHICH MEETS THE REQUIREMENTS SPECIFIED MAY BE USED. CONTRACTOR SHALL SCREEN PIT RUN AS REQUIRED TO MEET GRADATION REQUIREMENTS FOR STRUCTURAL FILL.

THE AGGREGATE SHALL MEET THE REQUIREMENTS OF THE GRADATION
GIVEN BELOW WHEN TESTED IN ACCORDANCE WITH ASTM C136 AND

> PERCENT PASSING SIZE 3-INCH 100 No. 4 SIEVE 30-60 200 MESH LESS THAN 5

2. OUTSIDE OF THE GROUND DISTURBED BY THE UTER UTILIDOR, EXCAVATION FOR FOOTINGS SHALL BE A MINIMUM OF 12 INCHES BELOW THE BOTTOM OF FOOTING. WHEN THIS DEPTH HAS BEEN REACHED, NOTIFY THE PROJECT ENGINEER SO THAT AN INSPECTION OF THE SUBGRADE SOILS MAY BE SCHEDULED. ANY ADDITIONAL EXCAVATION THAT MAY BE WARRANTED TO REMOVE SILTS AND FROST SUSCEPTIBLE SOILS WILL BE IDENTIFIED TO THE CONTRACTOR AT THE COMPLETION OF THE INSPECTION.



ZIMMER GUNSUL FRASCA ARCHITECTS LLP

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Facility Test Modules Technology

PROJECT # 2010134 ETTM

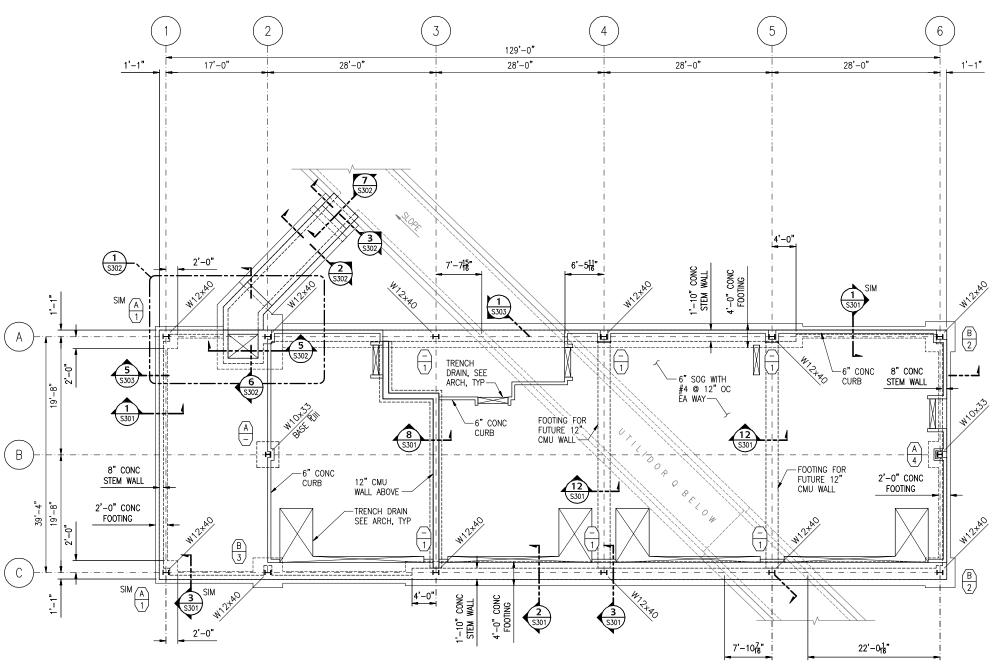
Fairbanks, Alaska

DETAILS

Drawing No.

Civil, Site, & Foundation **Design For Test Modules**

University of Alaska Fairbanks Energy Date: 8-10-2010 F09111.01 Job No: Drawn By: Checked By:



TITLE NAME LINE BOTTOM

8 4 0 8 16 24

FEET

SHEET NOTES

1. THESE DRAWINGS HAVE BEEN PREPARED TO SHOW THE WORK REQUIRED IN ORDER TO CONSTRUCT THE EXTERIOR FOUNDATION AND UTILIDOR CONNECTOR THIS CONSTRUCTION SEASON (2010). THE WORK IS TO BE ACCOMPLISHED BY KIEWIT AS PART OF THE UTER PROJECT CONTRACT. THE EXTENT OF THE WORK IS TO CONSTRUCT EVERYTHING FROM THE ANCHOR BOLTS DOWN. NO SLABS ARE TO BE POLIFED AT THIS TIME



BETTISWORTH NORTH

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Stamp

University of Alaska Fairbanks Energy Technology Facility Test Modules

PROJECT # 2010134 ETTM

Date: 8-10-2010

Job No: F09111.01

Drawn By: WTH/DJM

Checked By:
Revisions

- --

Drawing Title
STRUCTURAL
FOUNDATION AND SLAB
PLAN

Drawing No.

\$201 Civil, Site, & Foundation Design For Test Modules

FOOTING SCHEDULE REINFORCING MARK SIZE (LxW) THICKNESS REFERENCE BOTTOM TOP (5) #5, EA WAY A* 3'-8"x4'-4" 1'-0" 5'-0"x5'-0" 1'-0" (6) #5, EA WAY (6) #5, EA WAY

FOOTING TYPE

SEE SCHEDULE

- PEDESTAL TYPE

SEE SCHEDULE

PEDESTAL SCHEDULE

DETAIL

4/S301

5/S301

6/S301

7/S301

3

BASE PL

MARK I

MARK II

MARK II

MARK III

 $^{^{}st}$ AT A 'SIM' USE DIMENSIONS SHOWN ON PLAN AND REINFORCING SHOWN IN FOOTING SCHEDULE.