



The Environmental Studies Lab: Expansion

East Coast, USA

Codi Shine

The Owner

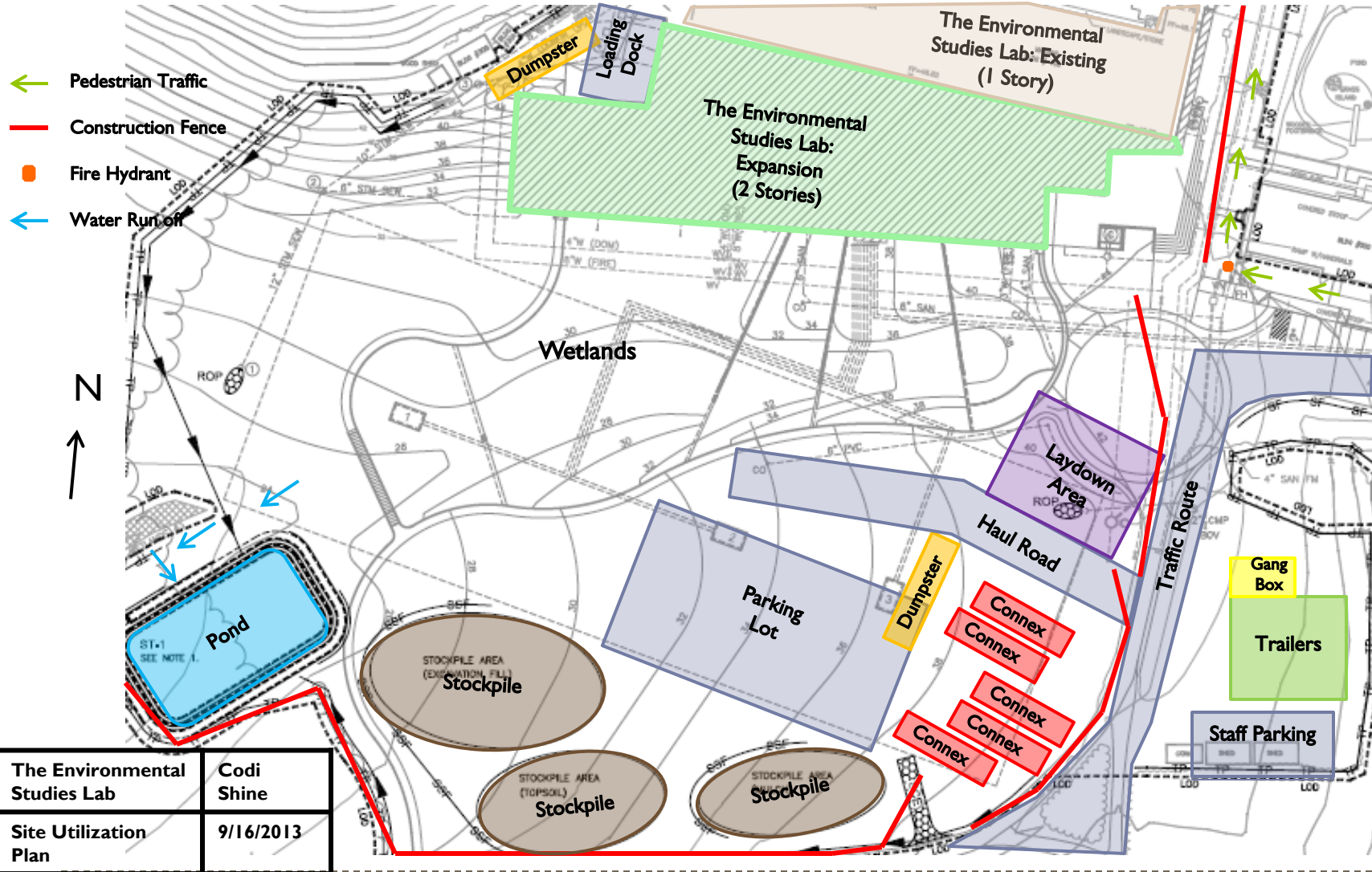
- ▶ **Who?**
 - ▶ Environmental Scientists

- ▶ **Why?**
 - ▶ Inadequate space
 - ▶ Out-of-date equipment
 - ▶ Sustainable Site

- ▶ **LEED Platinum**



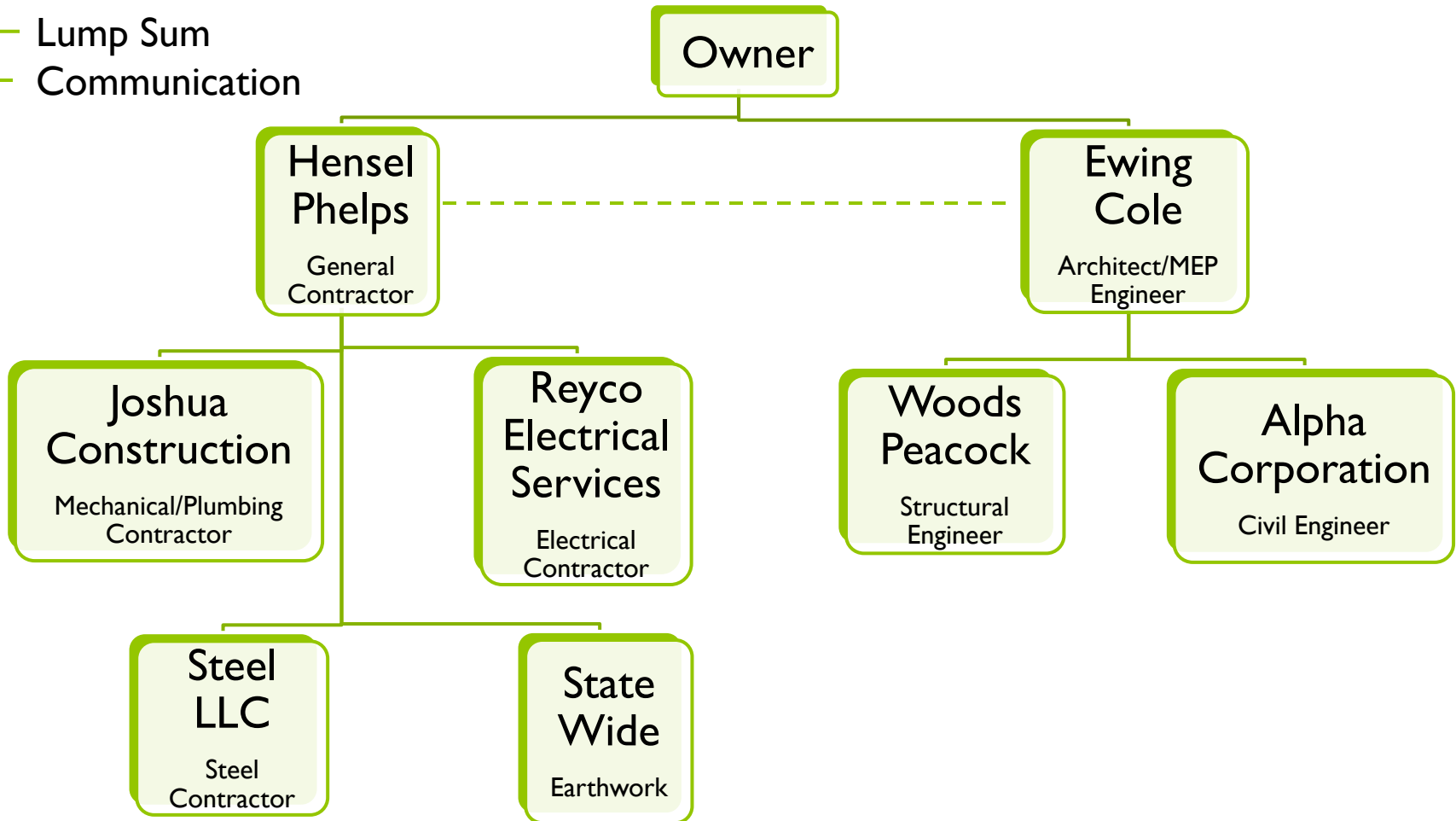
Existing Conditions



Project Delivery System

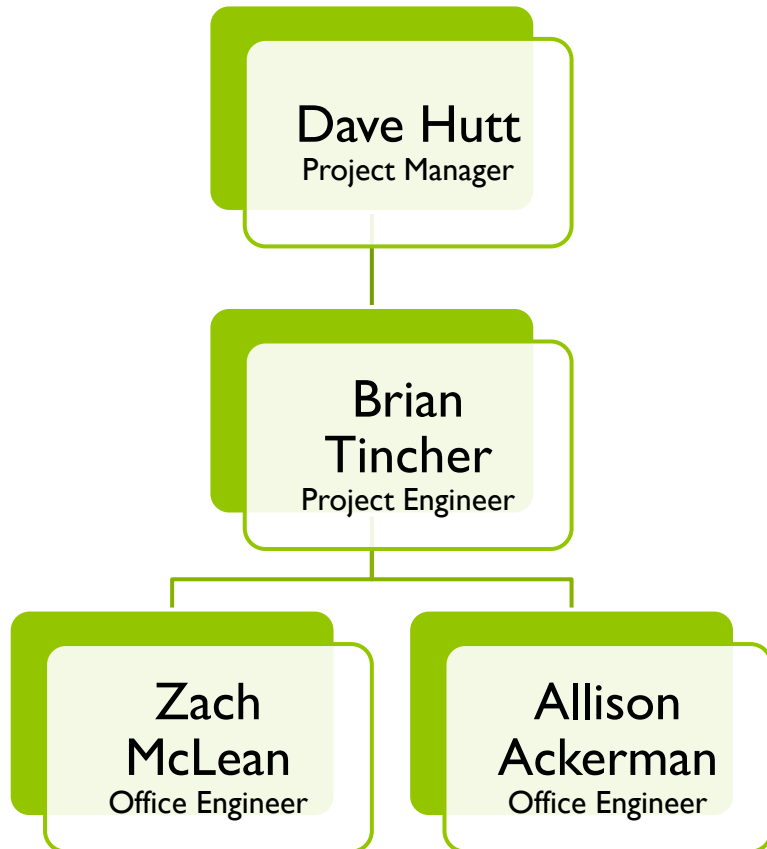
— Lump Sum

- - - Communication

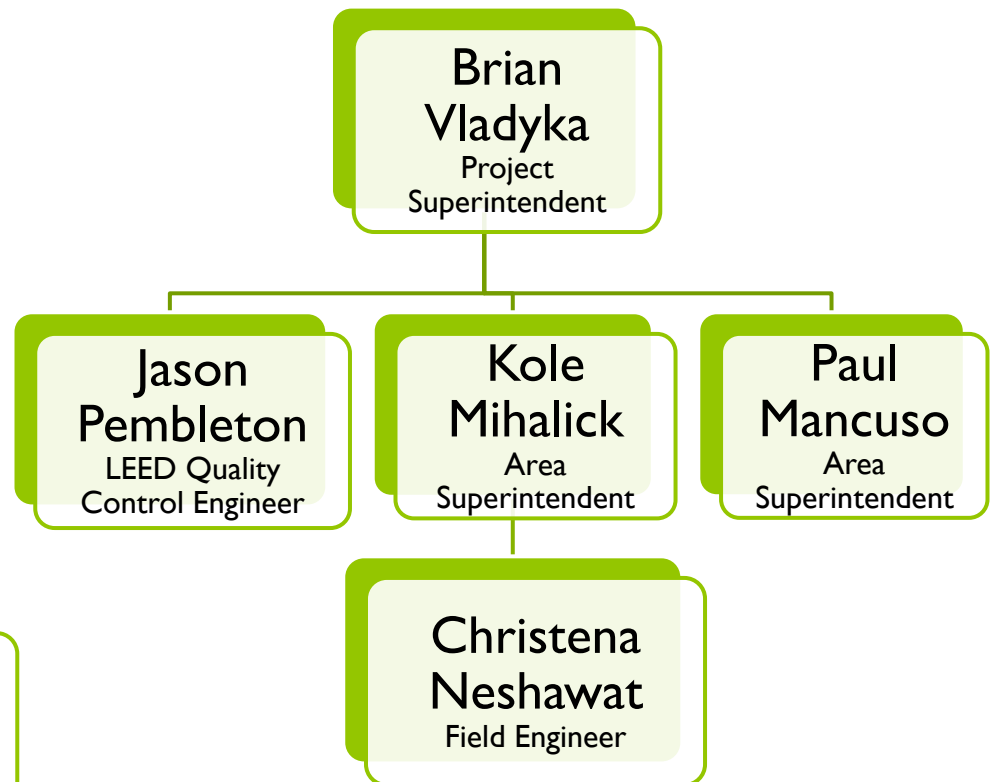


Staffing Plan

Office



Field



Building Systems Summary

Structural System

- ▶ Reinforced Concrete
- ▶ Steel Frame
- ▶ Roof Metal Decking and Steel Beams



Exterior System

- ▶ Brick Veneer
- ▶ Fiber Cement Siding
- ▶ Corrugated Metal Panels
- ▶ Curtain Wall System



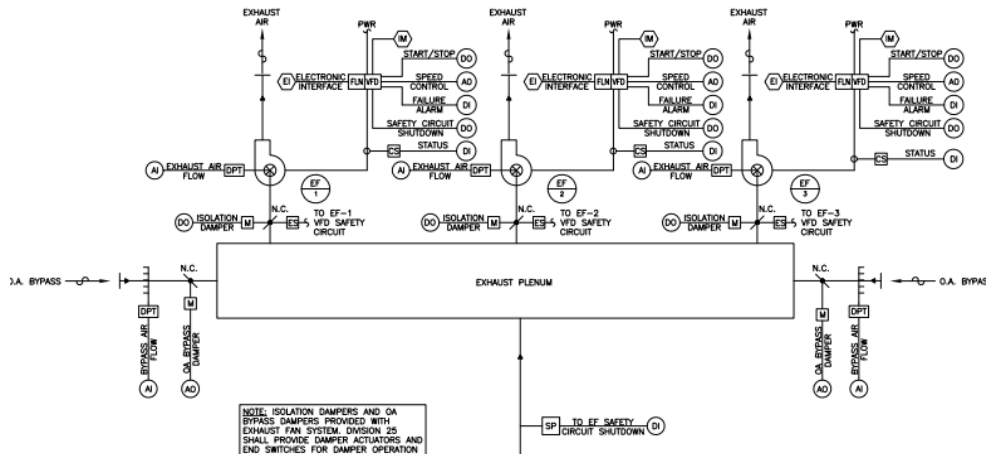
Building Systems

Mechanical System

- ▶ 250 Geothermal Wells
- ▶ 4 100% Outside Air Handlers
- ▶ 5 Enthalpy Wheel

Electrical System

- ▶ Automatic Transfer Switch
- ▶ Dimmable Controls and Occupancy Sensors
- ▶ New Transformer



Schedule Summary

The Environmental Studies Lab				Classic Schedule Layout																								16-Sep-13 11:43					
Activity Name	Original Duration	Start	Finish	2011												2012												2013					
				Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun					
SERC-BLv2 SERC BL v2	806	04-Apr-11	28-May-14																														
Notice to Proceed	0	01-Jun-11*	01-Jun-11	Notice to Proceed																													
Procurement	245	01-Jun-11	17-May-12	Procurement																													
Excavate	10	17-Oct-11*	28-Oct-11	Excavate																													
FRP Slab on Grade - Basement	5	16-Jan-12	20-Jan-12	FRP Slab on Grade - Basement																													
FRP Slab on Grade - Level 1 S3	4	16-Feb-12	21-Feb-12	FRP Slab on Grade - Level 1 S3																													
Erect Steel Columns & Beams - Basement	4	22-Feb-12	27-Feb-12	Erect Steel Columns & Beams - Basement																													
FRP Slab on Grade - Level 1 S2	5	01-Mar-12	07-Mar-12	FRP Slab on Grade - Level 1 S2																													
Erect Steel Columns & Beams - Level 1 S3	6	06-Mar-12	13-Mar-12	Erect Steel Columns & Beams - Level 1 S3																													
Erect Steel Columns & Beams - Level 1 S2	5	14-Mar-12	20-Mar-12	Erect Steel Columns & Beams - Level 1 S2																													
FRP Slab on Metal Decking - Level 1 S3	5	21-Mar-12	27-Mar-12	FRP Slab on Metal Decking - Level 1 S3																													
Erect Steel Columns & Beams - Level 2 S3	6	21-Mar-12	28-Mar-12	Erect Steel Columns & Beams - Level 2 S3																													
FRP Slab on Metal Decking - Level 1 S2	5	28-Mar-12	03-Apr-12	FRP Slab on Metal Decking - Level 1 S2																													
Erect Steel Columns & Beams - Level 2 S2	5	29-Mar-12	04-Apr-12	Erect Steel Columns & Beams - Level 2 S2																													
FRP Slab on Metal Decking - Level 2 S3	5	03-Apr-12	09-Apr-12	FRP Slab on Metal Decking - Level 2 S3																													
Exterior Skin - Basement	35	04-Apr-12	22-May-12	Exterior Skin - Basement																													
Erect Steel Columns & Beams - Penthouse	4	05-Apr-12	10-Apr-12	Erect Steel Columns & Beams - Penthouse S3																													
FRP Slab on Metal Decking - Level 2 S2	4	10-Apr-12	13-Apr-12	FRP Slab on Metal Decking - Level 2 S2																													
Erect Steel Columns & Beams - Penthouse	3	11-Apr-12	13-Apr-12	Erect Steel Columns & Beams - Penthouse S2																													
Exterior Skin - Level 1	28	16-Apr-12	23-May-12	Exterior Skin - Level 1																													
Roof Enclosed	25	18-Apr-12	22-May-12	Roof Enclosed																													
Exterior Skin - Level 2	66	25-Apr-12	27-Jul-12	Exterior Skin - Level 2																													
FRP Slab on Metal Decking - Penthouse S3	3	08-May-12	10-May-12	FRP Slab on Metal Decking - Penthouse S3																													
FRP Slab on Metal Decking - Penthouse S2	3	11-May-12	15-May-12	FRP Slab on Metal Decking - Penthouse S2																													
Install Finishes - Level 1	195	05-Jun-12	13-Mar-13	Install Finishes - Level 1																													
Install Finishes - Basement	105	23-Aug-12	24-Jan-13	Install Finishes - Basement																													
Install Finishes - Level 2	125	27-Aug-12	25-Feb-13	Install Finishes - Level 2																													
Install Finishes - Penthouse	65	10-Dec-12	13-Mar-13	Install Finishes - Penthouse																													
Turnover	0	22-Apr-13*	22-Apr-13	Turnover																													



Project Cost Summary

- ▶ Construction Cost= \$39,000,000
- ▶ Total Project Cost= \$42,000,000

- ▶ Building Systems Cost:
 - ▶ Mechanical/Plumbing and Controls System= \$11,200,000
 - ▶ Electrical System= \$2,800,000
 - ▶ Structural System= \$3,500,000

- ▶ Square Foot Estimate= \$16,000,000

