

Effective Construction Proposals



*Presented by Richard U. Perosa, President of H.T. Lyons, Inc. (Allentown, PA)
at the 2009 Student Chapter Summit, Denver, CO, October 2, 2009*

Personal disclosure;
I have no favorites and
no allegiances, all
other schools will be
treated equally.

ANNOUNCEMENTS

Construction

- Few barriers to entry
- Individuals have significant impact
- Difficult to differentiate
- Largely a service business
- Readily available software and management tools

So, **WHAT** are we selling?

- Unique products, creative patented products?
- Proprietary software or tools?
- Special licenses, qualifications, educational degrees?



PEOPLE



YOU are selling *YOU*....

Your proposal represents
YOU. The reader forms an
image of *YOU*.

It's personal

**“It is a fact that you
project what you are.”**



Norman Vincent Peale

What image will you project?



WHO will be reading your proposal?

- Technical audience?
- Financial audience?
- Construction Manager - initial cost?
- Owner – total cost?
- Construction experience?
- Their Values – safety, quality, money?

The Proposal

Will you claim to be...

Professional?

Thorough?

Detail oriented?

The best choice?

THEN LOOK LIKE IT !!!!

Overall Appearance

Quality binding & paper

Cover page

Page layout

Well organized

TOC, page numbers, tabs

Distinctive / Unique

Organization

- **SUMMARY**
- **WHAT**
 - Scope Statement
 - Design , Value Engineering
- **HOW**
 - Project Plan, Schedule
- **COST**
 - Estimating and cost data
- **WHO**
 - Experience, Financials, Insurance, Safety

Executive Summary



Executive Summary

- Critical - sets the tone for the proposal
- Many will read only this section
- Use it to draw attention to strengths
- Very difficult to recover from a poor start
- MUST be well written

Learn to write well

Company Profile

Flash Construction Inc. specializes in designing HVAC and plumbing systems for commercial and high-rise structures. Our experience along with our great leadership qualities and our understanding of LEED qualifications place us above the rest of the competition. Our services are top of the line. The customer is placed first and is top priority. Our teams of highly trained and specialized laborers install the HVAC systems and plumbing with top of the line equipment and technology. We hire teams of highly respected and highly recognizable subcontractors to complete the rest of the building. Our safety manager has no tolerance for non-safety measures. Safety is our top priority and it shows in our safety rating of .89.

?
New process.

EMR
Management Philosophy

? WHAT?

In the 18 years that Flash Construction has been in business, we have been known as "innovators" in our designs and newly developed products that we have implemented in our projects. We have an immeasurable amount of experience with projects very similar to this job. With each of the projects that we work on we strive to be remembered for our hard work, dedication, and innovation by our employers. We are also known for quality and dependability. Couple that with money-saving techniques and LEED experience and this is why we believe our company can provide the services required for projects of this nature.

CLIENTS?
?

Our managerial crew is comprised of all graduates of Kent State University with a Bachelors Degree in Science with a concentration of Construction Management. Many crew members have minors in fields that are integral to the daily tasks of the company. Benjamin Potter, our LEED Specialist, is LEED accredited and has over 10 years experience in building according to LEED standards and has built numerous sustainable systems over that time period. Zachary Durbin, our safety manager, is OSHA certified and has maintained an average safety rating of .89 on all of our job sites. Our HVAC and plumbing engineers and staff have worked on three major Gold status buildings and have received awards for LEED accreditations and innovative designs.

EMR

Our team is a tight-knit group of men who met in college, studied together, and decided to start the company after graduation. Our company is in a lot of ways like a family run business in the sense that we have all been working together for more than 14 years and all studied together through college. This translates into our remarkable collaborative abilities with new and fresh ideas for sustainable systems. Over the years we have developed many close personal relationships with many distributors of HVAC and plumbing products that are environmentally friendly and help us design inventive systems for specific projects.

IS THIS BETTER?
?
WHY

With the knowledge our crew gained from our previous experiences we feel we are more than qualified to take on the challenges presented by this project and feel that the final outcome will be something that will surprise and exceed your expectations of the possibilities of what can be done for this project. We believe we are the best qualified company because we are honest, hard working, have a fantastic safety rating, and can do the job for less than budget which translates into less stress for you.

CLAIMS

? How do you know? BUDG

?

8

PG 8!
MWD

FIFTIETH ANNIVERSARY EDITION

WILLIAM
STRUNK JR.
AND
E.B. **WHITE**

The
ELEMENTS
of
STYLE

“The most valuable of all talents is that of never using two words when one will do.”

Thomas Jefferson



Executive Summary

- Three quarters of a page –signed!
- Personal and project specific
- Active verbs “will” vs. “could”
- Accurate spelling and punctuation
- State what and for how much
- Lead the reader to your strengths

Scope Statement



Scope Statement

- Identify project specifics, demonstrate you know the project better than the competition
 - Scour the project for and unique issues
- Avoid “Exclusions”
- Don’t state the obvious
- No long itemized lists – use brief narratives
- Reference the contract documents
 - dates, RFI’s, bulletins and addendums

Scope Statement Tips

- All overtime and shift work is excluded.

OR;

- This proposal is based on the understanding all work is scheduled to be performed during normal work hours.

Scope Statement Tips

- This proposal includes all equipment, material and labor required for a fully functional HVAC system.

OR;

- This proposal is based on the contract documents listed below and includes all labor, material, equipment and tools necessary to provide the work identified as the responsibility of the HVAC Contractor.

Scope Statement Tips

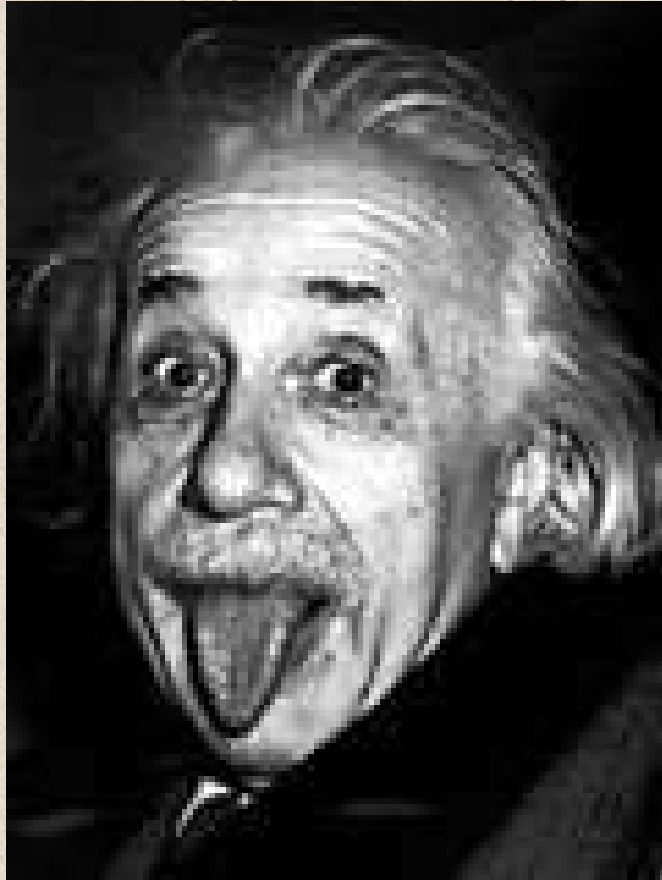
- Includes Boilers.

OR;

- This proposal includes furnishing, rigging and installing Boilers, B-1, B-2 and B-3 in the second floor M.E.R. and assumes the construction manager will provide roof openings to lower the boilers into place. Furthermore, it is understood the boilers will be set on housekeeping pads provided by others.

Technical Data





**–“Everything
should be as
simple as
possible, but not
simpler.”**

Albert Einstein

Design & Engineering

Verify solutions are appropriate

Get help, use resources;

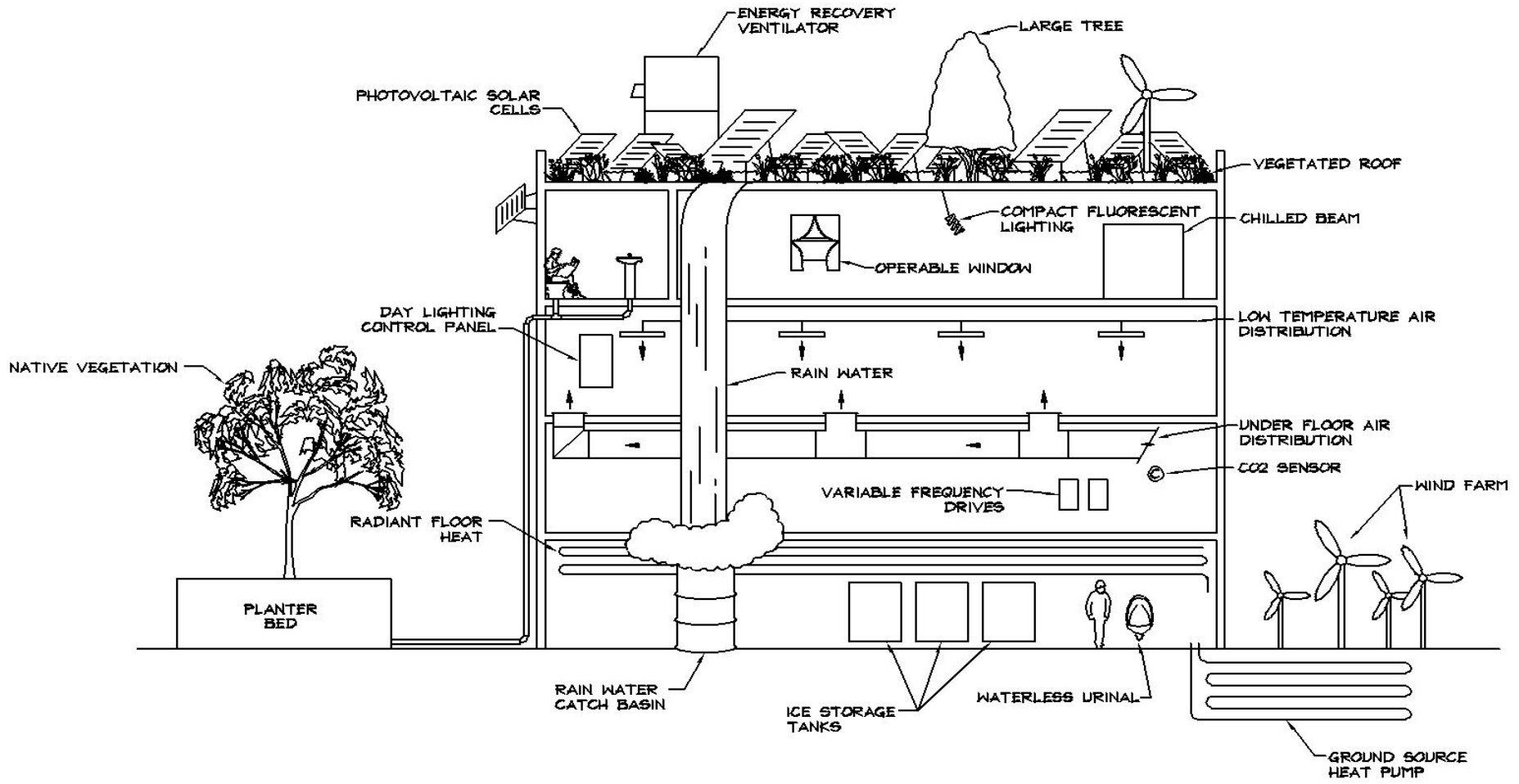
Vendors

Manufacturer websites

Contractors

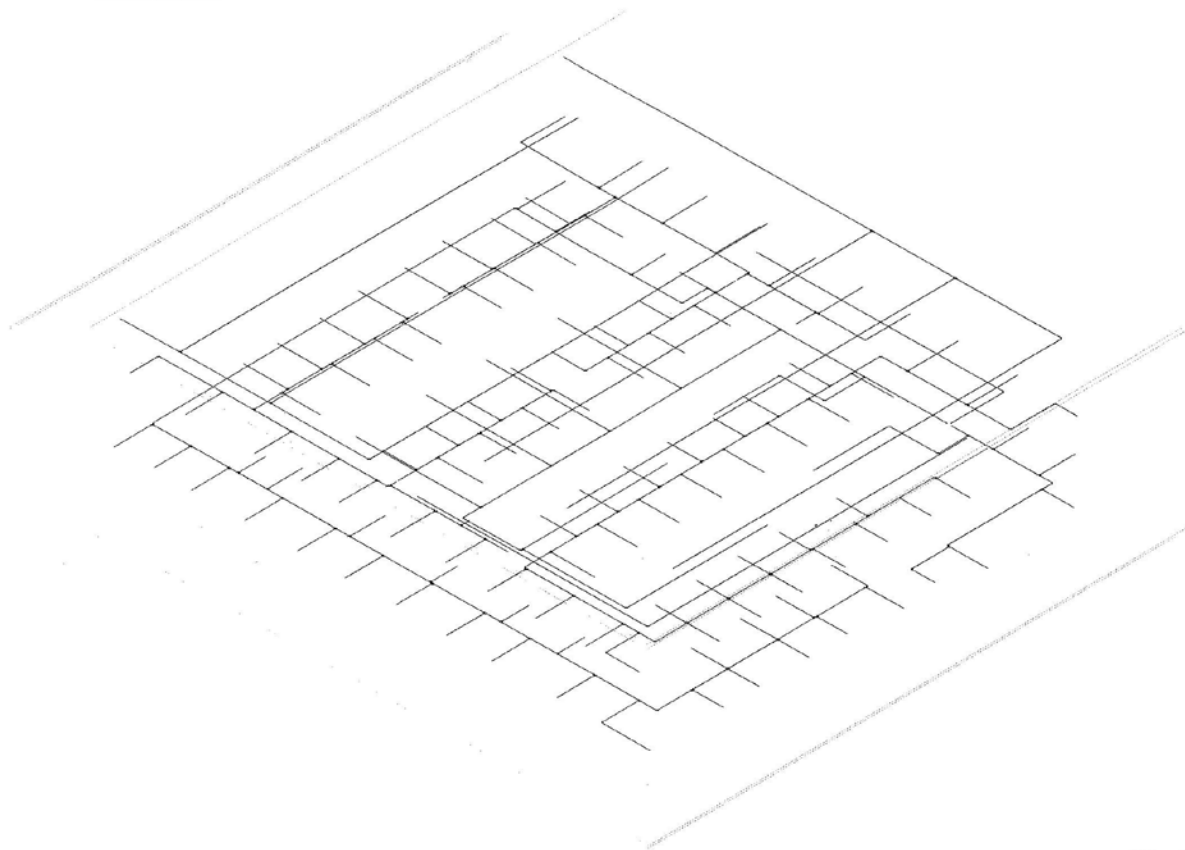
Engineers

Stay within your scope



CAD Drawings

- Not expected to have design complete
- No incomplete or pointless Drawings
- Consider example or representative drawings to show competency
 - Fabrication, equipment hook ups, design



OFFICE ADDITION JF AHERN CO

855 Morris Street
Fond Du Lac, WI

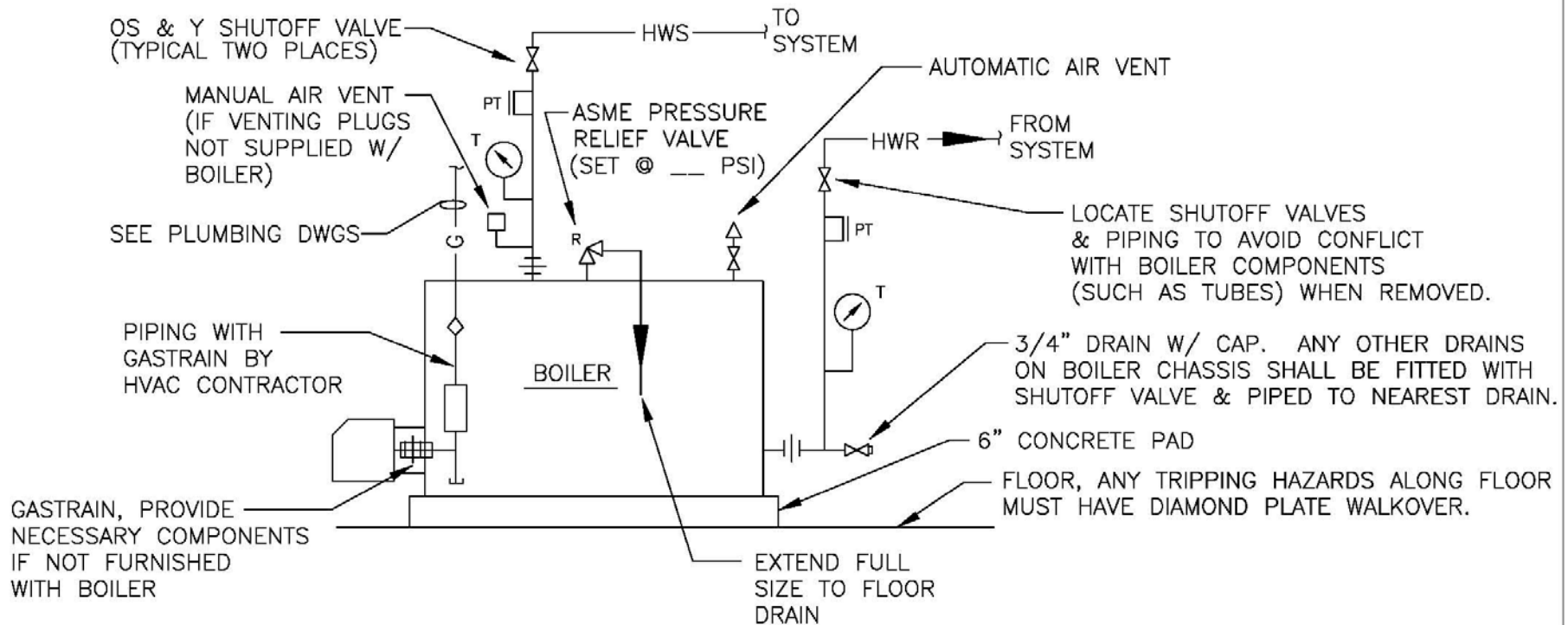
Fire Protection ISO

Project number 1452

Date 07 Dec. 2007

F-001

Scale

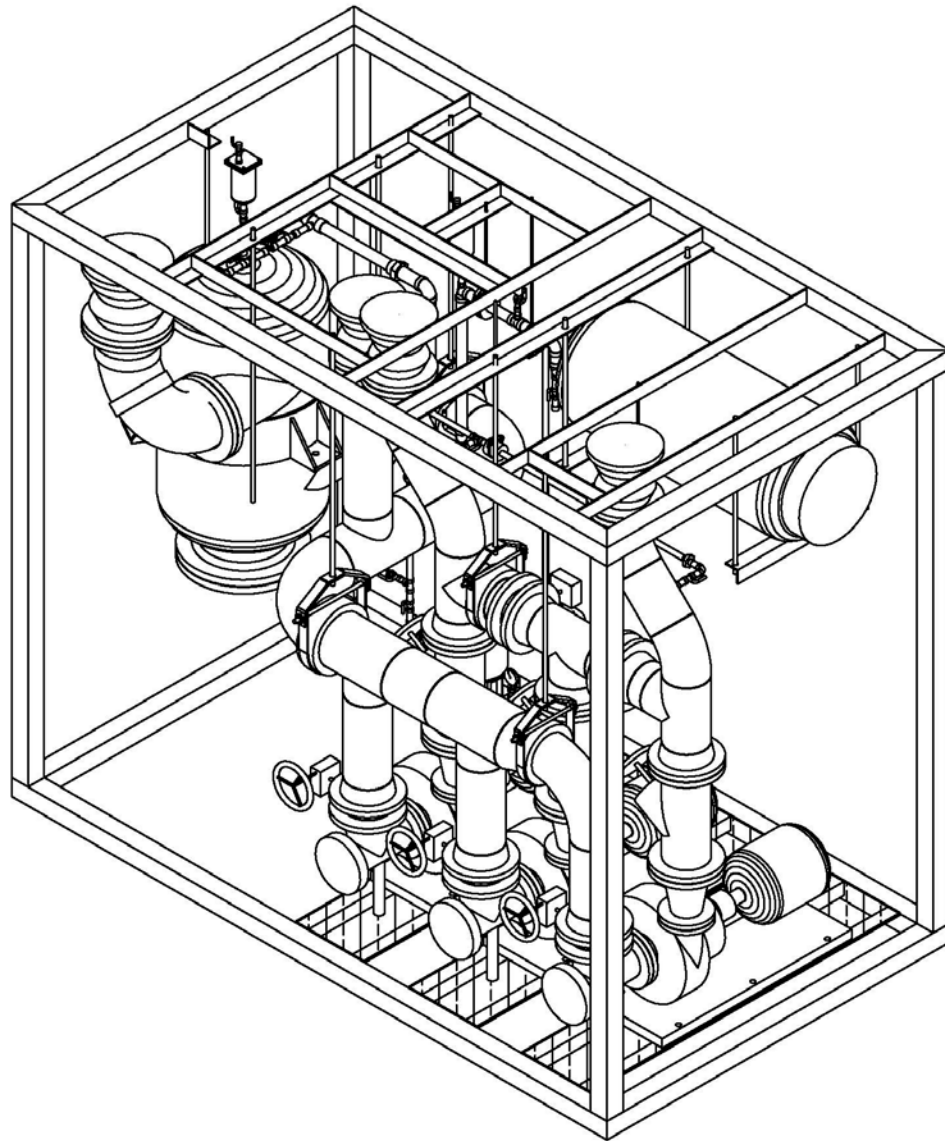


BOILER PIPING CONNECTION DETAIL

NOT TO SCALE

DESIGNER NOTE: FILL OUT PRESSURE SETTING FOR BOILER, MAKE SURE BOILER PRESSURE IS HIGH IF MULTIPLE STORY BUILDING.

NOTES: PROVIDE MINIMUM 2'-6" CLEARANCE AROUND BOILER (INCLUDING PIPES AND APPENDAGES). PROVIDE 6'-0" FROM THE FLOOR TO ANY OVERHEAD CLEARANCE OBSTRUCTION. ALL TRIPPING HAZARDS IN BOILER ROOM SHALL HAVE DIAMOND PLATE RAMPS OR EQUIVALENT. PROVIDE 6" MINIMUM CLEARANCE TO OPERATE VALVES. PROVIDE PIPING AND CONTROLS IN ACCORDANCE WITH ASME. BOILER INSTALLATION SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL CODES. TEMPERATURE RATINGS OF VALVES AND FITTINGS WITHIN STOP VALVES BOILER SHALL BE 250°F MINIMUM.

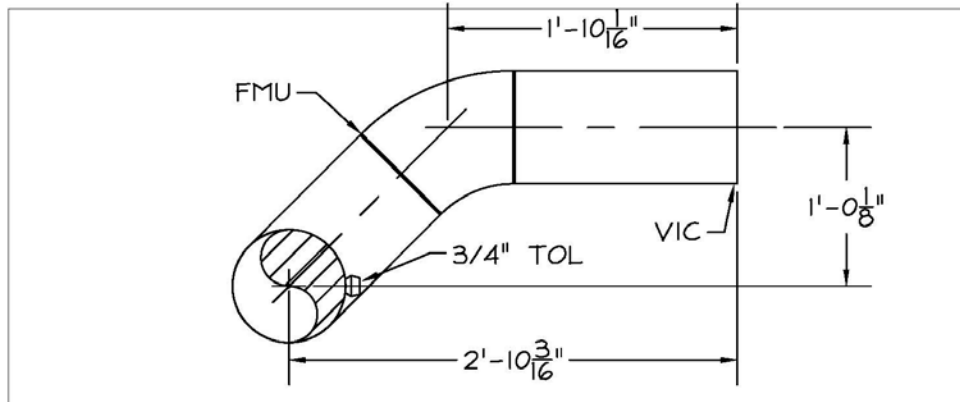


H.T. LYONS FABRICATORS	DWG DATE 2/22/06	DWG BY MM	TO SHOP 2/22/06	DATE REQ. 3/1/06	REF. DWG MP-1.1	FAB SHEET # MC-LL-CHWR-15
JOB NAME MUHL. COLLEGE		JOB # 51216	COST CODE 21000		SERVICE CHWR	BLDG./FLOOR LOWER LEVEL
WELD SPEC.	PIPE SPEC.		FITTING SPEC.		FLANGE SPEC.	
HTL STANDARD	CS-A53-ERW-Grd B-Sch 40		CS-A234-Grd A-BW-Sch 40		150# RF-WNF/SOF	
CUT BY / DATE	FIT BY / DATE	WELD BY / DATE	QC BY / DATE	WELD GAP 1/8"	WELD IN. / PC 35	PC QTY 1

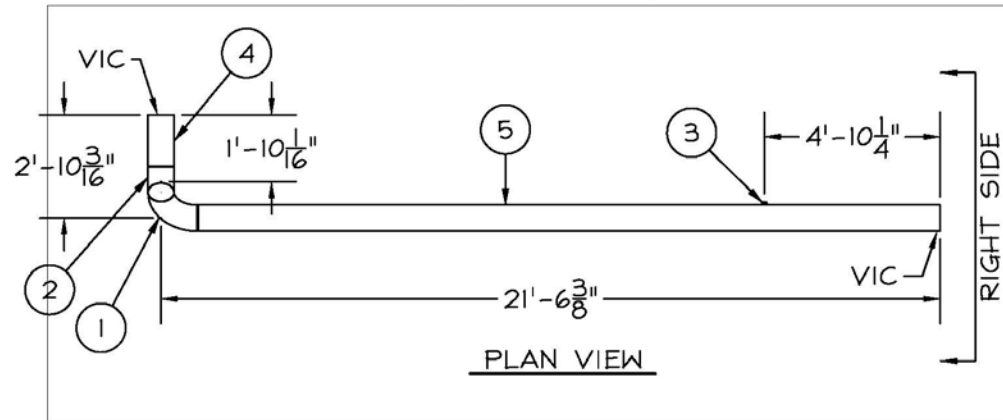
BILL OF MATERIAL

Label Qty Description

- | | | |
|---|---|---|
| 1 | 1 | 8" S/40 Black Steel Welded x 90 Degree Long Radius Elbow |
| 2 | 1 | 8" S/40 Black Steel Welded x 45 Degree Elbow |
| 3 | 1 | 3/4" S/40 Black Steel Threaded Thread-O-Let |
| 4 | 1 | 8" S/40 Black Steel Welded Pipe x 1'-4 15/16" E-E BEV x VIC |
| 5 | 1 | 8" S/40 Black Steel Welded Pipe x 20'-6" E-E BEV x VIC |



RIGHT SIDE



PLAN VIEW

Value Engineering

- recognize impact to other trades
- recognize impact to schedule
- recognize impact to base design
- **UNDERSTAND THE CONCEPT**

Project Plan



Project (*Specific*) Plan

- Personnel plan – don't overburden the project
 - 2.5 to 5% for management personnel
- Site logistics – material lay down, tools, office
- Purchasing plan – long lead items
- Planning, coordination, BIM
- Fabrication and subassembly

Project (*Specific*) Plan

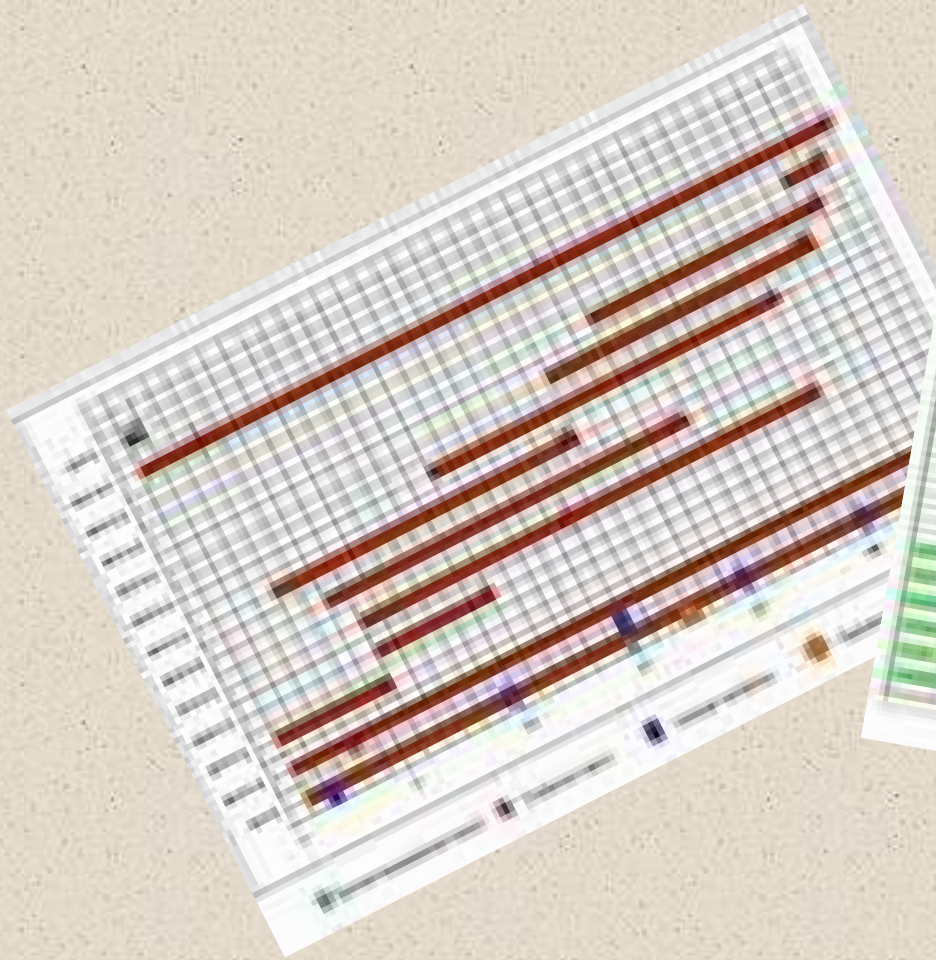
- Safety approach and concerns
- Critical tasks – cranes, deliveries
- Start Up, testing, functional checks, etc.
- Quality control & punch list procedures

Time for a reminder...

Be certain all sections of proposal agree; scope of work, project plan, estimate, value engineering.

When working as a team, thoroughly understand each others work. Does it agree with your work?

Schedules



Schedule

- Modern software and detail mandatory
- Pre-construction activities
 - Submittals, coordination, mobilization
- Check and re-check sequences, durations
- Two to three pages for mid-size projects
- One task ONE PAGE
- Recognize Value Engineering

Schedule Narrative

- Results in a better schedule
- Elaborate on project specifics
- Differentiator
- “Feels” custom vs. canned software
- Convey passion and enthusiasm
- Send a message of care and concern

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Estimate and Cost Data



Estimate / Cost data

- Summary level data
 1. Labor (\$ and hrs)
 2. Material (\$ and quantities)
 3. Value Engineering

Estimate / Cost data

- Detailed data
 1. Equipment
 2. Sub Contracts
 3. Other direct job costs
 - Site office expenses, rentals, cranes, permits, etc.

Estimate / Cost data

- Organized format – Think “six small jobs”
- Tables and Sub-Totals
- Accurate labor rates
 - Wages, fringe benefits, taxes and insurances
- Margins – 5 to 18%...depends, what's in job cost
- Internal check # - \$'s/sf, feet per man day, total man-days, etc.

Estimate / Cost data

- Check your math
- Check your math
- Check your math
- Check your math
- Check your math
- Then,
- Check your math again
- Then, can you guess ?
- Have someone else check your math

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Company Data



Company Data

- Show *Relevant* Project experience
 - projects and staff experience from representative work
- 15 pages of resumes is unnecessary
 - Multiple brief bios on one page for non-job charged personnel
- Organizational charts –
 - Project personnel with staffing plan?
 - Designate job charged positions (in estimate)

Company Data

- Income statement
 - Validate margins? Project = what % of annual revenue? Make sense?
- Balance Sheet
 - Current ratio, debt to equity, cash balance
 - Over / under billings
 - Get some help if unfamiliar
- Surety Letter
 - Capacity letter
 - Insurance Certificate (sample)

Company Data

- Backlog
 - What % of annual revenue?, show by year
 - This project = what % of your annual revenue?
 - 5 to 20%, good target range
- Safety performance and program information
 - Program with Project Plan
 - Experience Modification Rate – 1.00 = average
 - Recordable accident rate – frequency
 - OSHA 300 log from prior year
 - Awards
- Insurance
 - CGL, Auto and Workers Comp. minimum
 - Insurance Certificate (sample)

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

 DATE (MM/DD/YYYY)
 3/27/2009

PRODUCER The Graham Company The Graham Building 1 Penn Square West Philadelphia, PA 19102	(215) 567-6300	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
INSURED H.T. Lyons, Inc. Mill Run Corporate Center 7165 Ambassador Drive Allentown, PA 18106		INSURERS AFFORDING COVERAGE INSURER A: National Union Fire Ins. Co. of Pittsburgh, 19445 INSURER B: New Hampshire Insurance Company, 23841 INSURER C: INSURER D: INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR. INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR	GL0935954	3/31/2009	3/31/2010	EACH OCCURRENCE \$ 1,000,000
					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000
					MED EXP (Any one person) \$ 10,000
					PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC				GENERAL AGGREGATE \$ 2,000,000
					PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	CA0934163	3/31/2009	3/31/2010	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
					BODILY INJURY (Per person) \$
					BODILY INJURY (Per accident) \$
					PROPERTY DAMAGE (Per accident) \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$
					OTHER THAN EA ACC \$
					AUTO ONLY: AGG \$
A	EXCESS/UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE	BE7235066	3/31/2009	3/31/2010	EACH OCCURRENCE \$ 5,000,000
					AGGREGATE \$ 5,000,000
					\$
					\$
	DEDUCTIBLE RETENTION \$				\$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	WC4375743	3/31/2009	3/31/2010	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER \$ 1,000,000
					E.L. EACH ACCIDENT \$ 1,000,000
					E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
					E.L. DISEASE - POLICY LIMIT \$ 1,000,000
	OTHER				

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Automobile Liability includes Massachusetts Policy #CA 0934162

CERTIFICATE HOLDER

SAMPLE

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE



Time for a reminder...

Be certain all sections of proposal agree; scope of work, project plan, estimate, value engineering.

When working as a team, thoroughly understand each others work. Does it agree with your work?

Killer Mistakes

Black and White - (It's 2009 people !)

Inconsistency

Estimate vs. Scope vs. Technical Solution

Poor writing skills including spelling and grammar

Last year's information

No binding, missing pages, out of order, TOC

Killer Mistakes

Incomplete, incorrect or pointless CAD drawings

Bid forms not included

Please read the competition instructions

Crazy financial information

Math errors and inconsistencies in the estimate

Dramatically inappropriate technical solutions