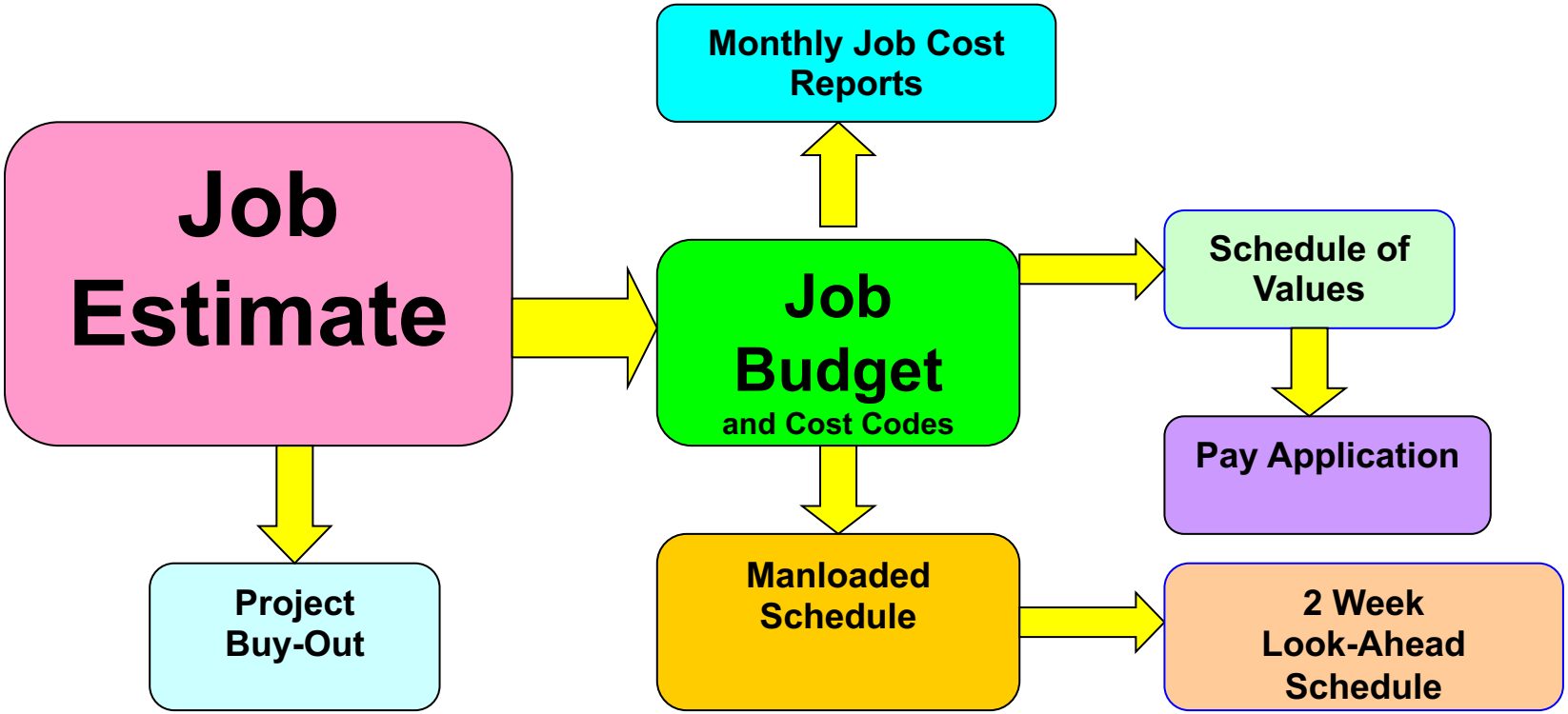
Understanding the Estimate Part 1

Foreman's Development Series

What's the Point?

As we will see here and in other Foreman Development modules, when the Contractor is successful, the Job Estimate will affect all other aspects of the Project:



Questions?

- What is an Estimate?
- What items are included in an Estimate?
- As a Foreman why do we need to know anything about the Estimate?
  - How does the estimate affect what we do?
- Is the Contractor going to show you the Estimate?
  - Should we be allowed to see it?
- Is it my Job to make the Contractor Money?

Objectives

The purpose of this Module is to give you a brief overview of:

- How the Electrical Contractor gets work and the bid process involved.
- How the Contractor arrives at the cost estimate.
- How the successful bid estimate is turned into the Job Budget of labor and material that you, as the Foreman, will be responsible for.

Upcoming Projects?

How are Jobs advertised?

- Jobs are listed in various trade publication services such as Dodge reports, Construction Reporter, etc.
- The Contractor decides which jobs he is interested in bidding.
- Anyone wishing to bid the project will register; get the bid forms and list of registered bidders.
- Plans and specifications are picked up after leaving cash deposit that is refunded when the plans are returned.

DODGE Lead Center

Looking for more detailed search results? Buy Dodge Global Network Now!

3253 Bidding Projects in Texas

The Search returned projects that are currently in the bidding phase. If you would like to see projects in other phases of construction such as design or planning, Click here.

Narrow Your Results

Include ASAP and NDS Bid Dates

Trade (Dodge Gobal Network Only)

Project Type

Site Development (610)
Paving (584)
Unclassified (487)
Storm Sewer (276)
See All

Type of Work

Alterations (1633)
New Project (221)
Additions, Alterations (99)
Alterations, New Project (79)
See All

County

Phase

Owner Type

Located within 10 miles of Zip Code or Address Go

All Results | Projects With Plans & Specs Only

View: Bidding Soonest

Filter By: State: Texas

Project	Project Type	Phase	Valuation	Location	Bid Date
2019 Paving Improvements 201900687208 v. 9 Dodge Project Report and Addenda Owner Type: Public View Now	Paving, Storm Sewer Track This Project	Bid Results	$199,552	TX (Johnson)	Jun 11, 2019
Asphalt Drive and Parking Area Resurface 201900710744 v. 2 Dodge Project Report Owner Type: Public View Now	Paving Track This Project	Bidding	$499,999	TX (Bexar)	Jun 19, 2019
Berth Maintenance Dredging 201900698851 v. 6 Dodge Project Report, Plans and Addenda Owner Type: Public View Now	Dredging Track This Project	Bidding	$499,999	TX (Harris)	Jun 19, 2019
BISD-SFA Waterline Relocation 201900704465 v. 4 Dodge Project Report, Plans and Addendum Owner Type: Public View Now	Water Line Track This Project	Bidding	$749,999	TX (Brazos)	Jun 19, 2019
Bridgeland Tuckerton Road WDS Improvements 201900691930 v. 8 Dodge Project Report, Plans, Specs and Addenda Owner Type: Public View Now	Paving, Storm Sewer, Sanitary Sewer Track This Project	Bidding	$399,999	TX (Harris)	Jun 19, 2019
Bucees Blvd and Sonoma Trail Street Improvements REBID 201900629126 v. 15	Paving,	Bidding	$1,300,000	TX (Ellis)	Jun 19, 2019

The Estimate

The Contractor does take offs and completes the cost estimate of the project.

- Prices come from the electrical supply houses – usually at the last minute on the day of the bid.
- The Electrical Contractor may also get prices from other Subcontractors for:
  - Pieces of the project that are specialized, risky or that could be done more cheaply by others.

Standard Bid Exclusions

- **Your bid will also include a set of "exclusions".**
  - This is a list of very common items that will tell the General what work the Sub didn't include in his bid.
  - Work that is being excluded will have to be included somewhere else in the General Contractor's price.
- Standard Exclusions could include:
  - Cutting and Patching or Bond Fees
  - Temporary Power or Lighting
  - Concrete Work, Trash Hauling, Fire Stopping or Painting

Bid Addendums

- **These are bid clarifications and / or additions to the Specifications and the Drawings.**
  - Issued prior to bid day
  - These become a legal part of the Contract Documents.
- **Addendums can delay the job bid date**
- **Each Contractor on the bid form must indicate the number of Alternates and Addendums received and included in the price.**

Bid Alternates

- There can be one or more Alternates.
  - These Alternates divide parts of the project into separate pieces of work.
- Each Alternate is priced individually on the bid form.
- Depending on the price, these Alternates can be included in the overall project or not as the Owner sees fit and their budget allows after the bids are opened.

Bid Day

- **The Sub's Bid (you)**
- **The General Contractor's Bid**
- **And the Winner is…**

Ethics

What are some of the unethical aspects of bidding work?

- What is “Shopping the Bid”?
- “Post Bid Shopping”?
- “Bid Peddling”?

When it comes to money - there are lots of unethical people in the world.

Other Ways of Bidding Work

- Owner's Choice
- T&M, Not to Exceed or Cost Plus
- Unit Pricing or Per Square Foot
- Conceptual Estimates or R.O.M.
- Design / Build and GMP

The Job Estimate

These are the ingredients and their costs that go into creating a detailed job estimate that becomes the Job Bid:

- **Material**
  - Pipe & wire, boxes and fittings, etc.
  - Fixtures and gear – purchased from Supply Houses / Vendors
- **Labor**
  - Direct Labor (example: $35.20 / hr for a Journeyman Wireman)
  - Indirect Labor (Labor Burden)
- **Equipment**
  - Company owned equipment
  - Rental / lease for project (scissor lifts, cranes, etc.)

Labor Burden

What is Labor Burden?

- “The extra labor costs, above and beyond the normal hourly working wage, that a Contractor must pay for each man-hour worked.”

- These are “indirect” costs that do not contribute directly to either profit or production.

Labor Burden – an example

Jan.1, 2022 New Mexico Local 611 Labor burden / Journeyman Wireman with hourly wage of: $35.20

FICA - Social Security & Medicare (Employer pays matching taxes on wages)	**7.65%**	**$2.69**
FUTA - Federal Unemployment Tax Act	**6.00%**	**$2.11**
SUTA - State Unemployment Tax	**5.40%**	**$1.90**
WC - NM Workmen's Compensation Insurance	**4.50%**	**$1.58**
PLPD - Personal Liability & Property damage Insurance	**2.00%**	**$0.70**
NEBF – National Electrician's Benefit Fund	**3.00%**	**$1.06**
PBF - NM Electrician Retirement Pension Fund (Local 611's own)	**$5.15 / hour**	**$5.15**
Local SW Health & Welfare Insurance Fund	**$6.00 / hour**	**$6.00**
NECA - NECA membership	**0.50%**	**$0.18**
JATC - Joint Apprenticeship Training Committee	**1.00%**	**$0.35**
CAF - Contract Administration Fund - CBA management, Greivances, etc.	**1.00%**	**$0.35**
NLMCC – National Labor-Management Cooperation Committee	**$.01 / hour**	**$0.01**
LLMCC - Local Labor-Management Cooperation Committee	**$.02 / hour**	**$0.02**

Labor Burden Total Dollar Cost per hour: $22.11

Total Cost of a Journeyman per hour: $57.31

Labor Burden - Percent of Wages: 62.81%

Labor Burden = $22.11 / $57.31 = 39% of total wage package

Your "Burn Rate for a Journeyman is $57.31 / 60 minutes = $.95 per wasted minute

The Job Estimate

- **Indirect C**
  - Jobsite
    - Job
    - Mo
    - Ga
    - Toi
    - Toc
  - Office
    - Sal
    - Off
    - Co
- **Subcontr**
  - They u

Office:		**Per Month**
Rent, or mortgage payment		$3.365.00
Lease and maintenance on:		
Copy machine		$165.00
FAX machine		$45.00
Computer, software material		$145.00
Telephones, 3 lines & a FAX line		$310.00
5 Cell Phones		$535.00
Misc. paper, discs, office supplies		$200.00
		$4,765.00
Office Salaries:		
Jake's Salary	$1,500.00/wk.	$6,000.00
Estimator	$1,200.00/wk.	$4,800.00
Truck driver	$600.00/wk.	$2,400.00
Secretary	$580.00/wk.	$2,320.00
Office Pension	1	$2,265.00
Office medical		$2,108.00
Payroll tax, UI, FICA, TDB, etc.		$3,289.00
		$23,182.00
Company Vehicles:		
Jake's vehicle lease		$572.00
Estimator's truck		$375.00
3 Job Trucks		$1,142.00
Flatbed material truck		$495.00
Gas for all vehicles 668 gal./month @ $3.20		$2,138.00
		$4,722.00
		= **$32,669 Overhead per Month**

Mark up and Profit

Mark up is the percentage of profit and overhead that would be added to the overall actual job costs to determine the final Bid.

- Direct Job Costs + Overhead and Profit = Total Cost

  Total Cost / Direct Job Cost = % Mark Up
- The percentage of mark up added to a bid can vary depending on a number of factors

Profit only becomes a reality if none of the above estimated cost amounts are exceeded.

  - Profit is the **ONLY** reason for the company's existence.

What Do You Think?

Group Activity #3

For the average Union Electrical Contractor the total Estimate costs can be broken down into the following typical percentages:

? % - **Material**

? % - **Labor** = **?** % **wages** + **?** % **Labor Burden**

? % - Jobsite Overhead

= **?** % - D.J.E. or Direct Job Expenses

+ **?** % - Company Overhead

+ **?** % - Profit (Of the gross project price, before taxes)

= 100%

Average Job Costs

Overall Job Costs
- For Electrical Projects of different sizes:

	Small	Medium	Large
Material	36.2%	35.0%	32.5%
Labor	32.1%	37.2%	41.0%
Overhead	21.6%	18.0%	15.0%
Job Expenses	4.0%	4.0%	4.5%
Subcontracts	3.8%	3.5%	4.4%
Profit	1.8%	1.5%	1.7%
Taxes	0.5%	0.8%	0.9%

12% of all start up Contractors fail within the first year!

Here we see the top ten reasons why:

1) Poor Job control – tracking performance, etc.
2) Poor estimating
3) Not enough working capital
4) Low Productivity
5) Not enough Overhead money in the bid
6) Collection difficulties
7) Inadequate Advertising
8) Inadequate Insurance
9) Lack of Technical Experience
10) Fraud – theft, embezzlement, etc.

Risky Business!

3% Profit (Of the gross project price, before taxes) = **1.85% After Taxes**

Example: $1 million total job bid
X 3% profit
$30,000 profit

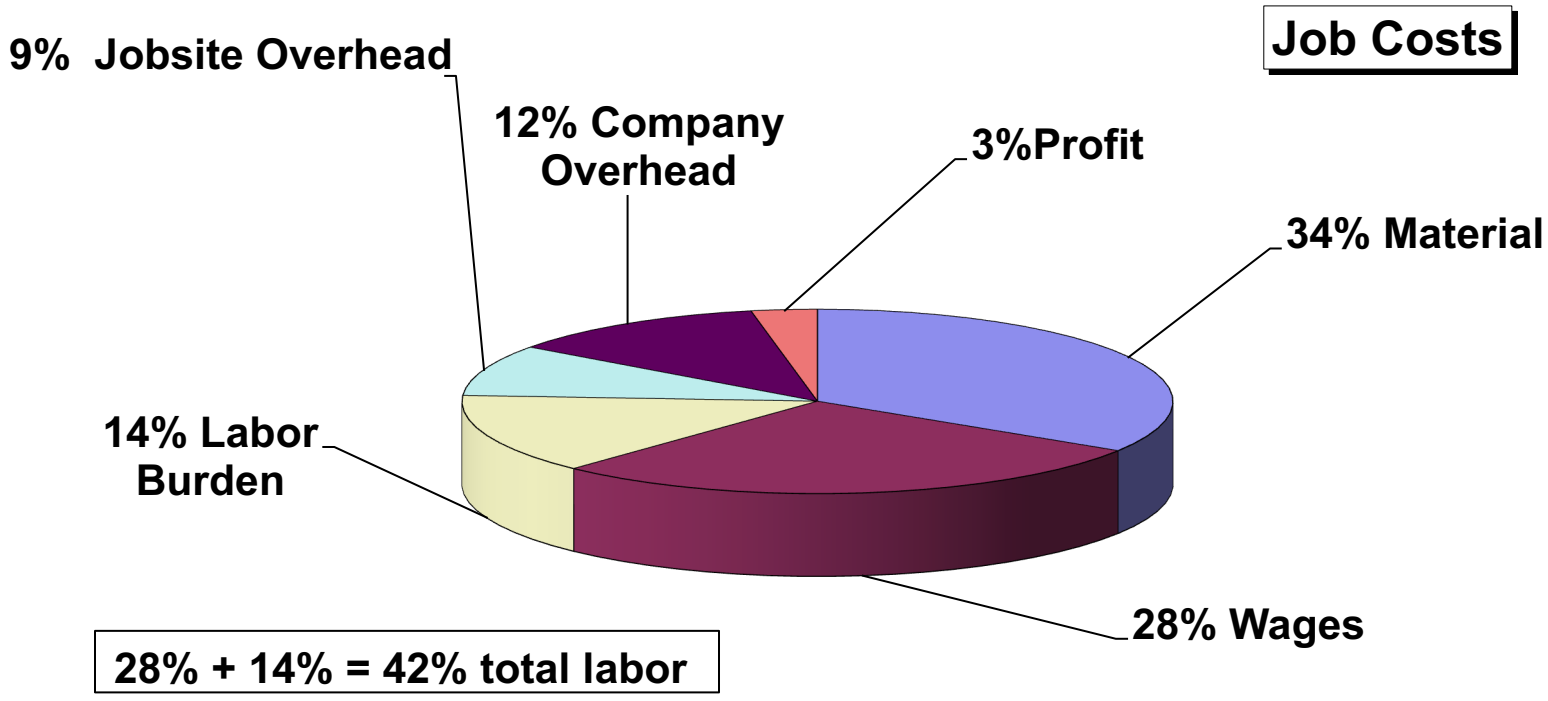
$30,000 = 3% profit
$200,000 = cash invested
= 15% (return on investment)
(= Good Money)

We all get a pay check every week.

- For the Contractor, however, there is no guarantee at all that he will make any money. He is the only one taking any risks on this job.
  - **Is that something you would be interested in doing?**
  - **As Foremen we need to help them make that Profit!**

What Costs Can We Control?

- As Foremen, what part of these Job Costs do we have control over?
- Which ones can we improve upon?



Lower Labor Costs = More Competitive

Estimate = Material + Labor + Overhead + Profit

- With Materials and Overhead basically being fixed costs the only way you can improve the profitability of your job is to: **Save money on Labor**.

- To save money on Labor we have to be more Productive: **More efficient in everything we do**.

Simple Job Take Offs

- **During the Estimate, devices and fixtures would normally be taken off by hand for each individual electrical blueprint sheet.**

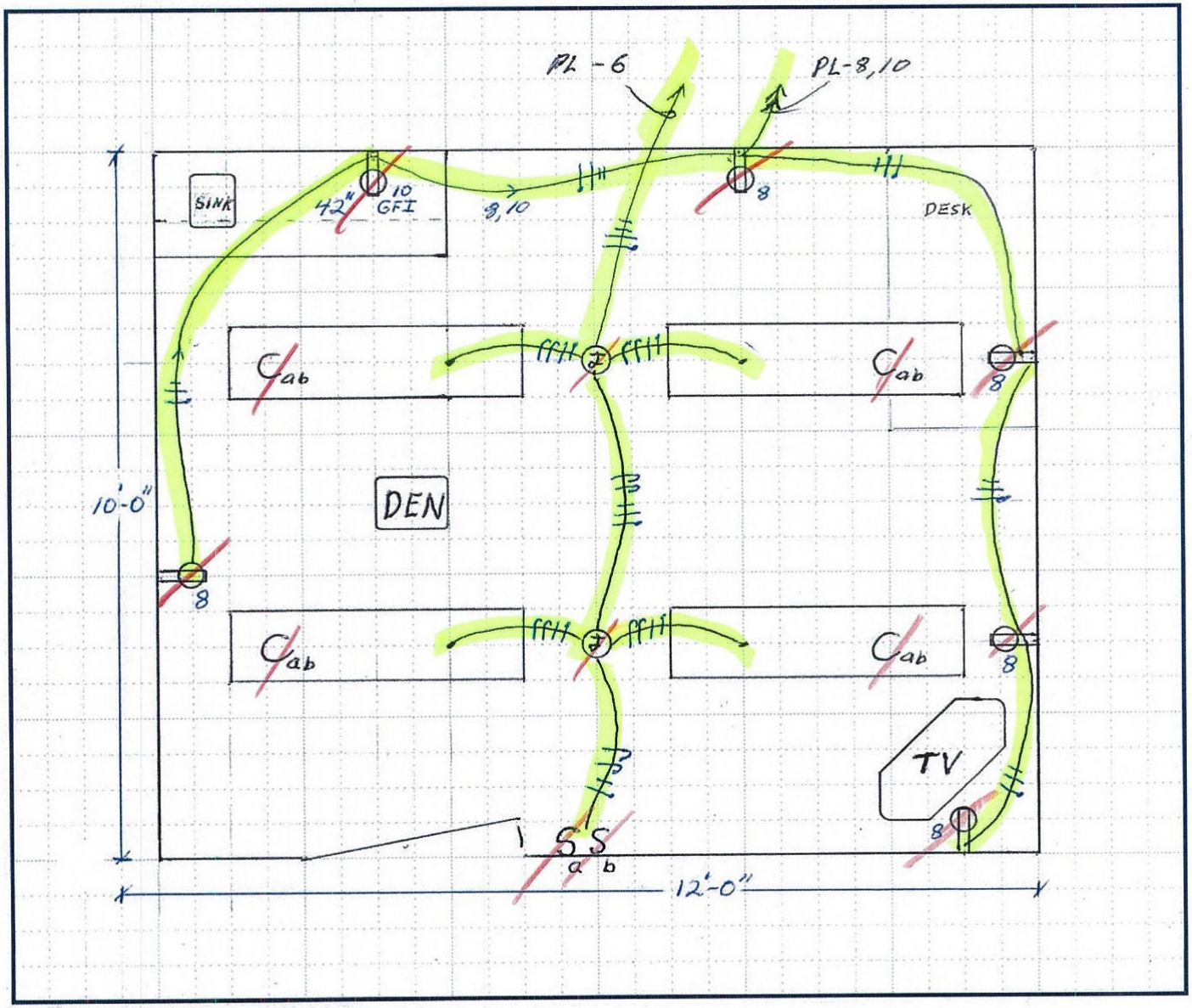
- **The totals would be put on spreadsheets or entered into the computer.**

Take Off Tools

The **"Thing Counter"** android Phone app,

Rotomaster

Marked Up Drawing



Typical Take-Off Sheet

JOB: **DRAWING:** **Date:**

Symbol / Drawing			GF	S1	S1S1	J	**Type C Lights**								
Sheet EP-1	5	2	1	0	0	4	0								
Sheet EP-2	10	1	4	0	0	1	0								
Sheet EL-1	0	0	0	4	1	4	6								
TOTAL	15	3	5	4	1	9	6								

To / From Take Offs

DATE:

JOB: Airport Basin Site 480v Feeder Take Offs — Page of

PHASE: All Feeders are Aluminum - 4AWG.

Sheet ID	FROM	TO	CND	Type GND	SIZE	NO WRS	NO WIRES	WIRE SIZE	NO. WIRE RNS	RUN LENGTH	Conduit RUN LENGTH	CONDUIT LENGTH	WIRE RUN LENGTH	WIRE LENGTH	WIRE TERM	GND WIRE LENGTH	Bushing	PVC Riser	Flex	Core drill	St Conn	Fire Seal	Grd Conn	J Box	Terminations	90/ COUP
E-902	Generator	Gen. Panel	PVC		4		4	500 Alum	250 Alum	4	17	17	68	32'	1/2	512	128									
	Gen Panel	HQL-C	EMT		1" 3"	3	1	#6	#10	4/0	120'	22	120'	22	405 / 135	5	8	140									
	MDP-C	HL-C	EMT	2	1 1/2"	4	1	#4/0, #2	1	60'		60'		320 / 80'		10	2										
E-901	300KVA Trans	MDP-B	PVC		4"	4		500 Aluminum	3/0	3	240'	240'	260'	260'	3/0	780'										
	MDP-C	HM-C	PVC		4" 1 1/2	4	1	#4/0	4	200'		200' / 800'		3520 / 880'		40	8		8								
	MDP-B	HM-B	PVC		1 1/2"	3		#6	#10	1	50'	50	65	65		195	65	CU									
	"	TLE-B	PVC		1 1/2"	3		#6	#10	1	50'	50	65	65		195	65	CU									
	TLE-B	LE-B	Flex		1 1/4"	4		#4	#10	1	3	3	10	10		30	10	CU	3'	1	1						
	MDP-B	ATS-B	EMT		3"	4		Aluminum	#2	1	1	1	10'	10		40	10'										
	Gen Panel	ATS-B	PVC		3"	4		300 Alum	#2	1	150'	150'	170	170		680	170'										
	ATS-B	HM-B	PVC		3"	4		300 Alum	#2	1	6'	6'	25'	25		100	25'										
	HM-B	TLM-B	Flex		2"	3		#3/0	#4	1	3	3	10'	10		30	10		3'	1	1						
	TLM-B	LM-B	Flex		2"	4		#2/0	#4	1	3	3	10'	10		40	10'		3'	1	1						
	HM-B	Elevator	PVC		1 1/2"	3		#2/0	6	1	65'	65'	75'	75		225	75'										
	HM-B	RHU-AC-01	PVC		2"	3		#2/0	#4	1	55'	55	75'	75		225	75'										
	HM-B	TLS-B	PVC		1 1/2	3		3/0	6	1	10	10	25	25		75	25										
	TLS-B	LS-B	Flex		1 1/4	4		2/0	6	1	3	3	10'	10		40	10'		3	1	1						
	MDP-B	TLR-B	PVC		2 1/2"	3		300	2	1	10'	10	25'	25		75	25'										
	TLR-B	LR-B	Flex		3"	4		300	2	1	3'	3	10'	10		40	10'		3	1	1						
	MDP-B	HQ-B	PVC		2"	4		2/0	4	1	6'	6	25'	25		100	25'										

Foreman Take Offs?

As a Foreman you may need to do take offs in the field. Why?

- You or the Project Manager may want to double check the fixture quantities on the Estimate.
- You may need to order material for a particular piece of the project.
    - The kitchen, the 2nd floor east wing, etc.

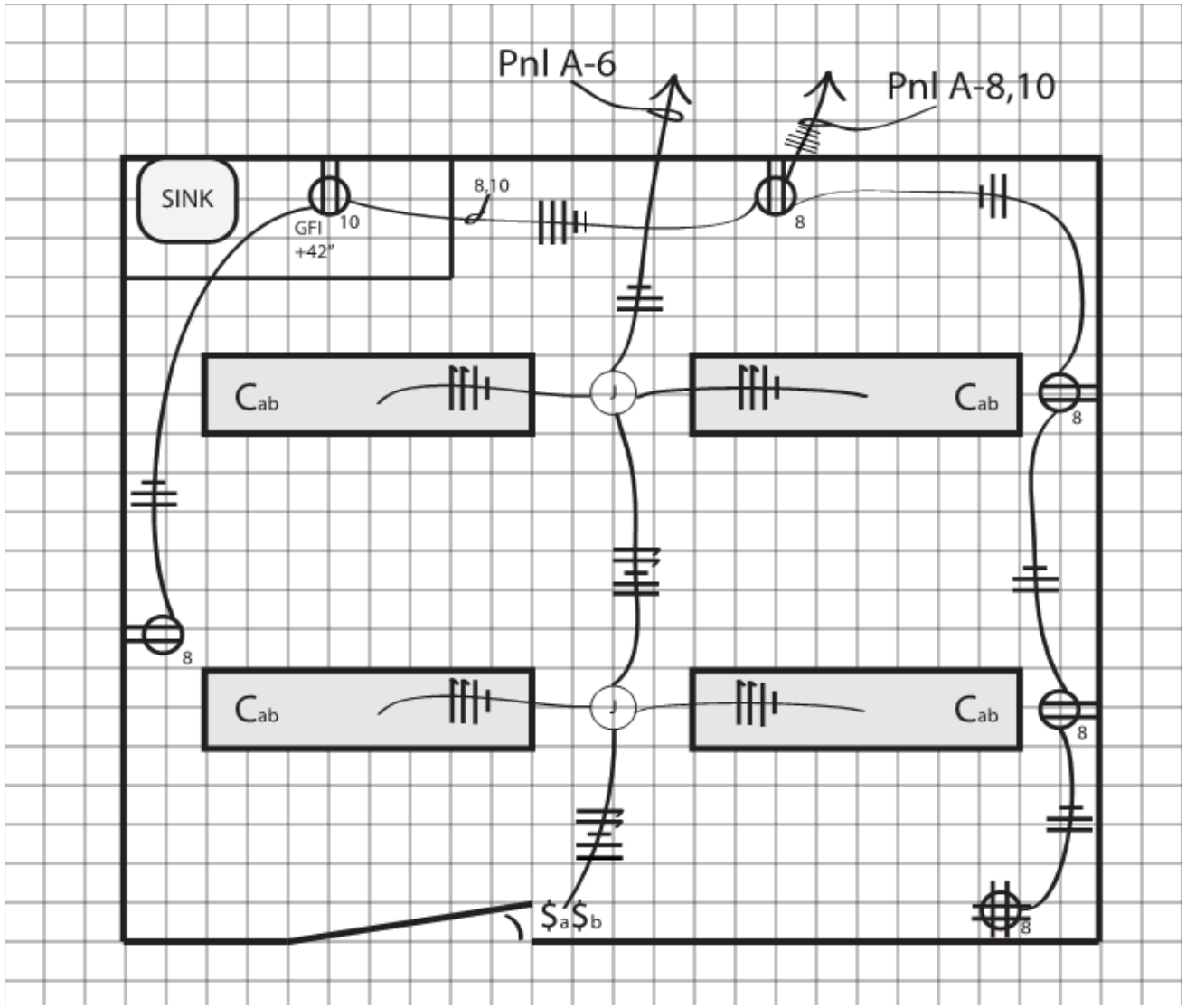
You may want to take off all of your feeder conduit and wire using the way you are actually going to run the conduit rather than the worst case used on the Estimate.

- The Bid may have figured all overhead EMT feeders but you are going to run PVC in the slab instead.
- This will give you all the bits and pieces per run and you can include this in your bulk material buy.

Take off the Electrical Materials Required for this Room

Scale is 2 squares = 1 foot
8’ T-grid Ceiling, Metal studs @ 24” OC.
Room is 20’ from electrical panel
Use ½” EMT & #12 THHN wire

Run EMT horizontally between boxes
Use 4 sq. boxes with 5/8” mud rings
Use 6’ long, ½” flex to lights
Receptacles are 18” AFF. UNO Switches are 48”AFF.
Home runs are overhead at 9’-6”AFF



Room Take Off

1) Count the symbols and enter the quantities.

2) Count up the number of boxes, mud rings, and blank plates that will be required based on the quantity of each of the symbols.
   - Which of the symbols will require a box? Which symbol will require a one-gang mud ring, etc?

3) Count the number of devices that will be required for each of the symbols.

4) Count the number of trim plates required for each of the symbols.

5) Count the footage of each type of Conduit / number of wires as shown on the drawings.
   - Count all of the three conductors and mark it off. Then count all of the four conductors, etc.

6) Total up the quantity of ½" EMT, #12 wire, etc.

Exercise Answers

JOB: DRAWING: Date:

Symbol			GFI	S_1	S_1S_1	J	Type C Lights	Boxes	4 sq. x 1 1/2"d	1 gang x 5/8" d mudring	2 gang x 5/8" d mudring	4 sq. blank plate			
	4	1	1	0	1	2	4		9	5	2	2			
Devices		GFI	S_1					Stainless Steel Trim Plates			GFI	2 gang Switch			
	6	1	2						4	1	1	1			
1/2" EMT & Flex with Wire	EMT- with 3 cond.	EMT - with 4 cond.	EMT - with 5 cond.	1/2"Flex with 4 cond.				Extended Pipe and Wire	1/2" EMT	1/2" EMT Conn.	1/2" EMT Coupling	1/2" Flex	1/2" Flex St. Conn.	1/2" Flex 90 Conn.	#12 THHN
Runs	9+7+4+ 4+23'	0	6+7+4+ 27'	6'x4				Totals	91'+	18	10?	24'	4	4	457'
Total Length	47'	0	44'	24'											
Misc:	Red and yellow wire nuts								Ceiling wires or 1/4" all thread to hang fixtures and Junction boxes						
	Grounding Pigtails								Wire Identification Labels?						
	Caddy Clips - Box to stud and conduit supports														

Test Your Knowledge

The extra labor costs, above and beyond the normal hourly working wage, that a Contractor must pay is called what?

LABOR BURDEN

Test Your Knowledge

Cutting, Patching, Bond Fees, Temporary Power may be examples of what?

STANDARD BID EXCLUSIONS

Test Your Knowledge

Name 1 of the 5 categories that go into a Job Estimate…

- Material
- Labor
- Equipment
- Overhead
- Profit

Test Your Knowledge

As a Foreman, which of the costs listed below do you NOT have control over?

A. Material
B. Man Hours / Labor
C. Jobsite Overhead
D. Labor Burden

LABOR BURDEN

Test Your Knowledge

Give an example of something that would be considered a JOBSITE indirect cost or overhead …..

- **Jobsite trailer, furnishings, supplies & utilities, copying prints, parking,**
- **Mobilization (Move in and set up costs) & Demobilization.**
- **Gang boxes, toolboxes, and storage trailers**
- **Toilets, ice & drinking water, cups**

Test Your Knowledge

A piece of the project that is priced separately at bid time is known as a what?

AN ALTERNATE

Project Buyout

- This is part of the Preconstruction process that takes place after the award of the bid to the General Contractor.
- The General Contractor has time to review the scope of each bid and the sub's ability to do the work along with any gaps or overlaps in price or scope of work.
- All of the bids are converted into subcontracts and purchase orders for the materials.

This should be done in an ethical and timely manner!

The Job Budget

Along with the Project Buyout, the PM will create a Job Budget:

- The money from the Estimate is juggled around into various job categories and budget line items.
  - It can be divided up by the different activities, by areas of the building and much more.

A Simple Job Cost Coding System

01 / Mobilization – Job site set up & removal: trailers, office, gang boxes, materials, etc.

02 / Demolition – Removals and demolition

03 / Site Work – Underground, pole lights, temporary power, etc.

04 / Branch – Conduit, boxes and wire; up to 1”.

05 / Feeders – Conduit, boxes and wire; 1 ¼” and above.

06 / Gear – Switchgear, transformers, starters, disconnects, contactors, etc.

07 / Fixtures – Receiving and installing any and all fixtures

08 / Special Systems – Security, fire alarm, PA, etc., including all conduit and wire
- does not include sub contractor’s work.

09 / Devices – Plugs and switches, trim plates, etc.

10 / Warranty Work

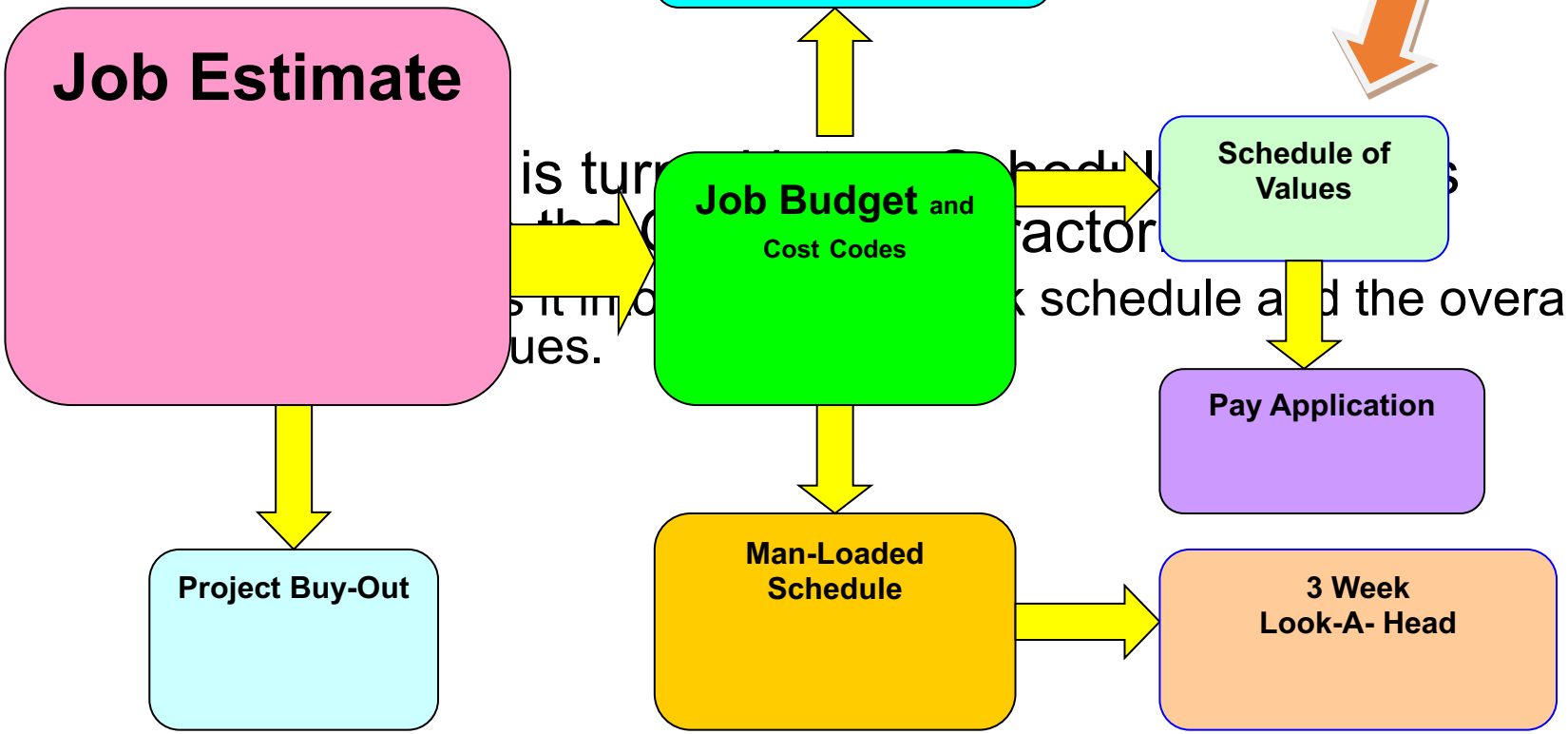
An Actual Job Budget

Code		Labor Hours	Labor$$ ($30/ hour)	Material $$	Equip.	Subs	Misc.	Total Cost	OH & Profit (15%)	Contract Amount
1	**Jobsite set up**	20	$600	$500				$1,100	$165	**$1,265**
2	**Demolition**	107	$3,210					$3,210	$482	**$3,692**
3	**Site work**	132	$3,960	$1,107				$5,067	$760	**$5,827**
4	**Branch Circuits**	500	$15,000	$2,805				$17,805	$2,671	**$20,476**
5	**Feeders**	182	$5,460	$7,668				$13,128	$1,969	**$15,097**
6	**Gear**	66	$1,980	$3,000				$4,980	$747	**$5,727**
7	**Fixtures**	495	$14,850	$98,941				$113,791	$17,069	**$130,860**
8	**Special Systems**	221	$6,630	$3,481		$7,500		$17,611	$2,642	**$20,253**
9	**Devices**	102	$3,060	$683				$3,743	$561	**$4,304**
10	**Warranty Work**		$0					$0	$0	**$0**
11	**General**						$4,000	$4,000	$600	**$4,600**
	Totals	1825	$54,750	$118,185	$0	$7,500	$4,000	$184,435	$27,665	**$212,100**

Schedule of Values

Schedule of Values:

- A detailed statement f e Contractor outlining the various p contract sur



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Schedule of Values

SCHEDULE OF VALUES

					DATE:	6/1/2016
	Boondock Electric				Progress Billing No.	#06
	2266 End of the Road Lane			Customer:	**Socorro Public Schools**	
	Middle of Nowhere, NM					
Contractor:	**The Best General Contractor**			Project:	Socorro High School Remodel	
Contract No.:	**2016 -22**	Dated:	**1/1/2016**	Location:	Socorro, New Mexico	
Description:	**High School Remodel**					

ITEM NUMBER	DESCRIPTION OF WORK	CONTRACT AMOUNT	COMPLETED TO DATE %	COMPLETED TO DATE AMOUNT	PREVIOUS BILLING	TOTAL DUE THIS BILLING
1	Jobsite set up	$ 1,265.00	95%	$ 1,200.00	$ 1,200.00	$ -
2	Demolition	$ 3,691.50	54%	$ 2,000.00	$ 2,000.00	$ -
3	Site work	$ 5,827.05	86%	$ 5,000.00	$ 4,000.00	$ 1,000.00
4	Branch Circuits	$ 20,475.75	44%	$ 9,000.00	$ 6,000.00	$ 3,000.00
5	Feeders	$ 15,097.20	46%	$ 7,000.00	$ 5,000.00	$ 2,000.00
6	Gear	$ 5,727.00	54%	$ 3,100.00	$ 2,500.00	$ 600.00
7	Fixtures	$ 130,859.65	70%	$ 92,000.00	$ 85,000.00	$ 7,000.00
8	Special Systems	$ 20,252.65	25%	$ 5,000.00	$ 4,000.00	$ 1,000.00
9	Devices	$ 4,304.45	60%	$ 2,600.00	$ 2,000.00	$ 600.00
10	Warranty Work	$ -	0%	$ -	$ -	$ -
11	General	$ 4,600.00	0%	$ -	$ -	$ -
	SUBTOTALS	$ 212,100.25		$ 126,900.00	$ 111,700.00	$ 15,200.00
	5% Retention	$ 10,605.01		$ 6,345.00	$ 5,585.00	$ 760.00
	NET TOTAL	$ 201,495.24		$ 120,555.00	$ 106,115.00	$ 14,440.00

TO (OWNER):

PROJECT:

APPLICATION NO: 2
PERIOD TO:02/29/2016

DISTRIBUTION TO:
_ OWNER
_ ARCHITECT
_ CONTRACTOR

FROM (CONTRACTOR):

VIA (ARCHITECT):

ARCHITECT'S PROJECT NO:

CONTRACT FOR:

CONTRACT DATE:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for Payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Type Document is attached.

1. ORIGINAL CONTRACT SUM	$	120,750.00
2. Net Change by Change Orders	$	2,900.00
3. CONTRACT SUM TO DATE (Line 1 + 2)	$	123,650.00
4. TOTAL COMPLETED AND STORED TO DATE	$	96,941.00
5. RETAINAGE:		
a. 0.00 % of Completed Work	$	0.00
b. 0.00 % of Stored Material	$	0.00
Total retainage (Line 5a + 5b)	$	0.00
6. TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)	$	96,941.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)	$	69,385.00
8. CURRENT PAYMENT DUE	$	27,556.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	$	26,709.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	2,900.00	0.00
Total approved this Month	0.00	0.00
TOTALS	2,900.00	0.00
NET CHANGES by Change Order	2,900.00	

The Undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the work covered by this application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of:

County of:

Subscribed and Sworn to before me this _____ Day of _____ 20 ___

Notary Public:

My Commission Expires :

ARCHITECT'S CERTIFICATE FOR PAYMENT

In Accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated,the quality of the work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED . . . . . $ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT:

By: _____ Date: _____

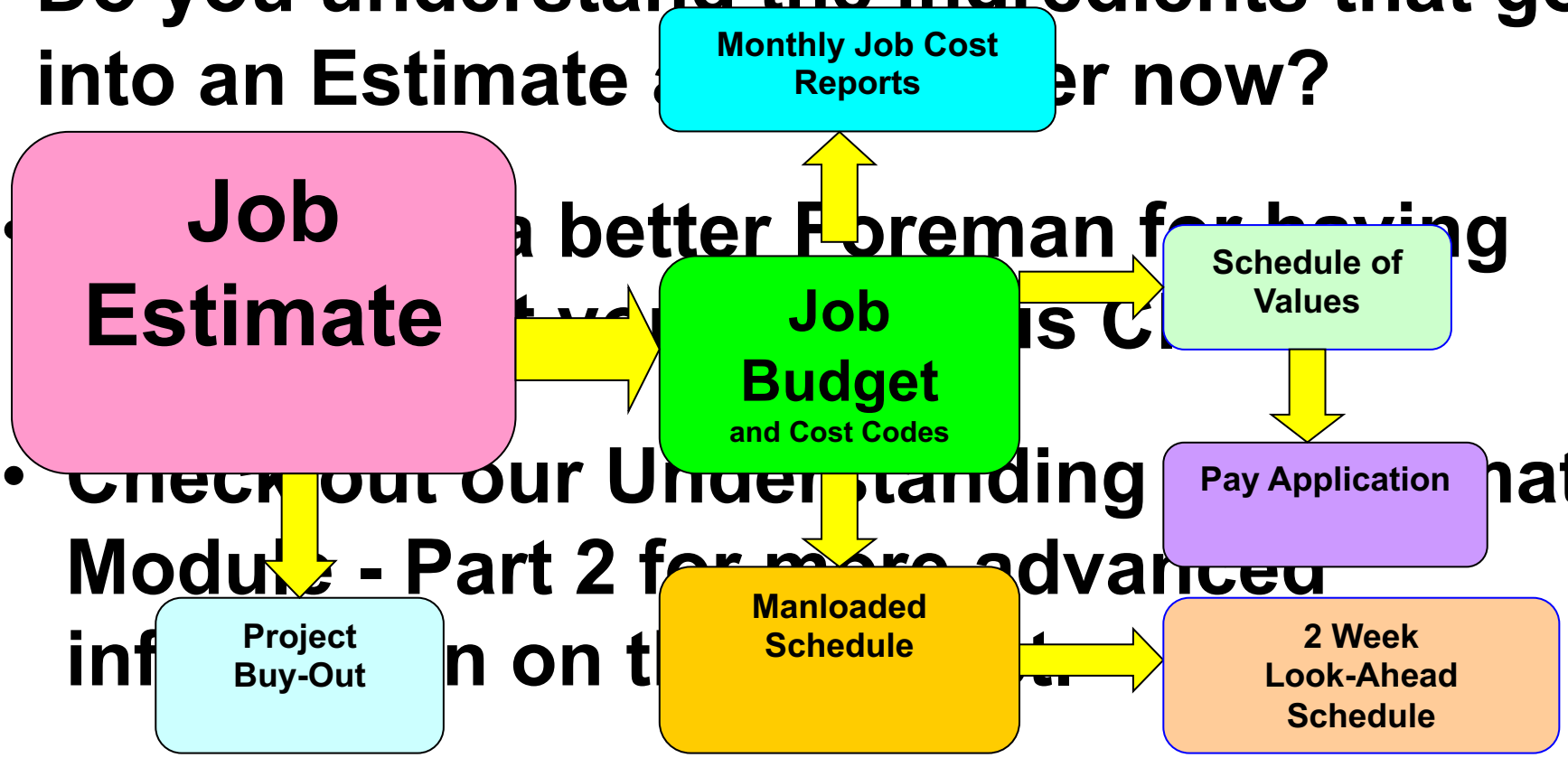
This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, Payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

A Job Cost Report

Code		Labor Hours	Labor Costs	Labor Spent	% Labor Spent	Material $$	Material $$ Spent	% Material Spent	Contract Amount	%Total Spent
1	**Jobsite set up**	20	$600.00	$500.00	**83%**	$500.00	$700.00	140%	$1,265.00	**95%**
2	**Demolition**	107	$3,210.00	$2,000.00	**62%**	$0.00	$0.00	0%	$3,691.50	**54%**
3	**Site work**	132	$3,960.00	$4,000.00	**101%**	$1,107.00	$1,000.00	90%	$5,827.05	**86%**
4	**Branch Circuits**	500	$15,000.00	$7,000.00	**47%**	$2,805.00	$2,000.00	71%	$20,475.75	**44%**
5	**Feeders**	182	$5,460.00	$3,000.00	**55%**	$7,668.00	$4,000.00	52%	$15,097.20	**46%**
6	**Gear**	66	$1,980.00	$100.00	**5%**	$3,000.00	$3,000.00	100%	$5,727.00	**54%**
7	**Fixtures**	495	$14,850.00	$12,000.00	**81%**	$98,941.00	$80,000.00	81%	$130,859.65	**70%**
8	**Special Systems**	221	$6,630.00	$2,000.00	**30%**	$3,481.00	$3,000.00	86%	$20,252.65	**25%**
9	**Devices**	102	$3,060.00	$2,000.00	**65%**	$683.00	$600.00	88%	$4,304.45	**60%**
10	**Warranty Work**		$0.00	$0.00	**0%**			0%	$0.00	**0%**
11	**General**								$4,600.00	**0%**
	Totals	1825	$54,750.00	$32,600.00	**60%**	$118,185.00	$94,300.00	**80%**	$212,100.25	**60%**

Summary

- Do you understand the ingredients that go into an Estimate …er now?
- …a better Foreman for having …t yo… …s C…
- Check out our Under…tanding …nate Modu…e - Part 2 for more advanced inf…n on t…



Does this flow chart make a little more sense now?