

GC/SUBCONTRACTOR PARTNERSHIP: A DISCUSSION ON CHANGE ORDERS

WEDNESDAY, SEPTEMBER 20, 2023



Hosted by: ASA of Metro Washington

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Bruce Spengler, Calvert Masonry



WELCOME: INTRODUCTION

- ASA has brought you the GC/Owner Event, now the Subcontractor/GC Event.
 - **CHANGE ORDERS** are the second largest complaint/issue that Subcontractors face next to payment, and often they are related.



AGENDA

- What are REAL Subcontractor Costs?
- Deep Dive into Dead costs for *SELF-PERFORMING* Subcontractors:
 - Labor
 - Material
 - Equipment
 - General Conditions



AGENDA (Cont'd)

- Schedule Impact
- Working Lunch
- Survey Results from GC's regarding change orders



EVENT OBJECTIVE

- * We Are Partners
- * Learn Something Today, Have an Open Mind
- * Communication



CHANGE ORDER COSTS, WHAT ARE THEY?

Direct Labor Costs (Let's Define)

- Fringes and labor burden (include full burden)
- Sometime actual labor is higher than Wage Scale
- Travel Time and per diem
- Vehicle costs, and/or vehicle allowance
- COLA for longer duration projects



LABOR BURDEN (DEFINED)

- Payroll taxes (Social Security, Medicare, Unemployment)
- Workmen's Comp
- General Liability (for some subs this is still determined based on payroll)
- Medical Insurance Benefits
- Retirement Benefits
- Sick and Family Leave, PTO, and Vacation
- Safety and Apprenticeship Training



LABOR QUANTIFICATION

- Efficiencies of production of a large crew and /or smaller crew
 - Studying the production rate of the work vs. the size of the crew already on site
- Mobilization and demobilization efforts
- Doubling up crew efforts on a project, potential inefficiencies
- Added supervision (Superintendent, Project Manager)



LABOR QUANTIFICATION

- Employee Parking
- Cleanup
- Night/weekend, OT work
- Additional shop, yard work required



MATERIALS

- Escalation
- Material Storage, Additional Handling
- Old unit prices do not account for small quantities, short orders, dedicated shipments
- Material on the jobsite that is not specific to the job, formwork, etc.



EQUIPMENT

- Cost of extended equipment duration (rental or allocated ownership)
- Small tools, trucks, hand-held tools
- Hoisting or tower crane rental



GENERAL CONDITIONS

- Erosion control maintenance
- Traffic control
- Additional temporary fence or temp. fence maintenance
- Safety guardrails



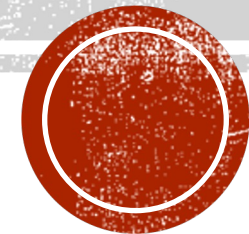
GENERAL CONDITIONS

- Winter protection and heating
- Protection of finishes
- Special permits (examples: public space, traffic control)
- Shop Drawings
- Surveying, As-builts



TABLE DISCUSSION

What are the top three direct change order costs that are the hardest to gain approval on? And Why?



HOW SCHEDULING CHANGES IMPACT SUBS

Out of Sequence Work Activities' Impact on Productivity

- Work activities are planned in a certain way, with a reasonable expectation of workflow, to prepare bids.
- When that plan has to change due to a schedule change, impact or suspension, many times cost of how to perform the activity is increased.



HOW SCHEDULING CHANGES IMPACT SUBS

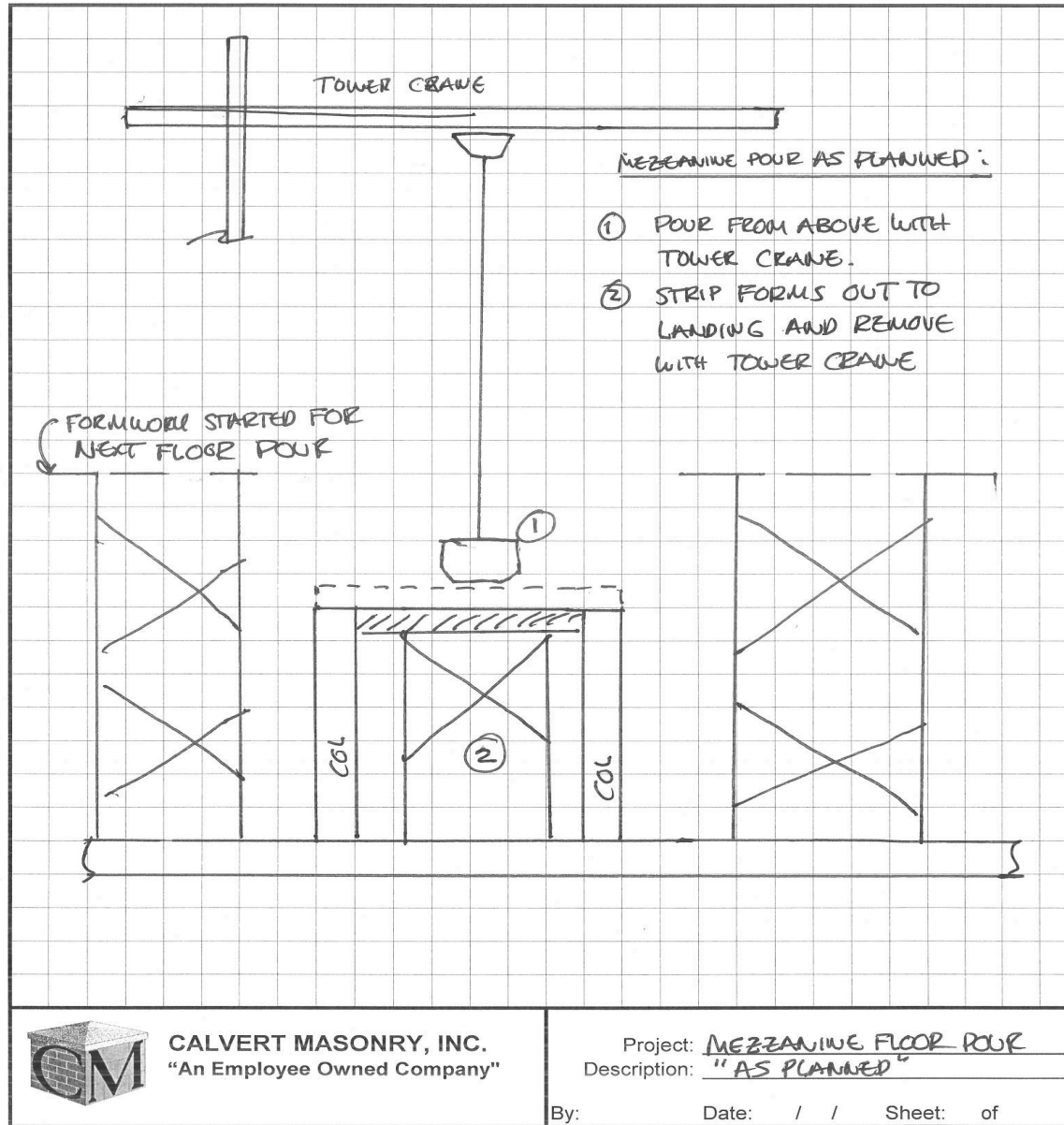
Out of Sequence Work Activities' Impact on Productivity

- Concrete subcontractor plans to form and pour a small Mezzanine slab area while forming main deck on floor above.
- An RFI for code and MEP space conflicts puts Mezzanine on hold. Critical path main decks continue.
- Two months later, conflicts are resolved with no change in Mezzanine slab construction design.
- IF no slab design difference, what is additional cost?



HOW SCHEDULING CHANGES IMPACT SUBS

CALVERT MASONRY, INC.



CALVERT MASONRY, INC.
"An Employee Owned Company"



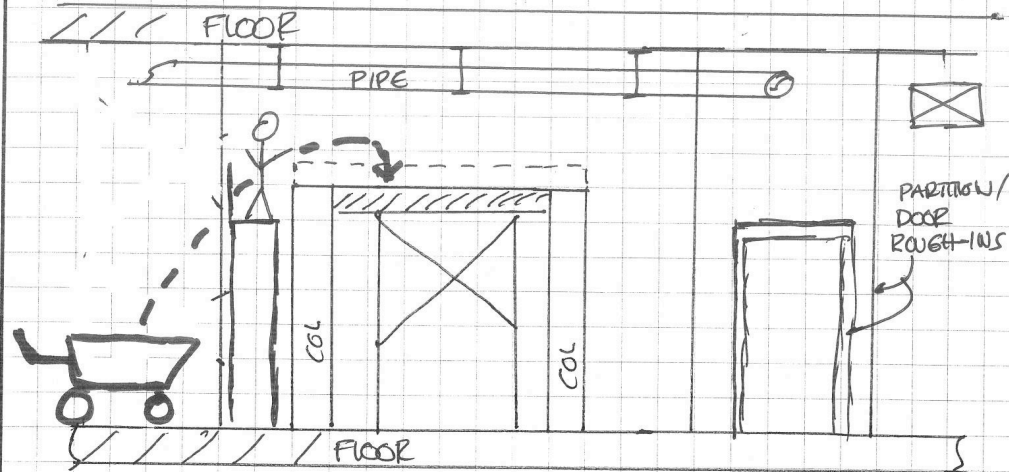
HOW SCHEDULING CHANGES IMPACT SUBS

CALVERT MASONRY, INC.

RFI DELAYS ABILITY TO POUR FLOOR UNTIL AFTER FLOOR ABOVE IS POURED, LANDING PLATFORM REMOVED

NOW

- NO ABILITY TO POUR FROM ABOVE
- CONCRETE MUST BE BROUGHT IN WITH SMALL EQUIP
- LIFTED BY HAND OR SMALL PUMP
- FORMS REMOVED BY HAND THROUGH BUILDING TO HOLST



CALVERT MASONRY, INC.
"An Employee Owned Company"

Project: MEZZANINE FLOOR POUR
Description: "AS IMPACTED FOR RFI"

By: _____ Date: / / Sheet: of



HOW SCHEDULING CHANGES IMPACT SUBS

EXAMPLE #2 PRICE PROPOSAL		RFI Design Response Delay - Mezzanine Slab Construction								
		CARP OR						PROD/HR		
CREW MAKEUP	UNIT	FORE	\$/HR	FINISHER	\$/HR	LAB	\$/HR	TOT \$	RATE	\$/UNIT
STANDARD FORM CREW	SF	1	\$40.00	8	\$35.00	2	\$25.00	\$370.00	100	\$3.70
STANDARD SLAB CREW	CY	1	\$40.00	6	\$35.00	4	\$25.00	\$350.00	4	\$87.50
STANDARD STRIP CREW	SF	1	\$40.00	2	\$35.00	8	\$25.00	\$310.00	250	\$1.24
SMALL FORM HAND CRW	SF	1	\$40.00	2	\$35.00	2	\$25.00	\$160.00	25	\$6.40
SMALL SLAB HAND CRW	CY	1	\$40.00	2	\$35.00	2	\$25.00	\$160.00	1	\$160.00
SMALL STRIP HAND CRW	SF	1	\$40.00	2	\$35.00	2	\$25.00	\$160.00	65	\$2.46
LABOR HAND TRANSPRT						4	\$25.00	\$100.00		
THIS EXAMPLE ASSUMES NO EQUIPMENT TIME FACTOR; POUR SMALL ENOUGH THAT NEITHER										
CRANE NOR GEORGIA BUGGIES TIME ON SITE WOULD BE AFFECTED EITHER WAY.										



HOW SCHEDULING CHANGES IMPACT SUBS

EXAMPLE #2 PRICE PROPOSAL		RFI Design Response Delay - Mezzanine Slab Construction				TOT CRW
WORK ACTIVITY	QUANTITY	UNIT	UNIT PRICE	LABOR		HOURS
<u>DELETE SLAB POUR IN OPEN USING TOWER CRANE AND STANDARD FORM AND SLAB CREWS</u>						
FORM MEZZ SLAB - STD FORM CRW	-400	SF	\$3.70	-\$1,480.00		-4.0
POUR MEZZ SLAB - STD FORM CRW	-7.5	CY	\$87.50	-\$656.25		-1.9
STRIP MEZZ SLAB - STD FORM CRW	-400	SF				-1.6
CRANE AND BUCKET USED TO TRANSPORT MATERIAL AND FORMWORK						-7.5
<u>BUILD MEZZANINE SLAB AFTER BUILDING FRAME IN PLACE, MEP INSTALLED, DOORS INSTALLED</u>						
FORM MEZZ SLAB - SMALL CREW	400	SF	\$6.40	\$2,560.00		16.0
POUR MEZZ SLAB - SMALL CREW	7.5	CY	\$160.00	\$1,200.00		7.5
STRIP MEZZ SLAB - SMALL CREW	400	SF	\$2.46	\$984.62		6.2
HAND TRANSPORT MATL/EQ CRW	16.0	HRS	\$100.00	\$1,600.00		29.7
HAND BUGGY AND LABOR USED TO TRANSPORT AND FORMWORK						
SUBTOTAL				\$4,208.37		
LABOR BURDEN			45%	\$1,893.76		
STATE TAX			6%			
SUBTOTAL				\$6,102.13		
OH&P			15%	\$915.32		
SUBTOTAL				\$7,017.45		
BOND			1.5%	\$105.26		
SUBTOTALS				\$7,122.71		
GRAND TOTAL	\$7,122.71					



HOW SCHEDULING CHANGES IMPACT SUBS

Costs to De-mobilize and Re-mobilize to and from Project

- Labor cost to break down/clean up/move materials, tools and equipment from job, then back to the job
- Material loss (opened containers no longer usable, loss/damage in multiple transit and storage)
- Rental equipment off rent payment of unused month, pickup and delivery costs to return equipment



HOW SCHEDULING CHANGES IMPACT SUBS

Supervision and Overhead Considerations

- Dilution of Field supervision and crew support over a reduced crew size
- Project Overhead – changes in general
 - Review/price/incorporate hundreds of RFIs and PCOs
 - Increased PM, PE and SUPT involvement than planned
 - No OH on RFIs/changes that don't add cost to Work



HOW SCHEDULING CHANGES IMPACT SUBS

Supervision and Overhead Considerations

- Company Overhead – extended delay to start of work
 - Less revenue against same fixed overhead
 - Minimal ability on short notice to replace that revenue



HOW SCHEDULING CHANGES IMPACT SUBS

Having to Leave work areas/floors due to schedule change without completing work

- Demobilize and remobilize
- Return to more finished spaces/congested with walls and cabinets – less work area, protection concerns
- Competing with more trades for some space – productivity



HOW SCHEDULING CHANGES IMPACT SUBS

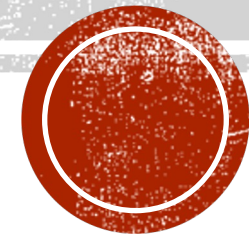
Shifting of Work Activities to a Detrimental Time of Year

- Slower cure/drying times = less productivity
- Less labor productivity in sub-30 degree weather
- Cost of winter protection, heat and curing



TABLE DISCUSSION

What are the top three most difficult schedule impacts for a subcontractor to recover costs from? And Why?



SURVEY RESULTS (May 2023)

GC Partners were asked **“What would you like for the subs to do better?”**

Results:

- Subcontractors MUST read and know what their subcontract says about change order processing. YOU OWN THE CONTRACT YOU SIGN.
- Subcontractors cannot expect payment unless and until they have provided all the information required in the subcontract.
- GCs generally do not submit partial change orders to the owner, so one sub will hold up processing a change order for payment.
- Subs must provide the best detail possible that corresponds to the changes. This helps the GC submit a payment request that is most likely to be approved by the owner.



SURVEY RESULTS (Cont'd)

- Provide detailed change order request according to the requirements of the subcontract.
 - Drawings that show what you are pricing
 - Invoice backup
 - All proper backup for lower tier subs
 - Provide credits
 - Number change orders with GC's tracking number as well as Sub's number.
- NO LUMP SUM
- If allowed, participate in GC's discussion with the Owner on change order.
- Require T&M work to be priced and submitted weekly.
- Provide a change order log monthly and with every change order.
- Use nationally recognized pricing guide.



SURVEY RESULTS (Cont'd)

GCs were asked to list three things they can do better to improve the change order process.

Some responses were:

- Don't let one or two subs who do not get pricing in timely, hold up approval for everyone else.
- Provide a clear scope of work associated with the change.
- Review all materials in a timely manner.
- Change order meetings every two weeks.
- Resolve T&M work (not for owner) as it is completed and pay within the following month.
- Work with the Sub to support Potential Change Orders with an Owner.
- Find creative ways to settle disputes between Owner and Sub.
- Be assertive with Owners, holding them accountable for expeditiously approve/process changes.
- Communicate status of change orders.



WHERE DO WE GO FROM HERE?

GC/Subcontractor Change Order Partnership: A Discussion on Change Orders
Wednesday, September 20, 2023



RESOURCES AVAILABLE

2018 White Paper on Improving the Change Order Process

Owners Meeting on Change Order Processes

Ojective for This Meeting on Change Order Costs with Subs and GC Partners

Results of GC Survey to Plan This Event

Powerpoint From This Event

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