Introduction

Design-assist and design-build subcontracting is a process of bringing trade subcontractors into the design phase of a project by contracting with them for preconstruction services and subsequently construction—similar to the CM at Risk project delivery method. Advantages of this include early bidding of portions of the construction cost, incorporating the expertise of the trade subcontractor into the design phase, design around specific products, and early preparation of shop drawings. With design-assist the engineer of record remains on the A/E team. With design-build the subcontractor becomes the engineer of record for a certain portion of work, and the engineer on the A/E team is responsible for coordination of the subcontractor’s work into the project. Following are the processes for each subcontracting method.

Process for CM using design-assist (DA) trades in CMAR contracts:

1. Use of DA trade contractors shall be project specific.
2. Maximize the use of DA trade contractors. Encourage use for MEP trades, curtain walls, foundation, fire protection, fire alarms, security, IT, BMS, and specialties.
3. The project team will make decisions regarding the best trades for DA, and jointly work through the Prequalification and RFP processes.
4. CM specifies DA scope at 50% schematic or before, but may have to wait until Design Development to issue the RFP and contract.
5. Similar to the CSU selection process for the CMAR, the CM will utilize a DA trade contractor prequalification / RFP process and a two contracts process (preconstruction and construction).
6. CM initiates an enhanced trade contractor prequalification process for DA, including advertising the bid package. The advertisement and prequalification process should include a description of the DA element and a scope of work description.
7. The CM, Campus, and Architect shall jointly select a minimum of four qualified DA trade contractors from the prequalification process to go on to the RFP phase.
8. The CM will issue an RFP to the selected DA trade contractors, similar to that used in the CMAR process, but simplified for trade contractor use. The CM’s trade RFP for each DA trade contractor’s scope of work will: contain a defined scope of work, publish the target budget, and require the DA trade contractor to propose a fee for preconstruction services and a target construction subcontract amount for the defined scope of work in the trade RFP.
9. The DA trades proposed cost on the RFP should be worth 30-40% of the assigned points, with quality being the remaining 60-70%.

10. Interviews and RFP evaluations should be done by the CM, University and Architect.

11. The University will issue to the CM an amendment to the preconstruction services agreement authorizing the DA portion of the trade contractor’s proposal. The CM then may issue a DA subcontract to the DA trade contractor for preconstruction services.

12. During preconstruction, the trade contractor will work with the Architect to achieve the target construction subcontract amount.

13. The Architect or the architectural firm remains the Engineer of Record and may delegate some detailing to the DA trade contractor.

14. Architect to review and approve the DA trade contractor’s constructability comments, and incorporate them into the contract documents. DA input is critical to enable the trade contractor to meet the target budget.

15. DA trades shall be an integral part of the estimating for their scope of work, or scopes that they may affect.

16. Constructability is done as a peer review by the DA trade contractor.

17. When the construction documents are complete, the CM will require the DA trade contractor to propose a final construction subcontract amount. The CM may not award a construction subcontract if the DA trade contractor’s proposed final construction subcontract amount exceeds its target construction subcontract amount, as amended and approved by the University during the preconstruction process.

18. If the project team deems that the DA trade contractor’s proposed final subcontract amount is close enough to the target subcontract amount, and the CM is awarded a construction contract, the University will instruct the CM to award a construction subcontract. If the DA trade contractor’s proposed final subcontract amount exceeds the target subcontract amount, the CM may put the work out to an open bid. The DA trade contractor may bid the work at that time.

19. If the CM lets the trade scope of work out to bid, the CM will award to the lowest responsive bidder.

20. CM will require DA trade contractors to submit a schedule of values for their scope of work.
Process for design-build (DB) trades in CMAR contracts:

1. Use of DB trade contractors shall be project specific.

2. Maximize the use of DB trade contractors. Encourage use for MEP trades, curtain walls, foundation, fire protection, fire alarms, security, IT, BMS, and specialties.

3. The project team will make decisions regarding the best trades for DB, and jointly work through the Prequalification / RFP process.

4. CM specifies DB scope at 50% schematic or before, but may have to wait until Design Development to contract.

5. Similar to the selection process for the CMAR, the CM will utilize a DB trade contractor prequalification / RFP process and a two contracts process (preconstruction and construction). Both contracts are held by the CM.

6. CM initiates an enhanced trade contractor prequalification process for DB, including advertising the bid package. The advertisement and prequalification process should include a description of the DB element and a scope of work description.

7. The CM, University, and Architect shall jointly select a minimum of four qualified DB trade contractors from the prequalification process to go on to the RFP phase.

8. The CM will issue an RFP to the selected DB trade contractors, similar to that used in the Trustees’ Design-Build process, simplified for trade contractor use. The CM’s trade RFP for each DB trade contractor’s scope of work will: contain a defined scope of work, publish the target budget, and require the DB trade contractor to propose a fee for preconstruction services and a construction subcontract amount for the defined scope of work in the trade RFP. During preconstruction, the DB trade contractor will work with the Architect to achieve the target construction subcontract amount.

9. The DB trade contractor will propose on the completed cost for his scope of work in the RFP.

10. Interviews prior to the RFP evaluations may be done by the CM, University and Architect.

11. The CM’s DB trade contract award will be based on an evaluation by the award committee. RFP evaluations should be done by the CM, University, and Architect.

12. The award committee will factor in quality points and total cost points to determine which proposer may be awarded a DB construction contract.

13. The DB trades proposed cost on the RFP should be worth 30-40% of the assigned points, with quality being the remaining 60-70%.
14. The University will issue to the CM an amendment to the preconstruction phase contract authorizing the design portion of the DB trade contractor’s proposal. The CM then contracts with the DB trade contractor for the design phase, and the contract is tied to the DB trade contractor’s DB proposal and bid amount, and CM includes a firm commitment to award the construction if the CM is awarded the construction. The bid package must be a performance type DB scope. The CM’s construction subcontract must be a DB type of contract and incorporate the design from the preconstruction phase.

15. The CM then issues a subcontract to the DB trade contractor for preconstruction services.

16. The DB trade contractor is contractually required to hold his proposed construction cost, as modified by change order.

17. The Architect or architectural firm delegates detailing and design responsibility to the DB trade contractor, with the DB trade contractor’s engineer becoming the engineer of record.

18. The Architect will incorporate the DB trade contractor’s drawings and details into the contract documents.

19. DB trades should be an integral part of the project estimating and constructability for any trades they may affect.

20. The DB trade contractor is responsible for estimating, completion of the design, and constructability for its own scope of work to assure compliance to the DB contract construction award amount.

21. The DB trade contractor’s scope of work and contract award amount, as adjusted by change order, shall be incorporated into the CMAR bidding process, and submitted as part of the CM’s GMP.

22. CM shall specify in the DB RFP that the DB construction contract is contingent on the CMAR receiving a construction contract award.

23. The CM issues a subcontract to the DB trade contractor for construction services.