



Eugene City Council

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EUGENE CITY COUNCIL AGENDA

October 12, 2016

12:00 p.m. CITY COUNCIL WORK SESSION
Harris Hall
125 East 8th Avenue
Eugene, Oregon 97401

Meeting of October 12, 2016;
Her Honor Mayor Kitty Piercy Presiding

Councilors

Greg Evans, President
George Brown
George Poling
Claire Syrett

Alan Zelenka, Vice President
Mike Clark
Chris Pryor
Betty Taylor

12:00 p.m. CITY COUNCIL WORK SESSION
Harris Hall, 125 East 8th Avenue

1. EXECUTIVE SESSION
Pursuant to ORS 192.660(2)(e)

***Mayor:** The Eugene City Council will now meet in Executive Session to negotiate real property transactions. The Executive Session is held pursuant to ORS 192.660(2)(e).*

Representatives of the news media and designated staff shall be allowed to attend the executive session. All other members of the audience are asked to leave the room. Representatives of the news media are specifically directed not to report on any of the deliberations during the executive session, except to state the general subject of the session as previously announced. No decision may be made in executive session. At the end of the executive session, we will return to open session and welcome the audience back into the room.

2. WORK SESSION
City Hall Update

Adjourn.

The Eugene City Council welcomes your interest in these agenda items. This meeting location is wheelchair-accessible. For the hearing impaired, an interpreter can be provided with 48 hours' notice prior to the meeting. Spanish-language interpretation will also be provided with 48 hours' notice. To arrange for these services, contact the receptionist at 541-682-5010. City Council meetings are telecast live on Metro Television, Comcast channel 21, and rebroadcast later in the week.

El consejo de la Ciudad de Eugene agradece su interés en estos asuntos de la agenda. El lugar de la reunión tiene acceso para sillas de ruedas. Se puede proveer a un intérprete para las personas con discapacidad auditiva si avisa con 48 horas de anticipación. También se puede proveer interpretación para español si avisa con 48 horas de anticipación. Para reservar estos servicios llame al 541-682-5010. Las reuniones del consejo de la ciudad se transmiten en vivo por Metro Television, Canal 21 de Comcast y son retransmitidas durante la semana.

For more information, contact the Council Coordinator at 541-682-5010,
or visit us online at ***www.eugene-or.gov***.

EUGENE CITY COUNCIL AGENDA ITEM SUMMARY



Work Session: City Hall Update

Meeting Date: October 12, 2016
Department: Central Services
www.eugene-or.gov

Agenda Item Number: 2
Staff Contact: Mike Penwell
Contact Telephone Number: 541-682-5547

ISSUE STATEMENT

The purpose of this work session is for Council to continue discussing and providing feedback related to a potential rebid process for the new Eugene City Hall. Council last discussed this topic on September 21.

BACKGROUND

At the July 18, 2016, work session, Council voted to reject the Guaranteed Maximum Price of \$18.2 million for the construction of the new Eugene City Hall. Council also voted to pursue the option of rebidding the project at a time when the bidding environment is more favorable, while at the same time looking for ways to collaborate with Lane County on development options related to City Hall, a new Lane County Courthouse, and the Farmers Market.

Since July, Rowell Brokaw has led the project team in a thorough review of the construction documents and bid results in an effort to identify potential cost reduction strategies that might be considered in conjunction with a rebid. A series of design review meetings generated an initial list of more than 200 potential cost reduction items of which more than 100 items were deemed worthy of additional discussion and analysis.

Cost reduction items were generated in four main areas—site improvements, building envelope and structure, mechanical and electrical systems, and interiors—and then evaluated by the project team for cost-saving potential, impact on the established project values and goals, and effect on our ability to rebid the project by the end of February 2017, when the bidding environment should be more favorable.

Based on the criteria above, the cost reduction items as presented on September 21 can be categorized in four groups according to potential to benefit the rebid process:

- 1) Items not recommended for further analysis because they don't meet project requirements in terms of cost-saving potential, schedule compatibility, and/or effect on project values. Examples include reducing the quality of the audio-visual equipment in the Council Chamber and Work Session Room, major changes to the exterior cladding system, and further refinement of the structural calculations to reduce the weight of the steel members.

- 2) Low-cost changes to the drawings and specifications that will likely result in some construction cost savings or that can be included in bid alternates for evaluation during final determination of the guaranteed maximum price (GMP). Examples include changing the glazing specification to a more standard type of glass, expanding the list of allowable lighting fixture manufacturers to promote more competitive bidding, and including a bid alternate to replace the cedar ceiling in the ground floor public spaces with a more standard acoustical tile ceiling.
- 3) Targeted scope reductions and design changes that will require additional design work to achieve, - and will likely result in significant construction cost savings, although they may also have an effect on the project values. Two primary examples are simplification of the south façade design and targeted revisions of the mechanical system.
- 4) Major design changes that would require extensive design work to achieve but are uncertain as to impact on net cost and schedule.

At the September 21 meeting, Council provided preliminary feedback on the cost reduction strategies and requested an additional work session to allow time for further review of the strategies and time to answer the following questions previously provided.

1. Does the Council want the project team to continue with work on a rebid option that includes the low- and no-cost cost reduction items presented at the work session?
2. Does the Council want the project team to continue with work on a rebid option that explores simplification of the south façade, including elimination of the double skin?
3. Does the Council want the project team to continue with work on a rebid option that explores targeted changes to the mechanical system?

RELATED CITY POLICIES

The City Hall planning process relates to the council goals of an effective, accountable municipal government, a safe community, and sustainable community growth and change.

CITY MANAGER'S RECOMMENDATION

There are no specific recommendations at this time.

SUGGESTED MOTION

Specific motions are not suggested at this time. Council answers to the questions outlined in the options above will determine necessary motions.

ATTACHMENTS

1. September 19, 2016, RBA Memorandum – Summary of Initial Cost Reductions Strategies for City Hall

FOR MORE INFORMATION

Staff Contact: Mike Penwell
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Staff E-Mail: michael.j.penwell@ci.eugene.or.us

19 September 2016

Eugene City Hall – Phase 1

Memorandum

Summary of Initial Cost Reduction Strategies for City Hall

The goal of this work is to provide City staff with a list of cost reduction strategies and supporting information, including a brief description of implications of specific strategies, rough order of magnitude construction cost savings, and a rough estimate of fees for redesign. McKenzie Commercial Construction provided a breakdown of the bidding information and rough construction cost savings that could be achieved by implementing specific strategies. Potential net cost savings are included for each viable option.

Approach

Using the June 2016 bid results and follow-up information provided by McKenzie Commercial (MCC), the project team generated a spreadsheet of line-item cost reduction opportunities. These cost reductions are generally related to four disciplines: Site, Envelope/Structural, MEP Systems, Interiors/Specifications.

Within these four categories, individual systems and details were studied and reviewed in four workshop meetings with Rowell Brokaw, technical experts and City staff. A fifth meeting was held to review the bid strategy and design documents with a local developer, and the owner's commissioning agent also produced a memo summarizing alternative mechanical systems. All of these discussions helped the team to refine the line-item options and alternatives to be pursued for cost estimating by McKenzie Commercial. With the goal of balancing potential cost reduction with the cost of redesign, line-item cost reductions were then organized into Cost Reduction Options that group together feasible and logical revisions.

Supporting Documents - Attached

- **Line-item Spreadsheet** of cost reduction strategies, color-coded to correspond with Cost Reduction Options 1, 2 and 3.
- **Wall Section Diagram** describing revisions to façade, canopies and roof height.
- **Construction Documents Markups** prepared to assist MCC estimating.
- **Schedule Diagram** describing the interface among the Cost Reduction Options, decision milestones, project delivery, and re-bid timeline.
- **Systems West Engineers Memorandum** summarizing other mechanical systems.

Cost Reduction Options

Option 1: Clarify, Simplify, Re-bid

This path seeks to maximize construction cost reductions without investing in significant design changes or pursuing reductions in scope. Focused on technical detailing and specifications, this path would include clarifications and revisions that bidders have indicated may result in lower costs (e.g., site furnishing specifications, lighting requirements, waterproofing, metal finishes, etc.). MCC expects the bid climate to be more competitive winter 2017. Optimization and clarifications to the bid documents along with a more competitive bidding environment is expected to result in lower costs.

Potential Net Cost Savings: \$350,000 - \$500,000

Option 2: Scope and Performance Reductions

This path seeks to reduce construction costs beyond what is possible in Option 1 by making more significant changes to the design documents. In addition to specification changes and technical revisions, this path includes options for scope reduction in areas where the bid results were higher than estimated as well as targeted revisions to MEP. The goal of these changes is to achieve more significant cost reduction while minimizing the impact on the energy performance. These areas include:

- Removal of the outer glass wall of the double skin
- Reduction of overall building height and simplifying the PV support structure
- Revisions to the scope of the site development with Phase 1
- Targeted revisions to the mechanical system

Potential Net Cost Savings: \$1,500,000 - \$2,000,000

Option 3: Major System Changes - Not Compatible with Project Schedule

This path would include some or all of the Option 1 and Option 2 strategies, and possibly more far-reaching redesign that cannot be completed for re-bid by February 1, 2017. Two examples of major system changes are a complete redesign of the mechanical system to accommodate a VRF system or the redesign of the exterior to be clad in brick.

Summary of Cost Reduction Meetings

1) Site

The construction documents that were bid in June 2016 included the entire western half of the City Hall block and improvements to all surrounding rights-of-way. An additive alternate to extend the 8th Avenue sidewalk design to the corner of 8th and High was also included.

Meeting Summary

A review of the bid results and completed landscape and civil engineering documents generated a two-prong approach to cost reduction considerations:

1. **Reduce area of site work.** This approach could reduce cost by eliminating scope in Phase 1. This could align with interest in increased opportunities to coordinate with other development on the City Hall block.
 - a. Eliminate Phase 1 development on the northwest quadrant of the block (parking lot area).
 - b. Eliminate Phase 1 development on the northwest quadrant of the block and also reduce Phase 1 investments on the east side of the City Hall plaza (e.g., replace hardscape with softscape surface, reduce number of trees, reduce stormwater infrastructure).
2. **Reduce quality of materials and eliminate components.** This approach could reduce cost by eliminating components and/or reducing the quality/flexibility/durability of Phase 1 components. Changes include lower quality hardscaping, elimination of infrastructure to serve a plaza water feature, elimination of plaza seating, and reduction of landscape features, trees and plantings.

2) Envelope / Structural

The structural steel and glazing packages were two bid packages where bid results were significantly higher than previous estimates. MCC noted the unexpectedly high steel and glass bids were likely the result of the perceived complexity of some building elements and because the project attracted only a single bidder for these scopes of work. The team explored revisions that could lower the cost of glazing and wall assemblies, and reduce the scope of structural and miscellaneous steel.

Meeting Summary

Review of the envelope, detailing and structural design identified the veneer-glazed curtain wall and roof/PV as primary areas of potential cost savings. Redesign of the concrete footings and the elimination of the west façade banner/sunshades and rooftop skylight were also identified as opportunities for some savings.

The removal of the outer glass curtain wall and associated structure on the south façade is likely to be the most significant opportunity for cost reduction, as it eliminates a substantial area of

scope from the project. The glazing/window package bid 40% higher than cost estimates and had no competition.

Removing the glass curtain wall from the south façade would also likely lead to the elimination or simplification of several other components, including: structural steel supports, sunshade/catwalks, mechanical dampers for passive ventilation, roof canopy, roof parapets, entry canopies, access ladders, fire protection measures, and automated windows. This design change could also lead to reductions in parapet height, cladding area, and revisions to the roof structure and rooftop photovoltaic structure that could generate meaningful savings. With the removal of double-skin façade's outer wall, the SSG curtain wall on the north façade would also be revised to a standard curtain wall.

The team also discussed the structural implications of redesign to support a more-expensive brick cladding system. This would require heavier, deeper perimeter steel beams; the addition of kicker supports to carry the increased weight; and redesign for the additional mass, change in connection requirements, and out-of-plane loading. These revisions would result in additional complexity and higher construction costs.

3) Mechanical-Electrical-Plumbing (MEP) Systems

The currently designed mechanical system is a 40-well geothermal system distributed with chilled beams in office areas and a displacement air system with radiant floor heating in public rooms. Review of alternative MEP systems and their varying impact on the overall building design were discussed in preparation for the MEP workshop.

Meeting Summary

Bid results were discussed to identify areas to target for possible cost reduction. MCC explained that there was only one bidder for the geothermal wells, and that this work is a specialty. It was observed, however, that the bid was roughly in line with the Architectural Cost Consultants' estimate. There was also concern expressed about the coordinating the geothermal wells with other mechanical and plumbing systems, and with building foundations. MCC suggested that eliminating the wells could simplify this work.

Bid scopes that did result in substantial cost increases were the hydronic distribution system and the "dry side" mechanical. These bids were roughly 25% higher than estimated. Plumbing bids were within the range of the estimate. Some of the cost of the hydronic and dry side mechanical may have been a product of the sustainability goals for the project.

Options for possible cost savings are described in the Systems West Engineers Memo (attached). All five options reduce or eliminate the geothermal wells, substituting other systems for providing hot and cold water to the distribution system. Four options leave the distribution system unchanged, recognizing that the chilled beam distribution system as designed is an appropriate system for an institutional building. Of these four options, the air-source VRV system does not meet owner requirements. A fifth option changes the entire mechanical system to a Variable Refrigerant Flow system. This has potential for the greatest construction cost

savings, but involves extensive redesign of the mechanical system, and would result in significant architectural redesign. This option is not feasible within the timeframe of the potential re-bid and does not meet owner requirements.

4) Interiors / General Specifications

Bid results, project specifications and interior finishes were reviewed to identify potential cost savings through changes in scope or finish quality. This line item list was then reviewed for compliance with project expectations.

Meeting Summary

Review of the finishes for the public spaces confirmed that the choices are appropriate in quality, durability, and scope. The upper floors with open office spaces and meeting rooms satisfy the requirements of the CMO program, and offer minimal opportunities for scope reduction. The majority of cost savings exist in simplification of details and changes in specifications. Examples include elimination of steel plate detailing on the ground floor, simplification of the air delivery to the Council Chamber and Work Session Rooms with associated simplification of casework details, and less costly fire proofing. Substitution of acoustic tile to replace the salvaged cedar ceiling in the public rooms was identified, possibly as a bid alternate. Casework, A/V systems, and marker boards were discussed as potential areas for reduction if program requirements are still met. Deletion of the skylight and the openings in the floors at levels 3 and 4 was discussed as a potentially significant reduction in scope. This could be studied further as a possible bid alternate. Follow-up review of interior casework and public room technology is recommended prior to re-bid.

5) Development Perspective / Bid Strategy

A fifth meeting to review the completed documents and bid results was held with a local development expert, Mark Miksis.

Feedback centered on the importance of defining objective cost reduction targets and prioritizing revisions to achieve a return on the investment of additional time and money. The team discussed bid strategies to increase participation and cost control, the need for aggressive outreach prior to bidding, and the importance of communicating confidence to subcontractors that the project is real.

The team also reviewed a draft schedule provided to test how various magnitudes of redesign can be accomplished in the expected time frame.

OPTION 1: CLARIFY, SIMPLIFY, RE-BID

OPTION 2: SCOPE AND PERFORMANCE REDUCTIONS

OPTION 3: MAJOR SYSTEM CHANGES - NOT COMPATIBLE W/ SCHEDULE

NOT PURSUED: DOES NOT MEET CITY PROJECT REQUIREMENTS

INTERIORS AND SPECIFICATIONS

			A	S	M	E	P	AV	C	L	FP	NOTES
100	Mural	Delete installation of Mural.	A									Not pursued
101	SOG MRVA additive.	Delete Moisture Vapor Reducing Admixture (MVRA) from slab on grade (SOG) concrete mix design.	A	S								
102	Precast Concrete Stair	Simplify precast treads. Delete nosing strip cast into tread. Provide sandblast tactile warning. (Note: sand blast does not provide significant color contrast - not accepted by UO for accessibility. Need to confirm meets ADA).	A	S								Cost increase
102.1	Precast Concrete Stair	Change to wood treads on steel plate. 3" thick white oak with inset nosing. (must be non-combustible structure. Need to check code on this)	A	S								Not pursued
103	Interior Steel Trim Plates @ WSR, CC and Lobby	Delete steel trim plates. Provide alternate material. Could be painted wood.	A	S								
104	Wood Bench / Plinth at north entry stair	Delete. Provide cane rail for ADA under stair.	A									Could be alternate.
105	Smoke Shoe	Change specified recessed smoke shoe to surface mounted.	A									
106	Glazing - At interior acoustic locations (GL-13)	Change from low iron / laminated to clear / laminated.	A		M							Cost for clear laminated
106.1	Glazing - At interior acoustic locations (GL-13)	Change from low iron / laminated glass to clear / tempered glass. (Laminated is better acoustically).	A		M							Cost for clear tempered
107	Window Coverings	Simplify blind controls. (Note: system was simplified in final addenda - may not be much additional savings).	A		M	E						
107.1	Window Coverings	At SH-2 (Typical office manual bottom up), change manual top down.	A									Not pursued
108	Tile: 2nd & 3rd Floor RRs	Delete wall tile. Floor tile and base to remain. Provide epoxy wall paint.	A									Not pursued
108.1	Tile: 1st Floor public RRs	Reduce full ht. tile to 48". Floor tile to remain. Epoxy paint wall and ceiling.	A									Not pursued
108.2	Tile: 2nd & 3rd Floor RRs	Delete all tile. Provide cove sheet flooring (vinyl / linoleum) and P-lam wainscot and epoxy wall paint.	A									Not pursued
109	Displacement Air-Dais	Provide below slab supply to floor registers. Revise dais design.	A	S	M							
110	Displacement Air-Portals	Provide below slab supply to floor registers. Revise portal design.	A	S	M							
111	AV - Work Session Room	Delete projector and projector screen in WSR. Pre wire for future install. LCD screen on east wall to remain in base project.	A					AV				
112	AV - General	Work with Pro-Sound for VE options.	A					AV				Not pursued. May be part of future design process
113	Media walls in WSR & 3rd Floor Meeting Rm.	Look at DIRT wall solution for integrated AV and white board in these locations. May not be a cost savings, but might be a simplification.	A					AV				
114	Ceilings - WSR, Lobby . CC	Delete cedar 9-wood and acoustic backup / Provide Armstrong Optima acoustic panels.	A									Will be a bid alternate
115	Ceilings - Typical ACT	Substitute less expensive tile.	A									
116	Casework	1st Floor: Delete 20% of cabinets in Support III & Break 151.	A									Not pursued. Review with staff
117	Casework	3rd Floor: Delete 20% of cabinets: Reduce in Break rm, Sister City display and outside CM office. Sister City and CM reception can be shelving only - no base cab.	A									Not pursued. Review with staff
118	Visual Display	Reduce marker board wall covering (MB-2) by 50%.	A									
119	Fire Proofing	Change intumescent FP on beams at 2nd floor to cementitious spray FP. Occurs at grid C in double ht space, and at grid A in meeting rm and HRNI office.	A									GC to assess cost/ benefit / sequencing
120	Dais back wall	Simplify design. Look at slotted rather than bent wood members.	A									Not pursued
121	3rd floor Workshop Rm	Delete pocket glass doors. Provide storefront with single sliding panel.	A									
122	Carpet in CC and WSR	Change \$22-square yard spec, to \$18. Room total area is 333 yards. Save \$1,332.	A									Not pursued

EXTERIOR MATERIALS

200	Precast Concrete Wall Panels	Change form liner to 12' max.	A									
200.1	Precast Concrete Wall Panels	Change panel finish to smooth sand blast or acid wash.	A									
200.2	Precast Concrete Wall Panels	Change precast to brick.	A	S								
200.3	Precast Concrete Wall Panels	Change precast to Portland cement stucco finish.	A	S								
201	3/8" Aluminum Plate Trim @ "C" edges	Change 3/8" Aluminum Plate Cladding to painted galvanized steel.	A									Cost increase
201.1	3/8" Aluminum Plate Trim @ "C" edges	Change 3/8" Aluminum Plate Cladding to Equitone Exposed Fastener Cladding.	A									
202	1/8" Aluminum Plate Cladding @ North bump out and South entry.	Change to Equitone Exposed Fastener Cladding.	A									
202.1	1/8" Aluminum Plate Cladding @ North bump out and South entry.	Change to NorthClad Al Series Aluminum panel System Series. Also look at ACM Series.	A									
203	Cement Panel Cladding	Change Equitone exposed fastener cladding to Cembrit or other exposed fastener cladding.	A									Not pursued
204	Hot Applied Waterproofing-perimeter foundation.	Change to cold applied at all perimeter stem walls.	A									
204.1	Hot Applied Waterproofing-perimeter foundation.	Change to cold applied and use only at infiltration planter. Check with envelope Cx to determine if meets building performance requirement.	A									
205	VX veneer SSG glazing system at north stair	Delete VX and provide standard curtain wall. Delete steel veneer support system. Support for Curtain wall required at 4 stories.	A	S	M							
206	Glazing	Replace low iron (Starfire) glass with standard clear glass at GL-4 and GL-5. GL-4 is triple glazed IGU at the ground floor in CC and WSR. GL-5 is single glazed units at the outer double skin. GL-5 is deleted if double skin is eliminated.	A		M							
207	Parapet	Reduce height by 3' to 4' around the East, West and North. (300 sf wall and cladding) Revise parapet diagonal bracing. Still needed? (Requires new PV approach).	A	S								
208	Skylight	Delete PV Glazing. Provide alternate glass.	A			E						
209	Skylight	Bring skylight down to roof level. (If parapet and south canopy are lower as well).	A	S								
209.1	Skylight	Delete skylight. Add roofing, roof structure and 4th floor structure at skylight well. (Look at making skylight an alternate).	A	S	M	E						
210	PV structure	Reduce height / find alternate mounting system closer to roof. (If parapet and south canopy are lower as well).	A	S		E						
211	PMMA Roofing	Delete PMMA - Replace with TPO in all locations. Revise details and add PVC coated flashing. (bid doc locations: South upper canopy & north canopy).	A									
212	Cladding backup	Revise cladding back up so that there is direct attachment to Knight Wall. RB to investigate options - believe this option is unlikely to work.										
213	Cladding backup and insulation	Replace Knight Wall and standard rock wool with Roxul Comfortboard and hat channel direct attachment. (Rejected by team- not institutional quality).	A									Not pursued

DOUBLE SKIN / SOUTH FAÇADE

300	Double Skin Veneer Glazing	Delete VX veneer SSG glazing system on outer wall.	A	S	M											
301	Structural steel backup and horizontal wind braces for veneer glazing.	Delete.	A	S												
302	Catwalks / sun shade bar grate	Delete (4) levels and associated supports and connectors.	A	S	M											
303	Dampers at top of double skin.	Delete mechanical dampers.	A		M	E										
304	Bar grate at dampers	Delete.	A													
305	Upper South Canopy	Lower by 4'-0". Revise roof framing so that canopy roof is cantilevered section of primary roof framing. Revised framing will be lighter than bid docs - not supporting hung double skin, Reduce height of south façade by 4'-0"	A	S	M											
306	Upper South Canopy Facia Trims.	Delete aluminum plate. Use sheet metal / galvanized steel plate.	A													
307	Not Used	Not used														
308	Wing walls at East and West	Delete south extension by 4' to 5'. Eliminates 800 sf of cladding, 400 sf wall framing and significant steel that braces the horizontal wall cantilever.	A	S												
309	Cedar Vertical Panels	Option 1: Revise finish and panel design for exterior exposure.	A													
309.1	Cedar Vertical Panels	Option 2: Replace with other material. Parklex / Copper / Other.	A													
310	Exterior bottom up shades	Move to interior, or change to true exterior motorized blinds, See below.	A		M	E										
311	Sunshades	Assess need for new exterior sun control. May need to add storefront mounted sun shade or Exterior motorized shades or high performance glass tech.	A	S	M											
312	Façade Lighting	Revise lighting scheme - simpler without horizontal structure.	A			E										
313	Automated Windows at south 3rd / 4th floors	Delete automation - Not required for AM&M with removal of double skin. Contacts to determine if windows are open is required for mechanical system.	A		M	E										
314	Ladders & Gates at east end of double skin	Delete.	A													
315	Louvers and Door at SE 2nd floor from DOAS room.	Delete. Replace with cladding or base material (precast).	A													
316	Fire Protection	Delete Fire Protection on south façade. Will still be required at lower canopy and maybe at upper canopy.	A											FP		
317	Fire Protection	Delete 1hr window wash at WSR, Lobby, and Chamber.	A											FP		
318	Lower Canopy	Revise design - Will need to shed water from face of building, not face of double skin. Replace perforated metal soffit with wood to match upper canopy? Replace plate steel roof with sheet metal system? Other simplified steel detailing? Find route for dry system. Verify shading of 1st floor glazing.	A		M	E								FP		
319	location of south 1st floor CW	Design question: Should curtain wall at south of CC move south to reduce the offset to the 3rd - 4th floor wall. Not a cost saving.														

STRUCTURAL SYSTEM

400	Concrete quantity	Revise footing design for 1.25 importance factor.	A	S												
401	Steel weight	Assess cost / benefit of recalculation of column / beams for importance factor of 1.25.		S												Very small return on design effort.
402	Not Used	Not used	A	S		E										
403	Steel Detailing - WSR west wall	Look for simpler detailing with less thermal transfer.	A	S	M											
404	Banners	Delete banner structure. Assess additional heat gain at west windows.	A	S	M											
405	Brick Cladding	Assess required design changes for brick cladding at Equitone locations. (Not a cost reduction strategy. For owner feedback).	A	S												Not pursued
406	Galvanizing	Eliminate galvanizing from all steel not directly exposed to weather. Spec item.	A	S												
407	Roof deck concrete	Eliminate concrete from roof deck. Provide metal deck. (Noted as possible but unlikely by structural engineer).	A	S												

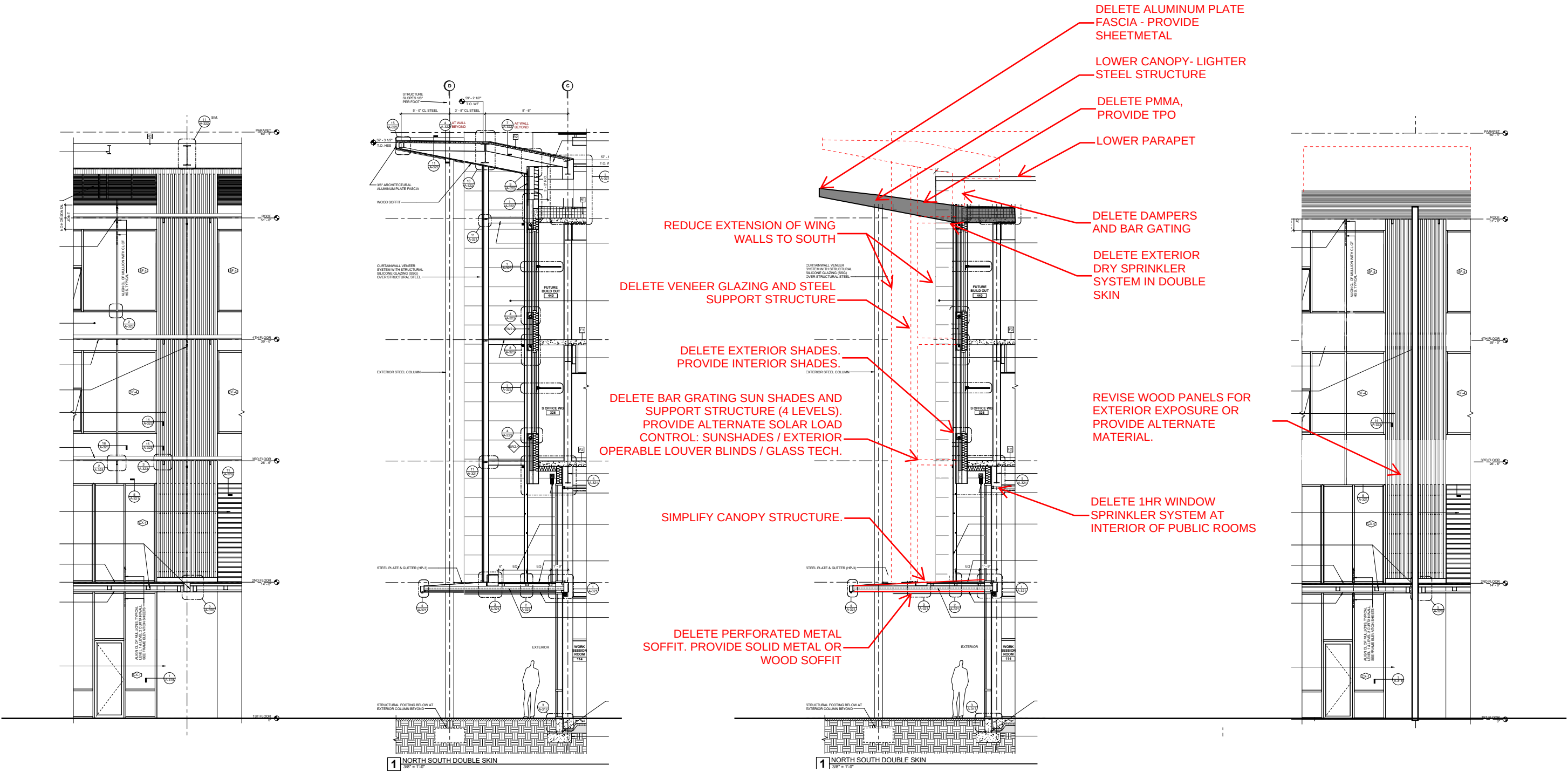
MECHANICAL / ELECTRICAL / PLUMBING SYSTEMS

500.1	Option 1: Conventional boiler / chiller central plant	Central Plant: Delete ground source: Add Conventional boiler / chiller.	A		M	E										Fossil fuel, will not meet city requirements
500.2	Option 2: Air source VRV Heating and Cooling Plant	Central Plant: Delete ground source: Add with refrigerant / water heat exchanger.	A		M	E										Non standard design. High risk.
500.3	Option 3: Air Source heat Pump	Central Plant: Delete ground source: Add to heat pump chiller and boiler.	A		M	E										
500.4	Option 4: Geothermal with Peak boiler.	Central Plant: Reduce to 30 wells, add peak boiler (gas).	A		M	E										Cost increase
500.5	Option 5: VRF Central Plant + Distribution	Central Plant: Change system to VRF. Distribution system: Change system to VRF.	A		M	E										Required re-design does not meet schedule
501	Distribution: Council Chamber	Provide below slab supply to floor registers on north and south of room. Simplify dais design - no air distribution required. Simplify CC portal - No air distribution required.	A	S	M											
502	Distribution: Work Session Room	Provide below slab supply to floor registers on east side of room. Simplify portal design - no air distribution required.	A	S	M											
203	DOAS	Move to roof. Delete mechanical room loft and redistribute some of the equipment to DOAS room.	A	S	M	E										
504	Lighting	Post Bid lighting VE.	A			E										
505	Lighting	Simplify lighting Controls.	A			E										
506	PV	Revise layout and support if required by double skin and parapet changes are selected.	A	S		E										
507	PV	Move inverters to roof from DOAS room. (may not work well if parapets are lower. Top of inverters would be are 6'.	A			E										
508	Hydronic Pipe	Allow PEX pipe.														
509	Electrical- Wiring	Allow MC cable from branch lighting and power.														
510	Electrical- Wiring	Allow aluminum conductors for feeders #10 and larger.														

SITE

600	North Site Strategy	Delete north parking lot and associated landscape. Existing crushed rock to remain. Retain planting strip north of drive. Retain covered bike parking and trash enclosure. Retain ability to turn around. Delete drive to 7th Ave	A			E				C	L		Could be bid alternate. COE / MCC to clarify alternate
601	South Site Strategy	Substitute crushed basalt at paving area east of entry walkway. Delete concrete, planters, inner row of trees at double allee, and fountain infrastructure. Retain some planting and hardscape definition at building edge and adjacent to sidewalk.	A			E				C	L		Could be bid alternate. COE / MCC to clarify alternate
602	PEPI Strategy North	Delete PEPI work on Pearl St and 7th ave. adjacent to work deleted in "North Site Strategy"	A			E				C	L		Could be bid alternate. COE / MCC to clarify
603	PEPI Strategy South	Delete PEPI work east half of block on 8th ave. if "South Site Strategy" is adopted.	A			E				C	L		Could be bid alternate. COE / MCC to clarify
604	Plaza Paving	Change 8" thick to 7" thick.									L		
605	Plaza Paving	Remove concrete coloring (dark gray).									L		
606	Plaza Paving	Change acid wash finish to broomed finish.									L		
607	Plaza Paving	Change pavers to concrete.									L		
608	Plaza Paving	Simplify joints.									L		
609	Soil Spec / detail	Specify / detail manufactured soil for top layer only. Lower quality soil may be used lower in the section.									L		
610	Storm water planters	Remove weathered steel. Leave concrete walls.									L		
611	Storm water planters	Remove sitting steps.									L		
612	Storm water planters	Remove lighting.				E					L		
613	Planting	Reduce quantity of planting (excluding trees)									L		
614	Silva Cell	Remove from project. Will require reinforced concrete in some locations.								C	L		
615	Water Feature	Remove vaults / conduits and above ground backflow required for future WF installation.				E				C	L		
616	Drinking Fountain	Delete dinking fountain.								C	L		
617	Site furnishings	Reduce quantity by 30%									L		
618	Site furnishings	Change product to less expensive option.									L		
619	Site furnishings	Remove integrated lighting from plaza benches.				E					L		
620	Greenscreen fencing	Change greenscreen fencing (vine covered fence) to chain link.									L		Not pursued

COST REDUCTION STRATEGIES
WALL SECTION DIAGRAM



CD SET

COST REDUCTION

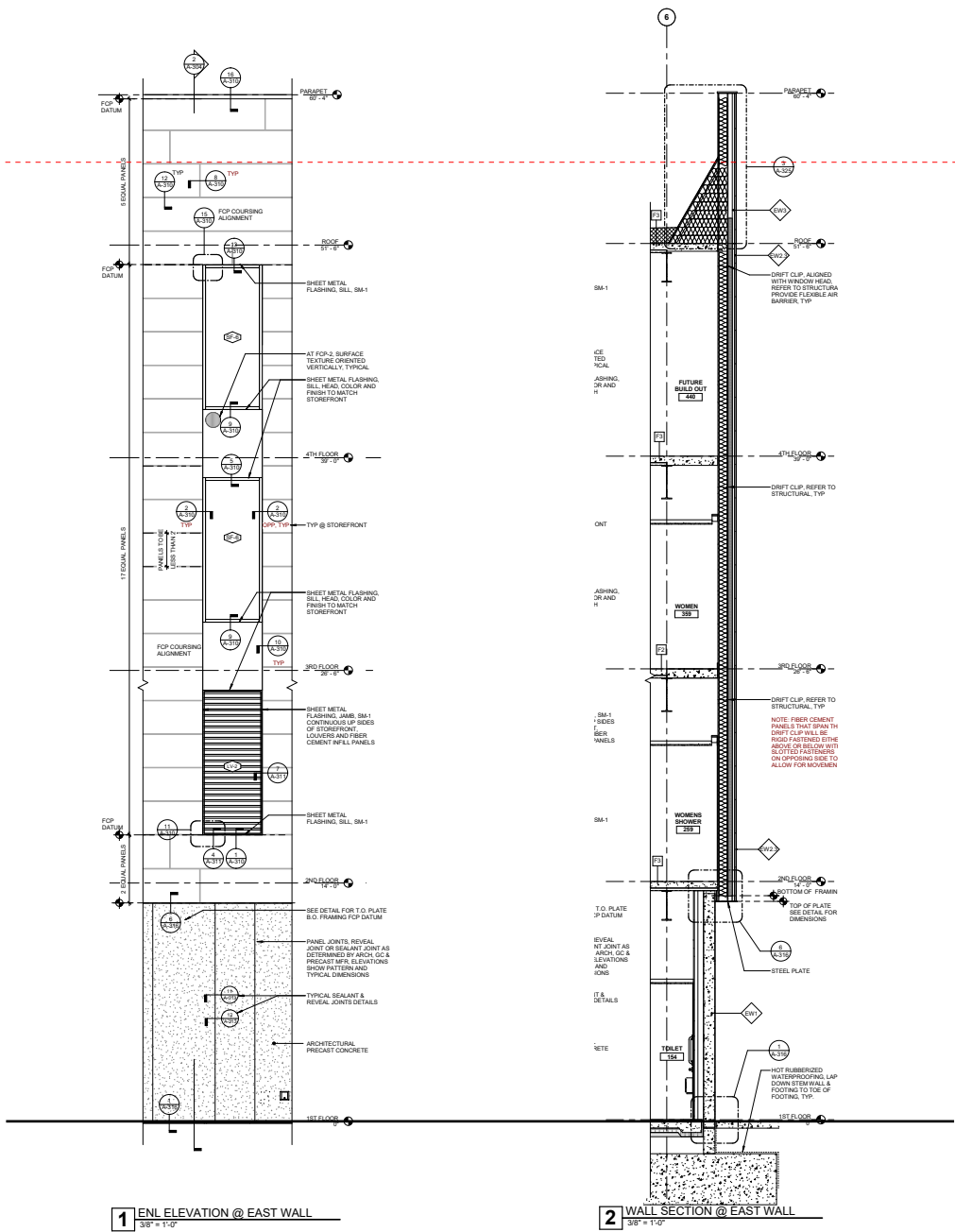
DOUBLE SKIN DIAGRAM

EUGENE CITY HALL
AUGUST 22,2016

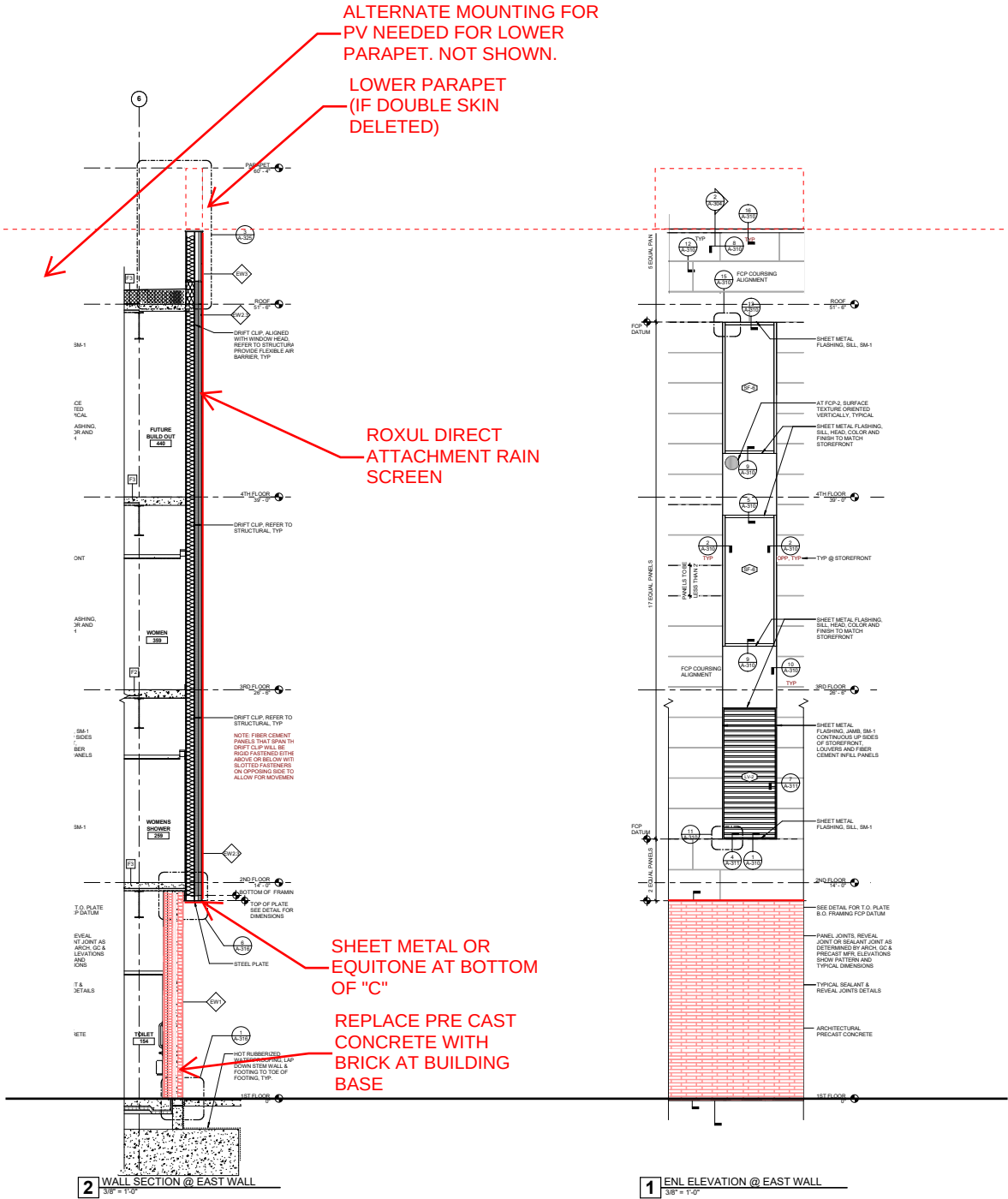
ROWELL
BROKAW

1 East Broadway
Suite 300
Eugene, Oregon 97401
541 485 1003
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COST REDUCTION STRATEGIES
WALL SECTION DIAGRAM



CD SET



COST REDUCTION

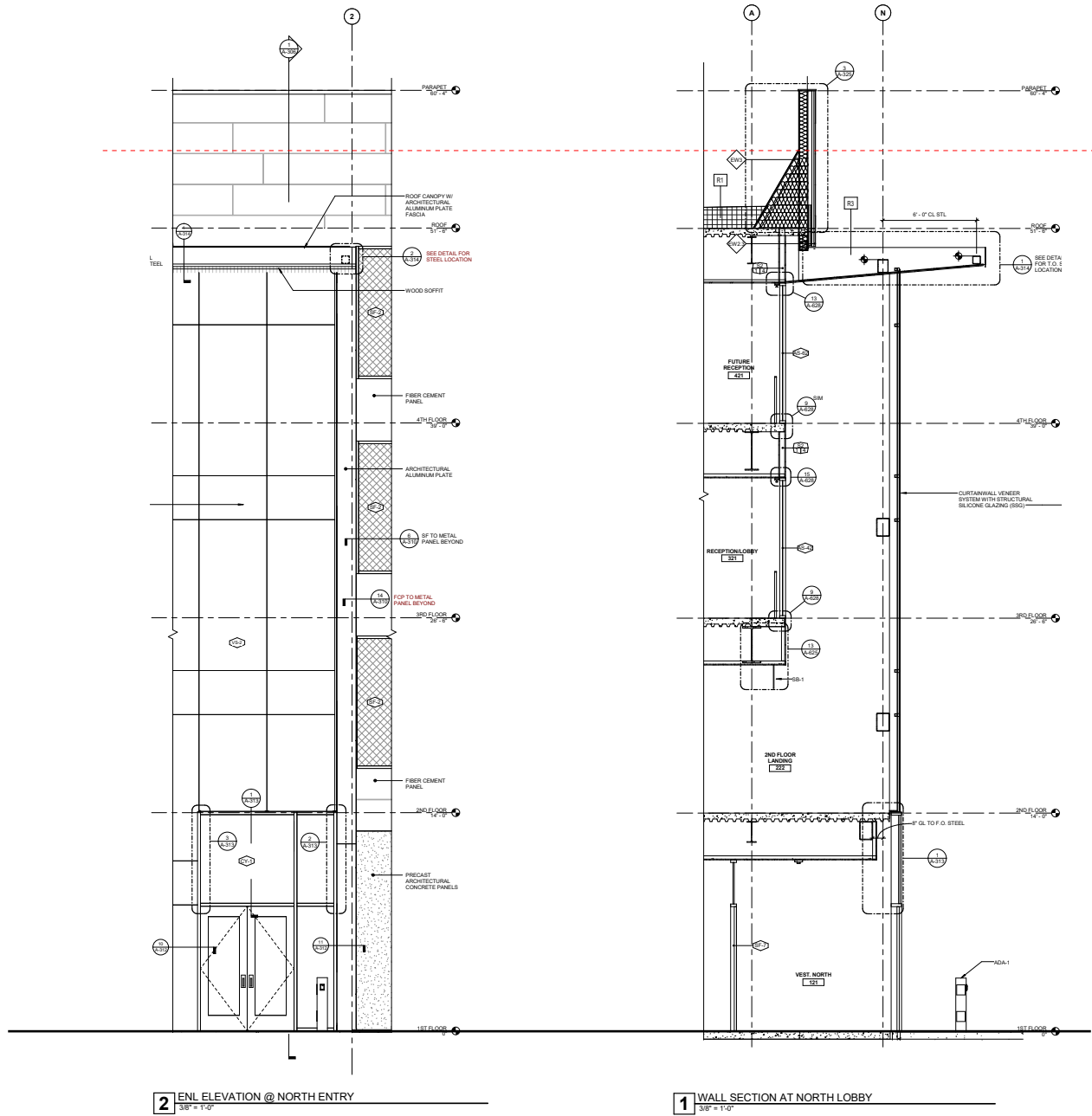
TYPICAL WALL DIAGRAM

EUGENE CITY HALL
AUGUST 22,2016

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COST REDUCTION STRATEGIES
WALL SECTION DIAGRAM



CD SET

COST REDUCTION

NORTH ENTRY DIAGRAM

EUGENE CITY HALL
AUGUST 22,2016

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Options:

- 1. NORTH SITE STRATEGY:**
Delete north parking lot and associated landscape, site paving and access road. Existing crushed rock to remain. Retain planting strip north of drive. Retain covered bike parking and trash enclosure. Retain ability to turn around. Delete drive to 7th Ave.
- 2. SOUTH SITE STRATEGY:**
Substitute crushed basalt at paving area east of entry walkway. Delete concrete, planters, inner row of trees at double alley, and fountain infrastructure. Retain some planting and hardscape definition at building edge and adjacent to sidewalk. Retain specimen tree without tree grate.
- 3. PEPI:**
Delete PEPI work adjacent to north site revisions. Delete PEPI work east of project boundary.

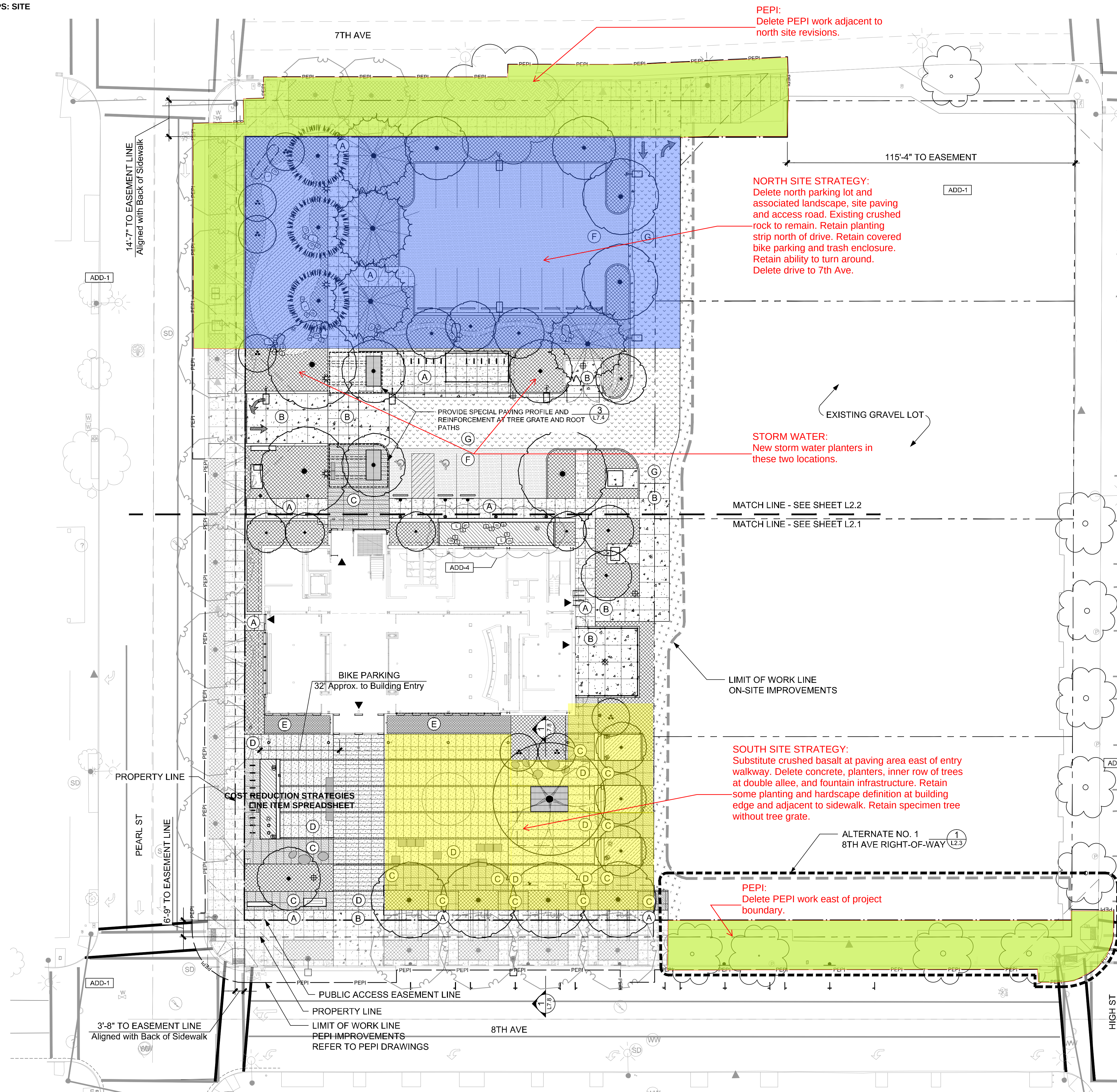
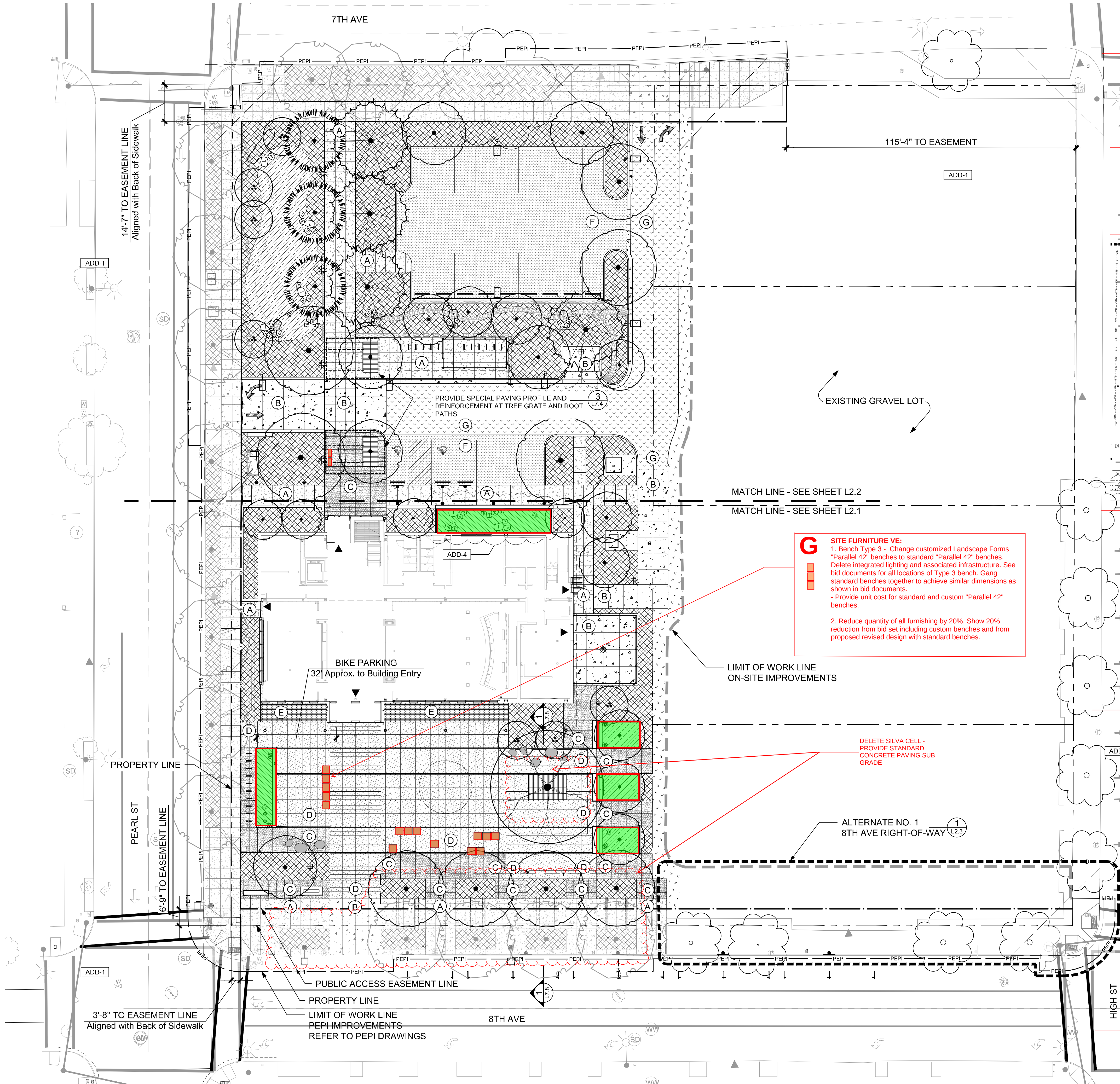


Diagram: Reduce project scope and program while retaining Civic Quality of Site



COST REDUCTION STRATEGY 2:
Reduce Civic Quality of Site but retain overall program and scope.

A Soil VE
Soil: provide primary planting soil in all planting areas to 18" depth. Below 18" or outside of planting area, any local loam is acceptable.

B Planting VE
Reduce density of planting by 20% (excluding trees) while still meeting code.

C WATER FEATURE VE
Delete future water feature infrastructure:
- backflow
- vaults
- power
- conduit/piping
- grading changes, trench drain

D SILVA CELL VE:
Eliminate Silva Cells:
In ROW - Delete all.
(PW has requested this in the permit review)
On Site - Delete at specimen tree and all other locations.

E STORM WATER PLANTER VE:
Delete weathering steel in plaza and roof runoff storm water planters.
Concrete retaining walls to remain as detailed.
Delete Lighting in planters.
Delete the steps / seating at east plaza planters
Provide concrete retaining wall as detailed.

F PLAZA PAVING VE ITEMS:
Provide line item cost for each of the 4 items below.

1. SIMPLIFY / REDUCE AMOUNT OF JOINTING IN THE PLAZA PAVING. DESIGN TBD. BUDGET FOR JOINTING REDUCTION OF 30%.

2. DELETE SAND WASH FINISH - PROVIDE LIGHT BROOM FINISH
DELETE CONCRETE COLOR - PROVIDE STANDARD CONCRETE 4" THICKNESS

3. DELETE SAND WASH FINISH - PROVIDE LIGHT BROOM FINISH
DELETE CONCRETE COLOR - PROVIDE STANDARD CONCRETE 7" THICKNESS

4. DELETE UNIT PAVING. PROVIDE CONCRETE PAVING TO MATCHING ADJACENT CONCRETE PAVING.

G SITE FURNITURE VE:
1. Bench Type 3 - Change customized Landscape Forms "Parallel 42" benches to standard "Parallel 42" benches. Delete integrated lighting and associated infrastructure. See bid documents for all locations of Type 3 bench. Gang standard benches together to achieve similar dimensions as shown in bid documents.
- Provide unit cost for standard and custom "Parallel 42" benches.
2. Reduce quantity of all furnishing by 20%. Show 20% reduction from bid set including custom benches and from proposed revised design with standard benches.

DELETE SILVA CELL - PROVIDE STANDARD CONCRETE PAVING SUB GRADE

ALTERNATE NO. 1 8TH AVE RIGHT-OF-WAY

CONCRETE PAVING 4" THICKNESS CONCRETE (7 L7.5) NO CHANGES

CONCRETE PAVING 8" THICKNESS CONCRETE, VEHICLE REINFORCEMENT (8 L7.5)

PLAZA COLORED CONCRETE PAVING 4" THICKNESS CONCRETE (7 L7.5)

PLAZA COLORED CONCRETE PAVING 8" THICKNESS CONCRETE, VEHICLE REINFORCEMENT (8 L7.5)

PRECAST CONCRETE UNIT PAVING (2 L7.9)

UNIT PAVER BAND (2 L7.9)

LIGHT ASPHALT PAVING SEE CIVIL DETAIL 7, C-202 NO CHANGES

STANDARD ASPHALT PAVING SEE CIVIL DETAIL 6, C-202

Diagram: Reduce Civic Quality of Site but retain overall program and scope.

DIAGRAM KEY

- CEMENT PANEL CLADDING**
FCP-1, FCP-2, FCP-3:
1. SUBSTITUTE CEMBRIT PANEL.
2. ELIMINATE SECONDARY BACK UP CHANNEL AND ATTACH DIRECTLY TO KNIGHT WALL SYSTEM.
- DELETED WALL SURFACE**
- 3/8" ALUMINUM TRIM REVISION**
OPTIONS:
1. 3/8" GALVANIZED OR POWDER COATED STEEL, SIMILAR ATTACHMENT TO DETAILED ALUMINUM.
2. HEAVY GAGE SHEETMETAL
3. EQUITONE EXPOSED FASTENER CLADDING.
- MP-1 REVISION OPTIONS:**
1. GAGE METAL CLADDING - NORTH CLAD AL SERIES OR SIMILAR.
2. EQUITONE EXPOSED FASTENER CLADDING.
- BASE MATERIAL OPTIONS:**
1. PRECAST WITH 12" FORM LINER.
2. PRECAST WITH SMOOTH ACID WASH.
3. BRICK - WALL FRAMING, WEATHER BARRIER AND INSULATION TO MATCH TYPICAL AT UPPER FLOORS.
4. PORTLAND CEMENT STUCCO RAIN SCREEN, WALL FRAMING, WEATHER BARRIER AND INSULATION TO MATCH TYPICAL AT UPPER FLOORS.

SET ISSUE DATE

2016-09-01
COST REDUCTION
STRATEGIES

PROJECT TRACKING

RBA #: 1309

P.I.C: JOHN ROWELL
PM / PA: K. KNUDSON / P. KING

Owner

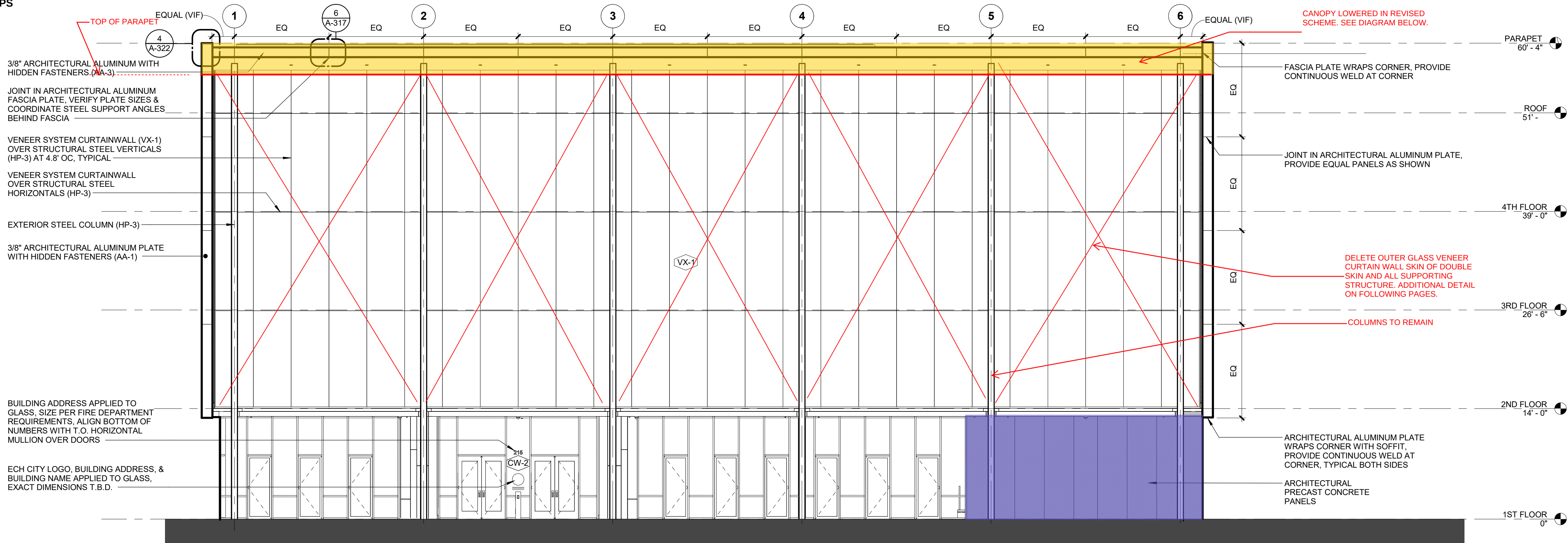
CITY OF EUGENE
210 CHESHIRE AVE.
EUGENE OR, 97401



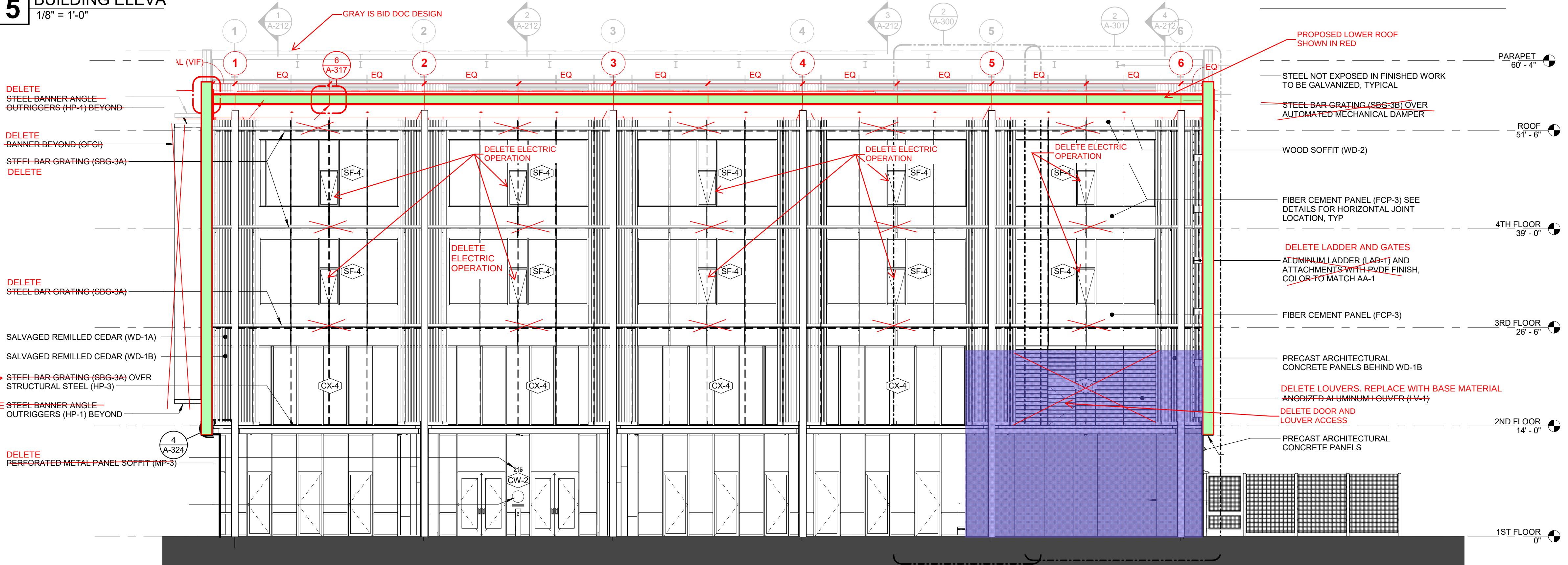
Project Name
EUGENE CITY HALL

Project Address
215 E. 8TH AVE,
EUGENE OR

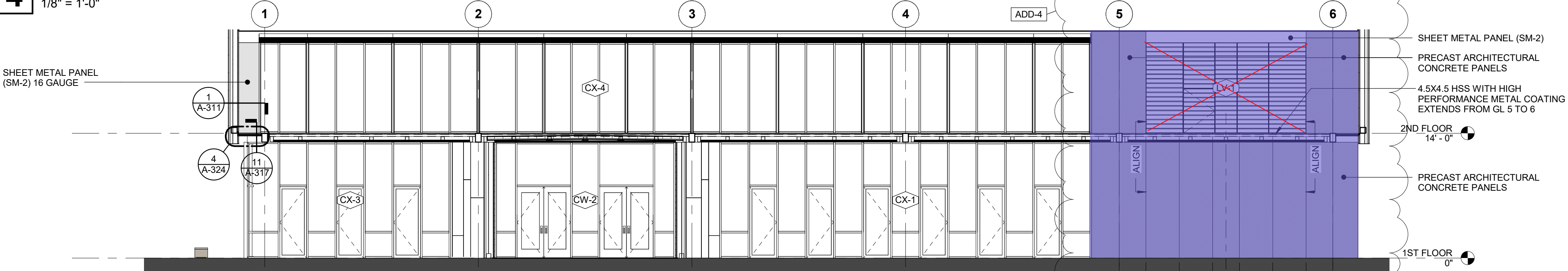
BUILDING
ELEVATIONS - SOUTH



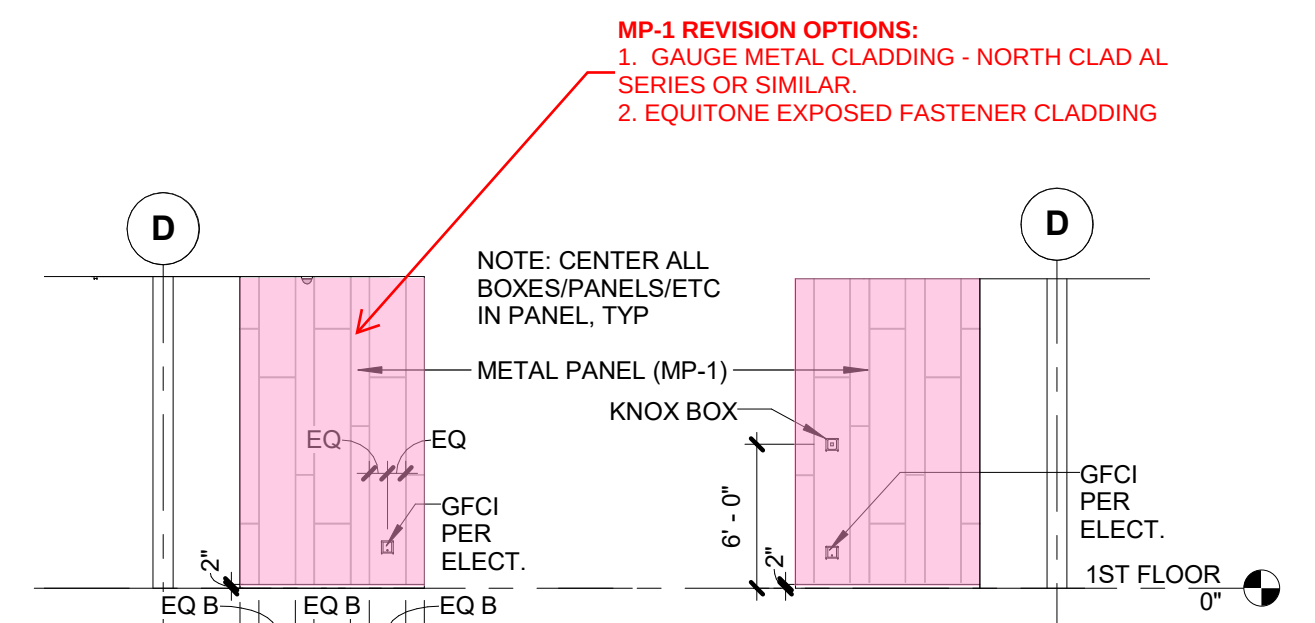
5 BUILDING ELEVATION
1/8" = 1'-0"



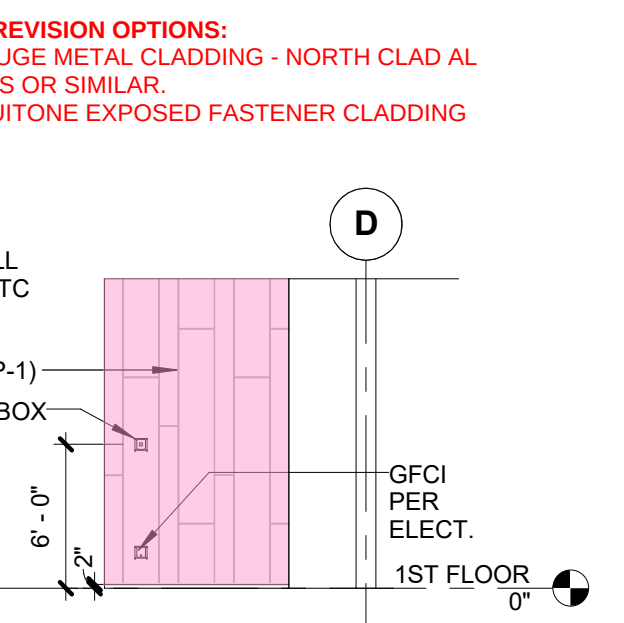
4 BUILDING ELEVATION - SOUTH INTERIOR DOUBLE SKIN WALL
1/8" = 1'-0"



3 BUILDING ELEVATION - SOUTH INTERIOR GLAZING
1/8" = 1'-0"

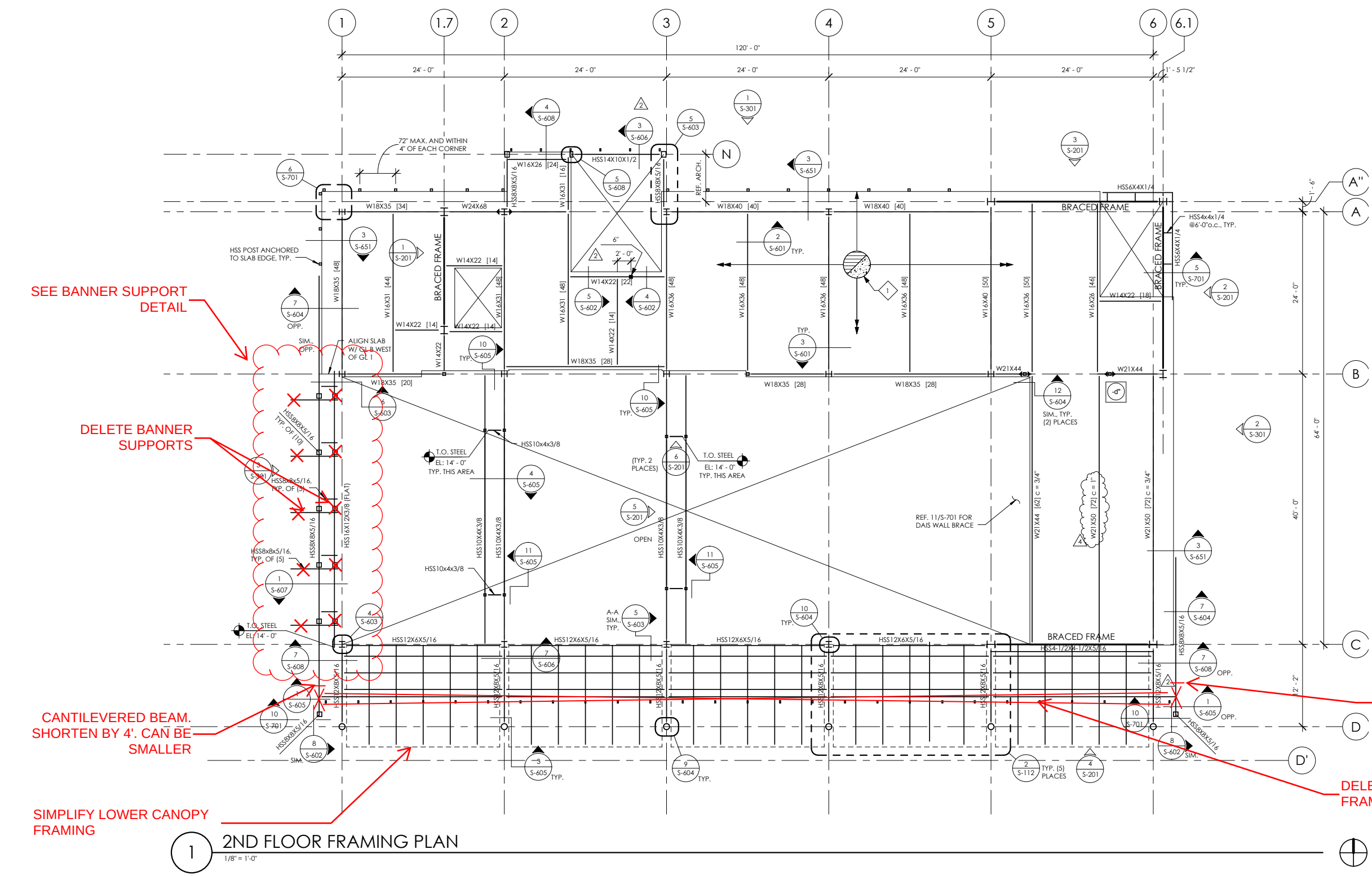
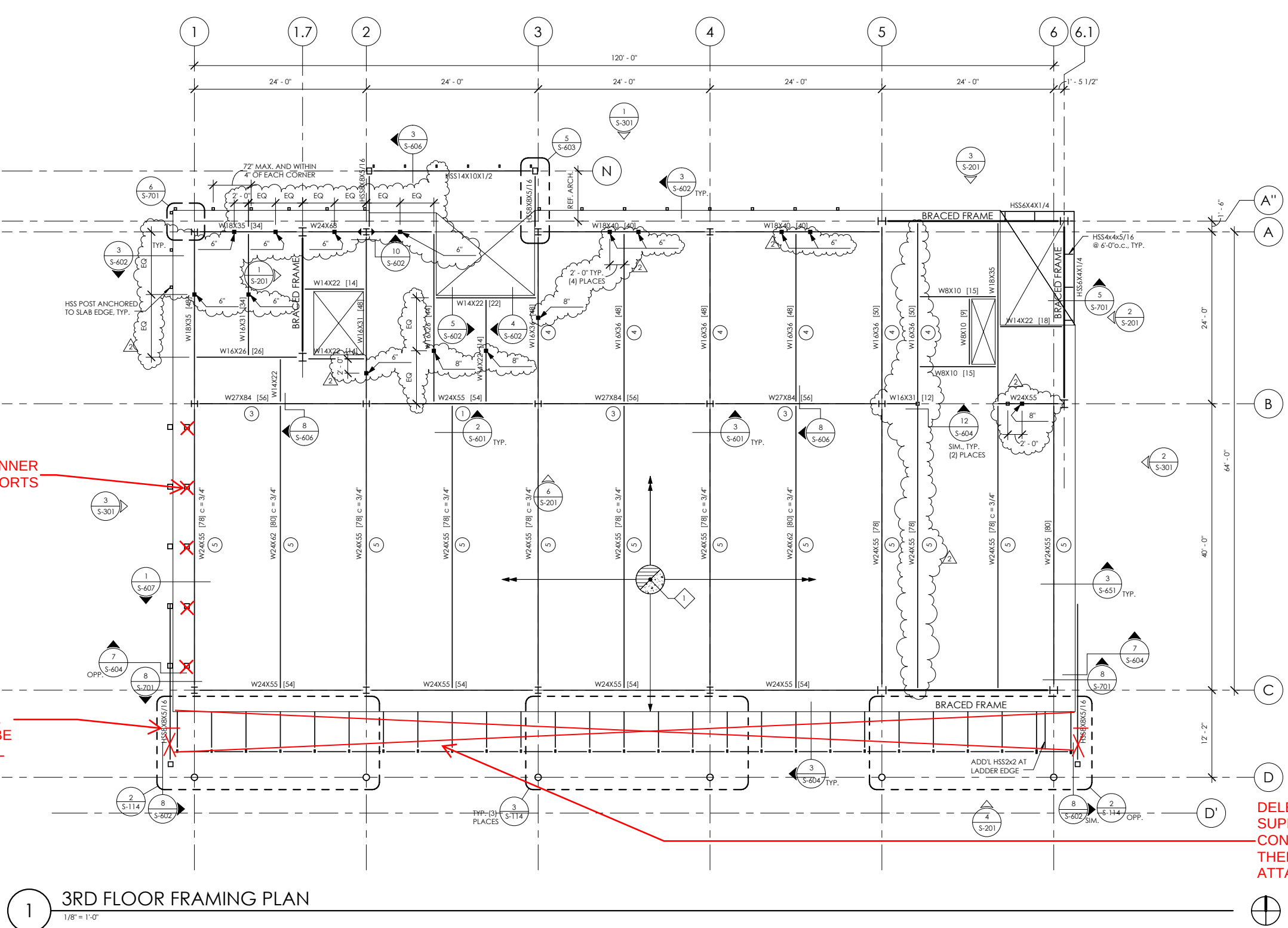
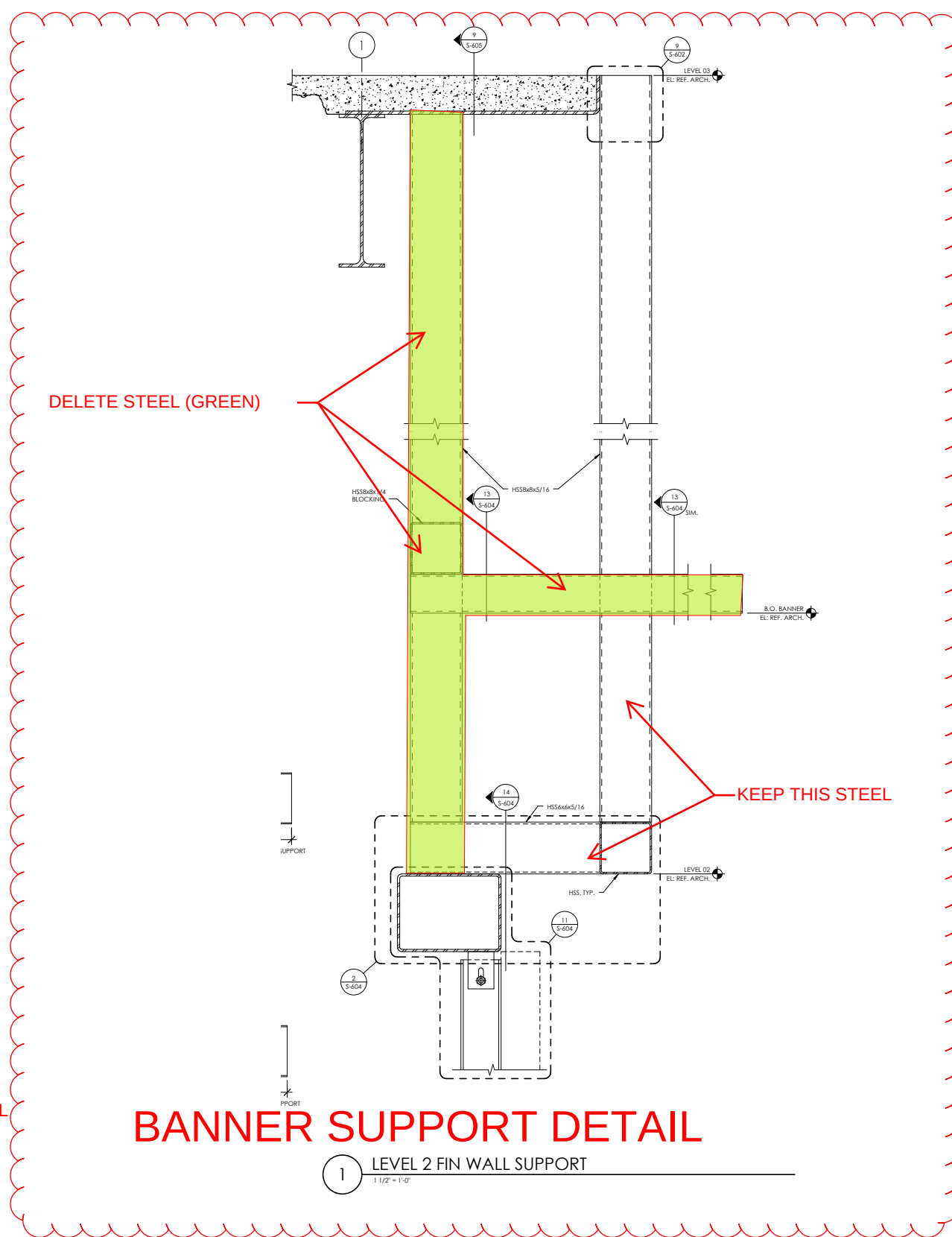
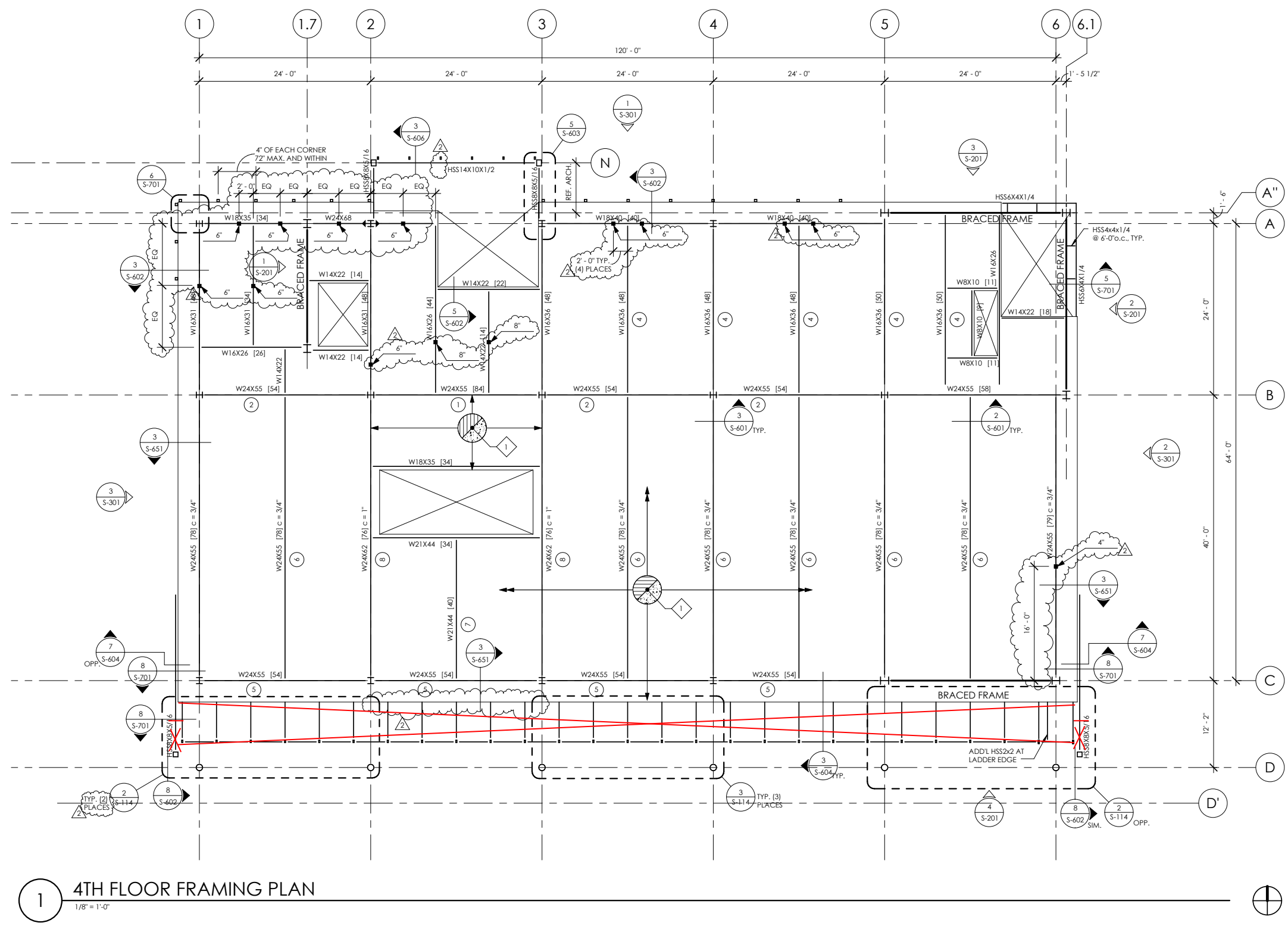
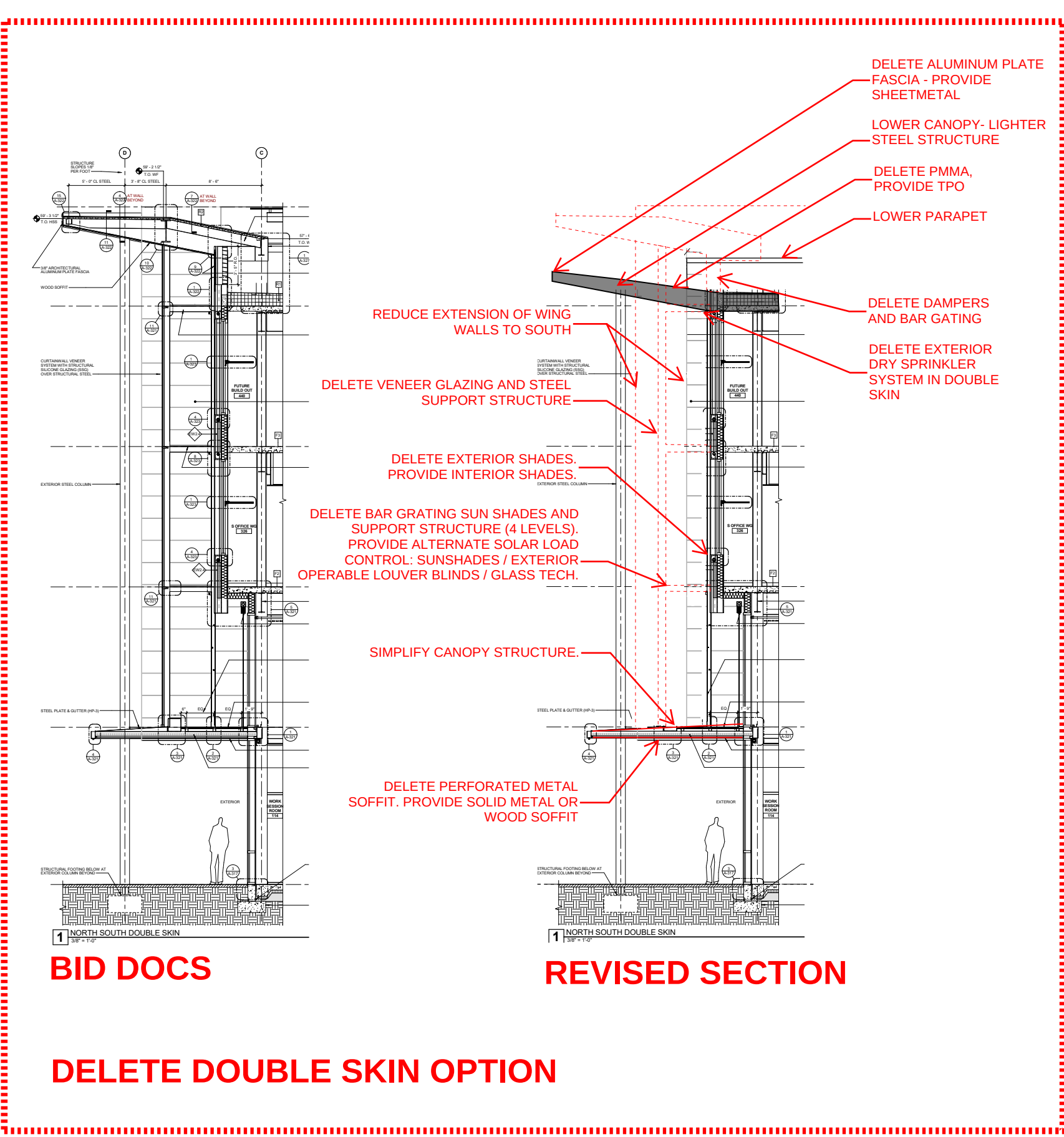
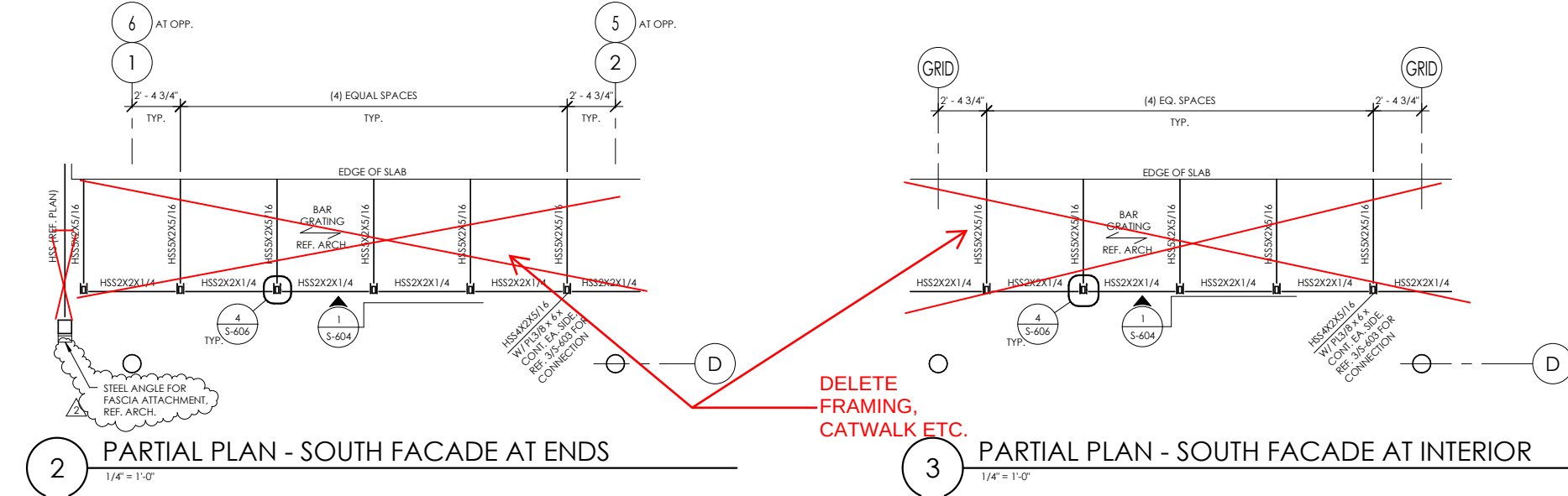


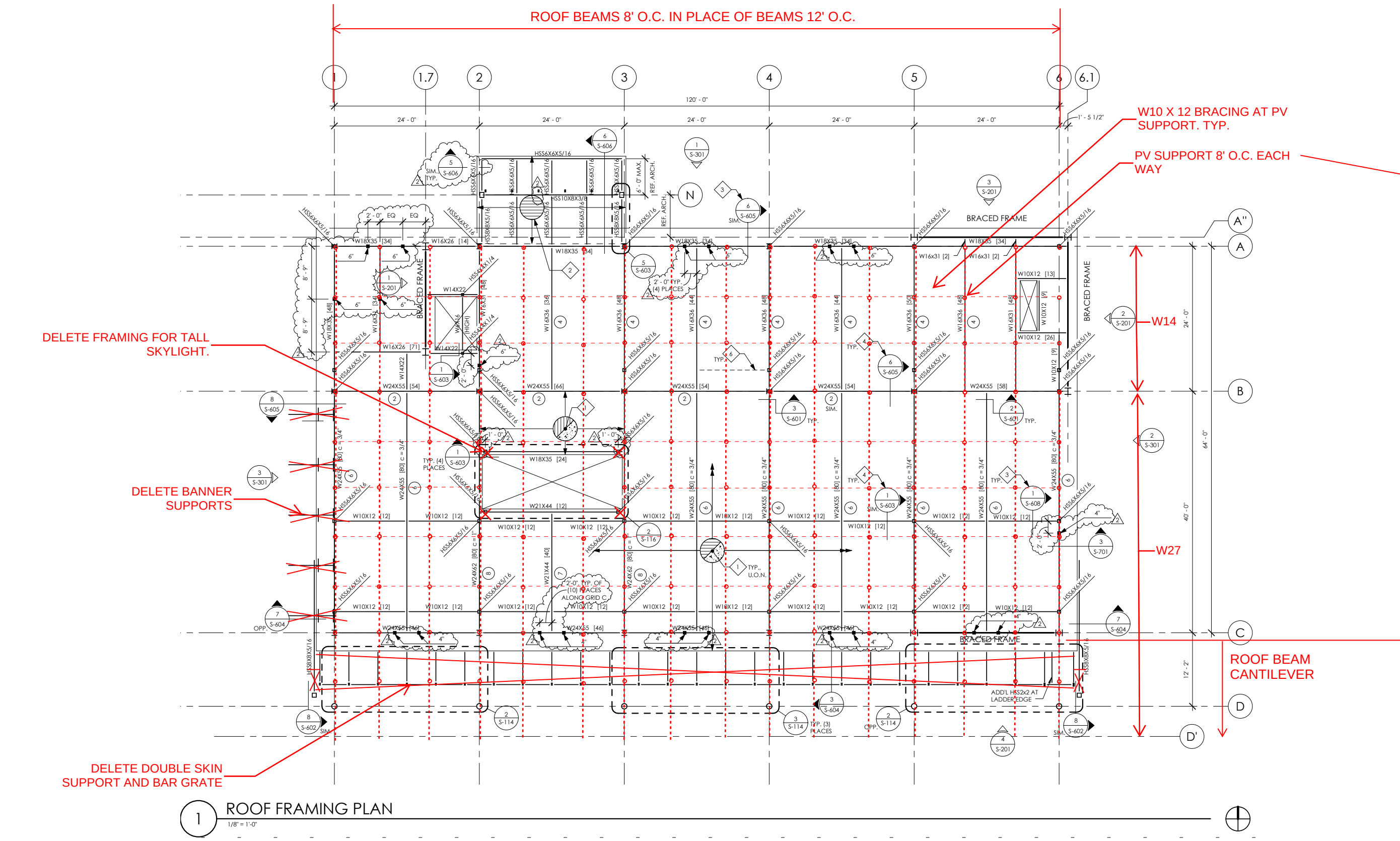
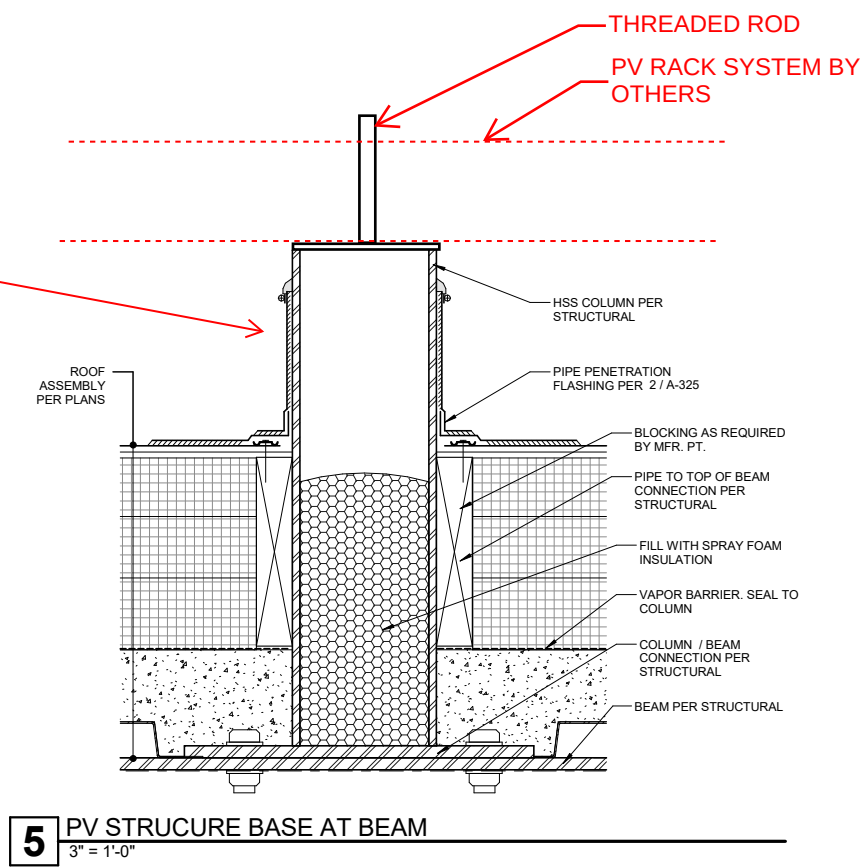
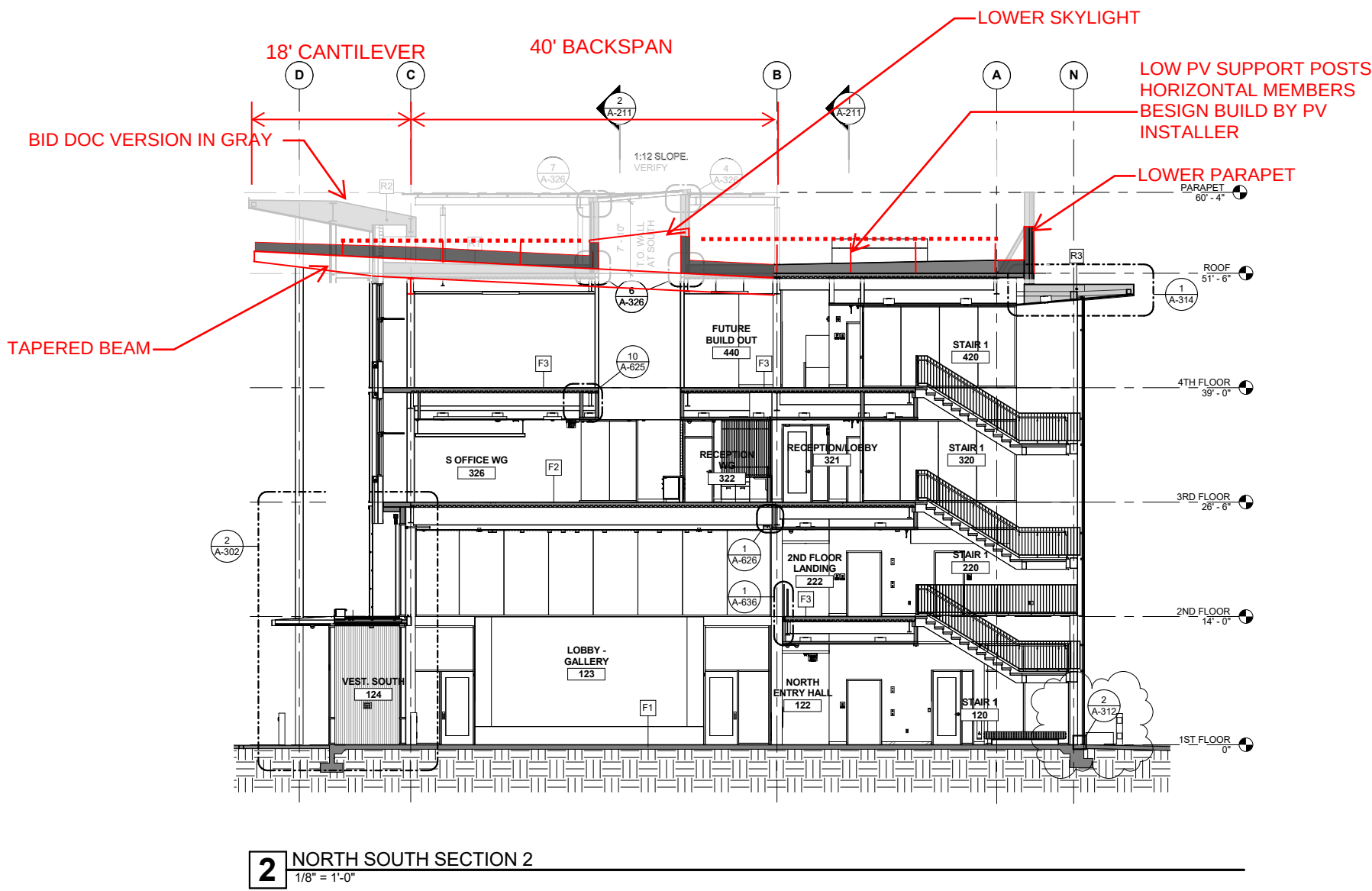
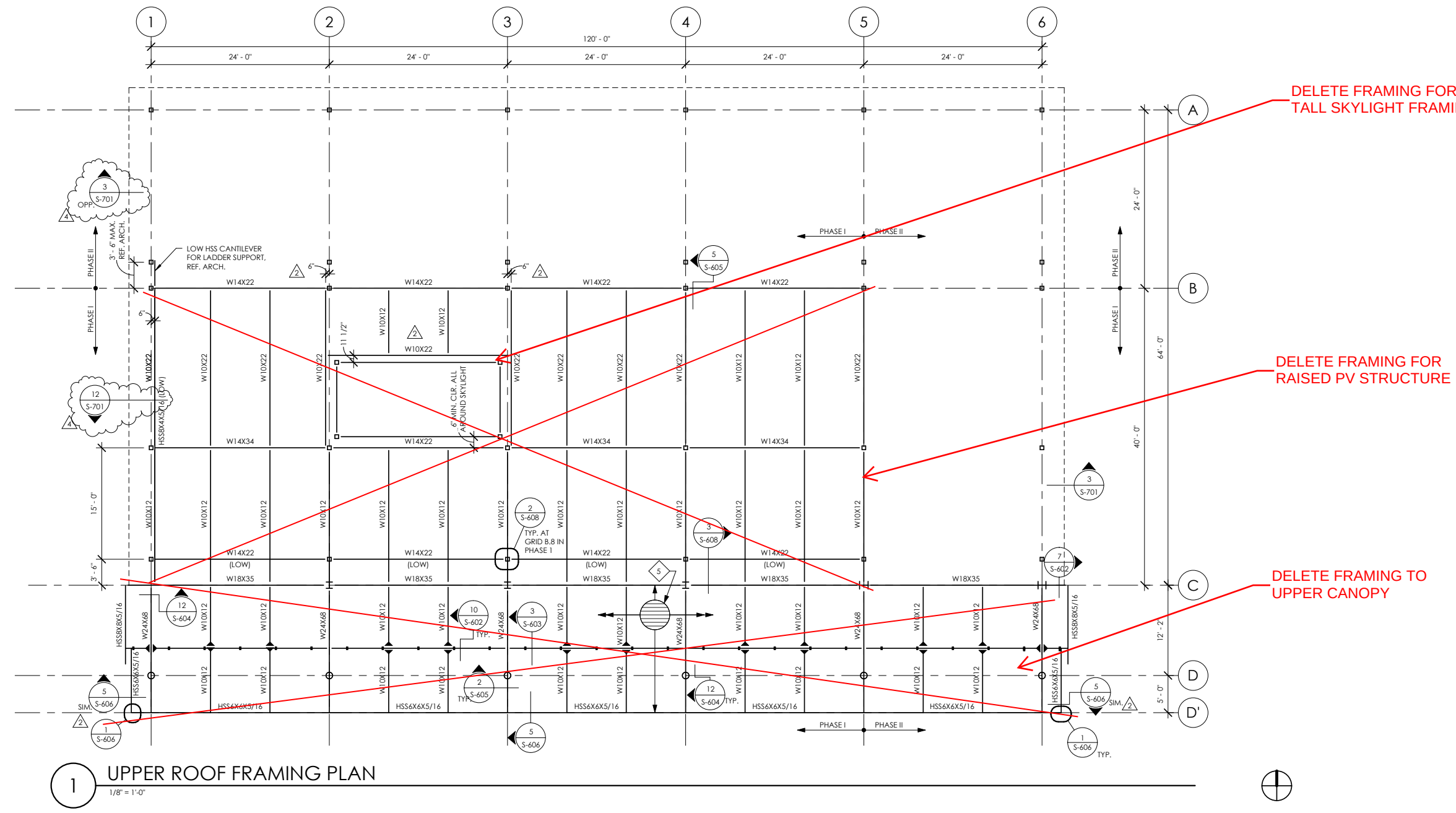
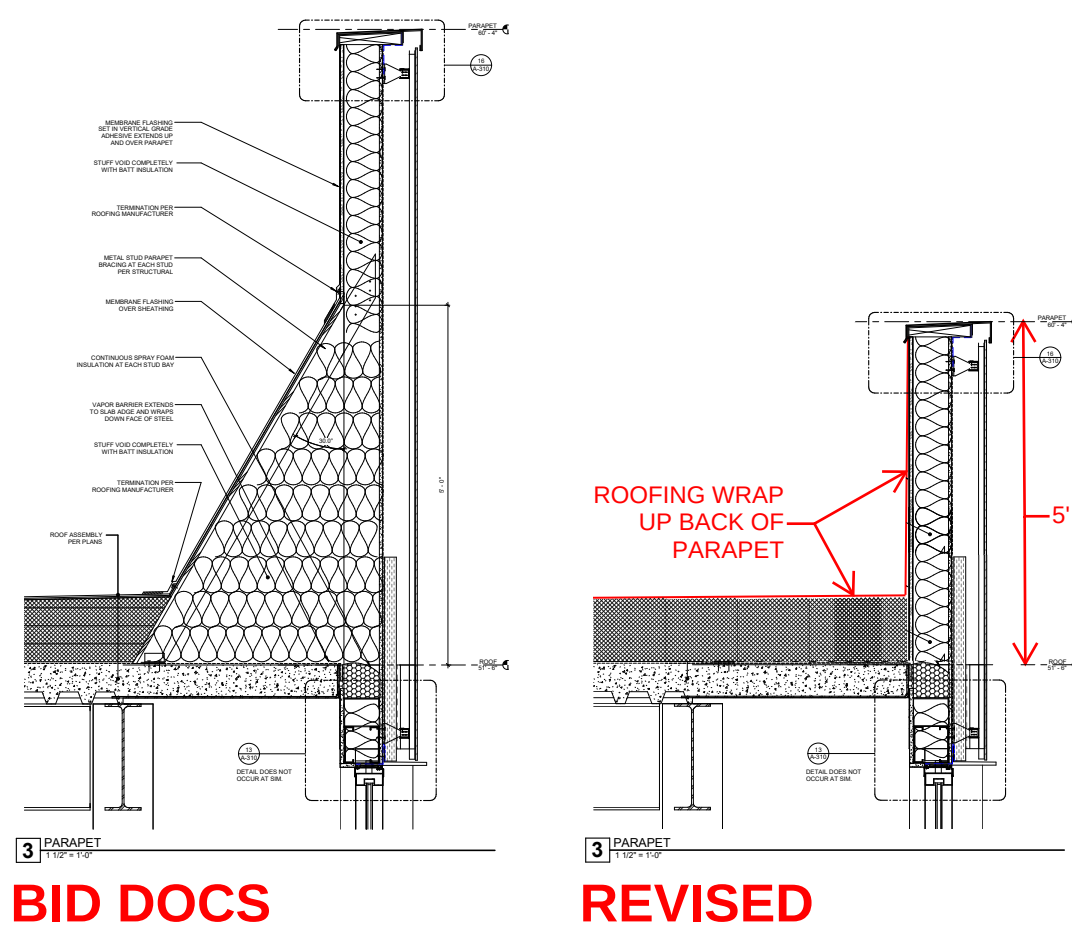
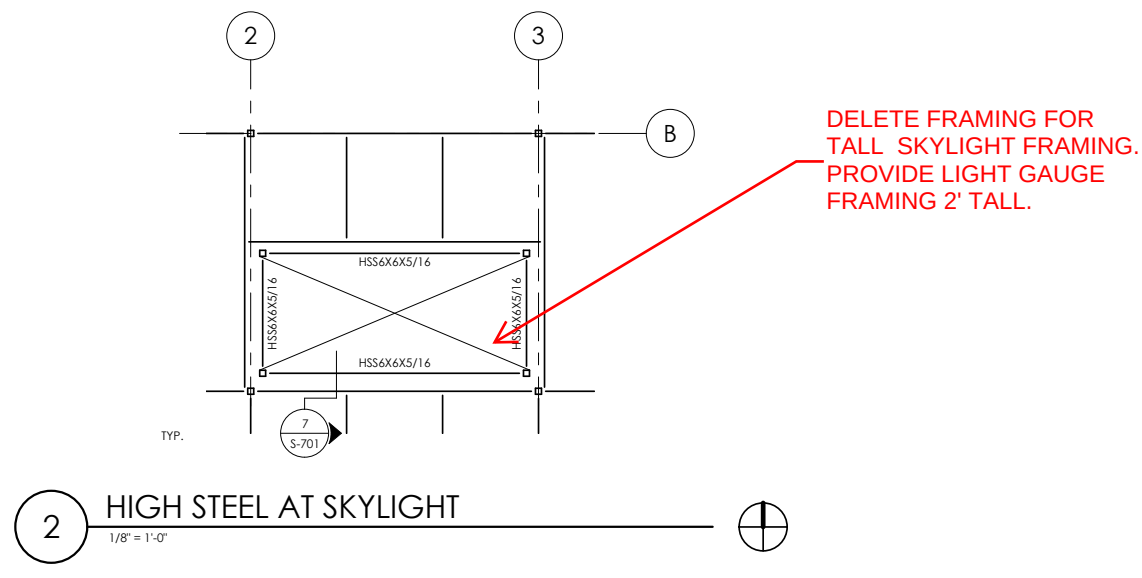
2 S. ENTRANCE - EAST
1/8" = 1'-0"



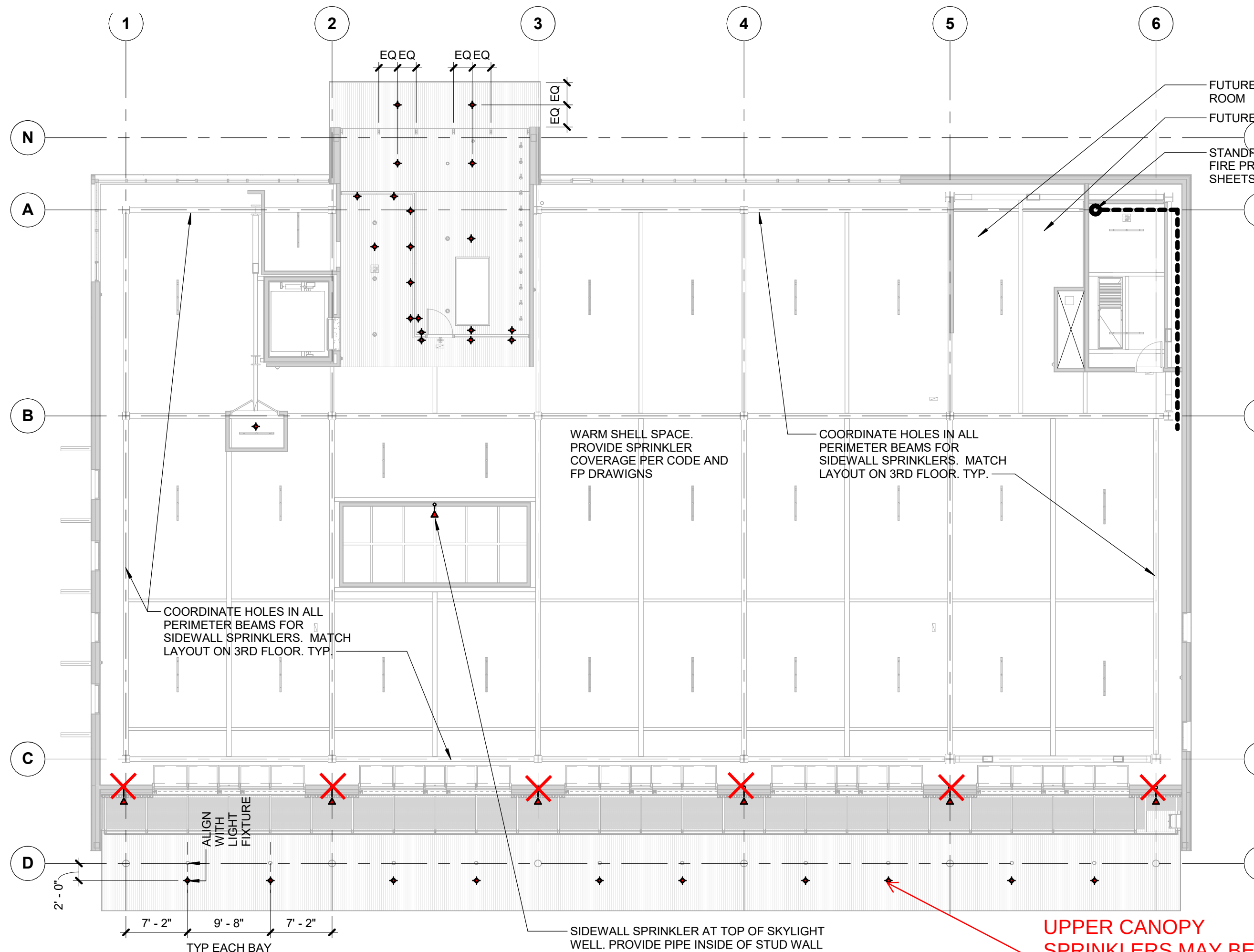
1 S. ENTRANCE - WEST
1/8" = 1'-0"

6/21/2016 5:26:25 PM

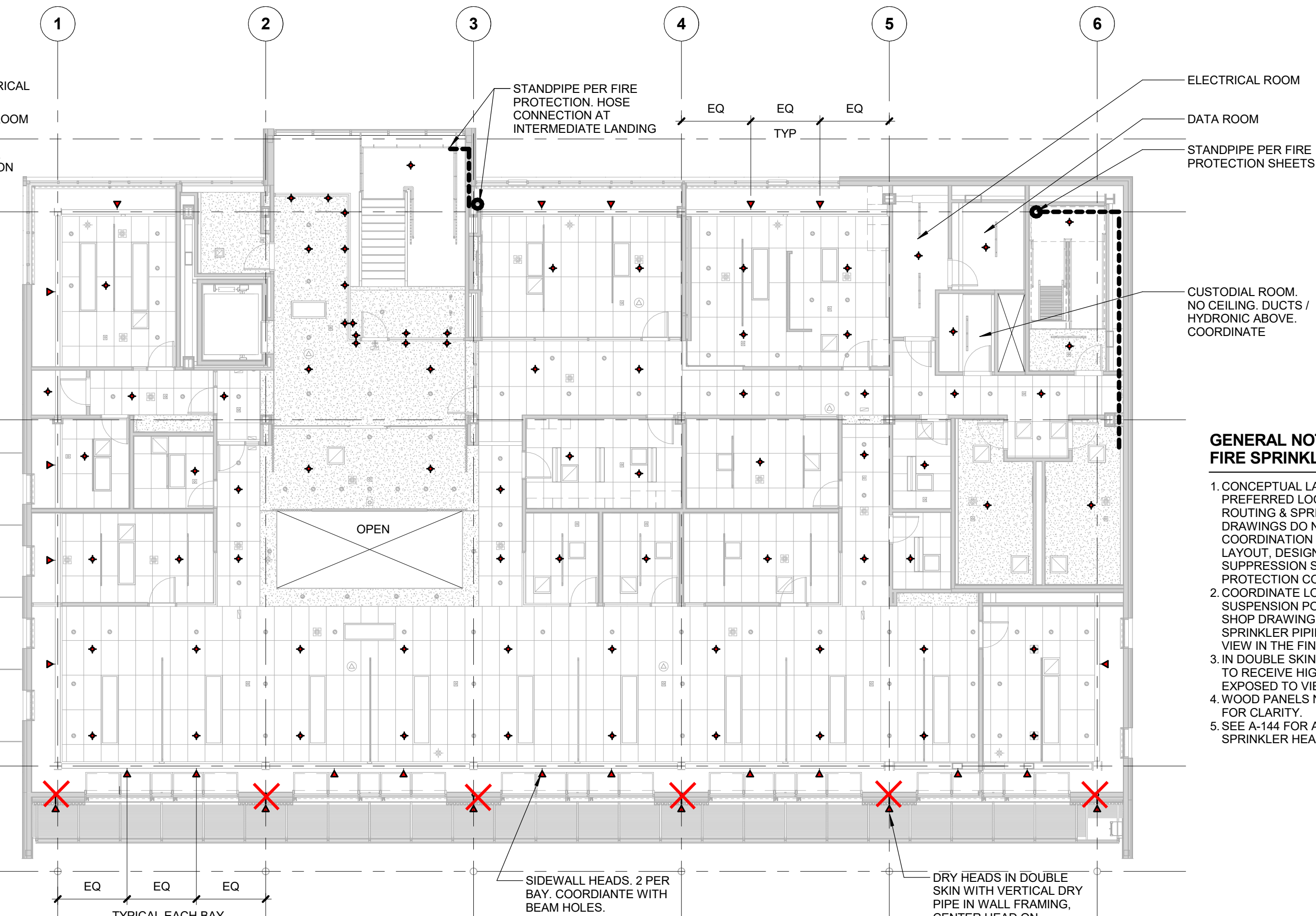




DELETE DOUBLE SKIN OPTION:
STRUCTURAL MARKUP



4TH FLOOR FS CONCEPTUAL DIAGRAM
3/32" = 1'-0"

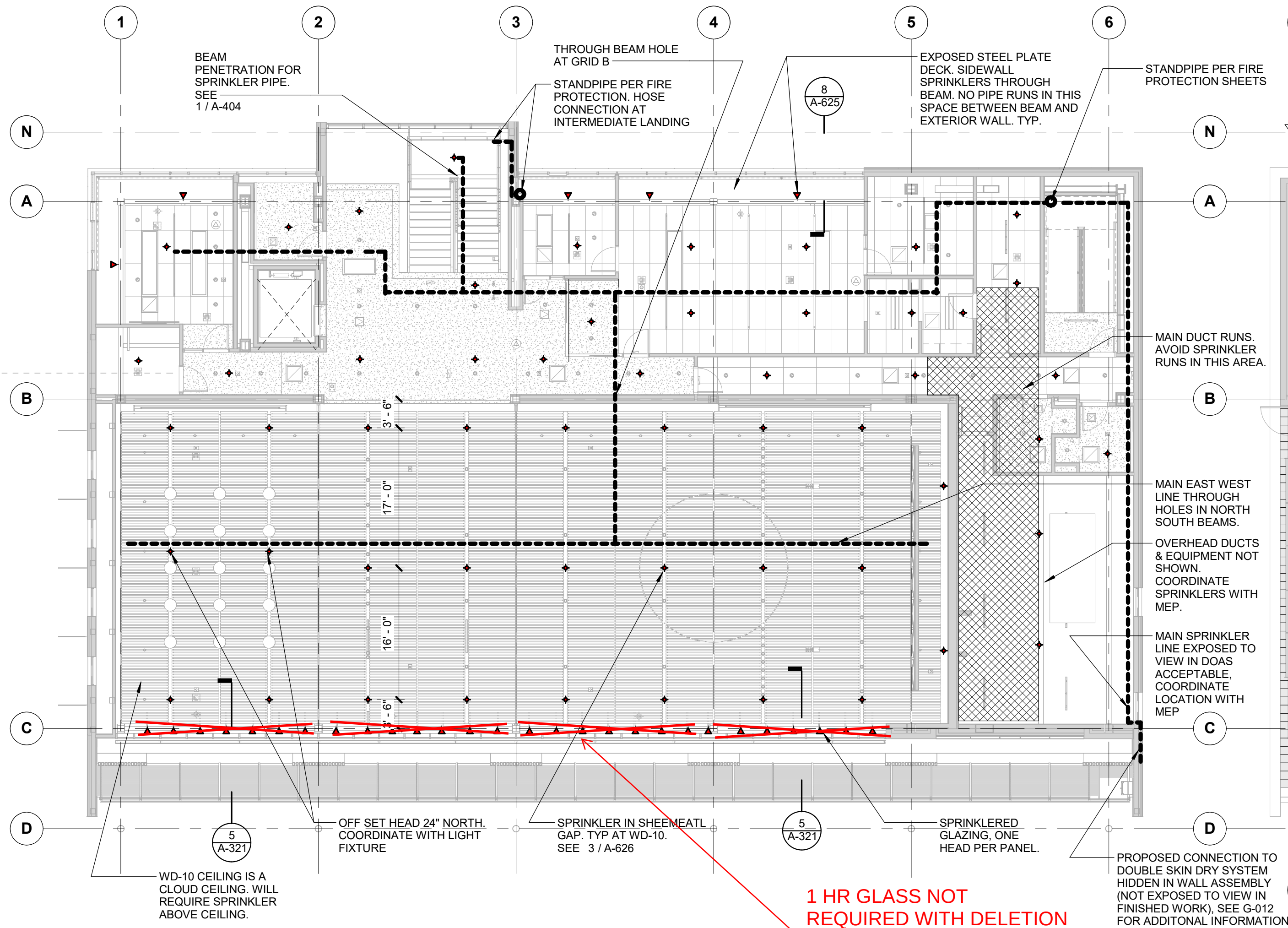


3RD FLOOR FS CONCEPTUAL DIAGRAM
3/32" = 1'-0"

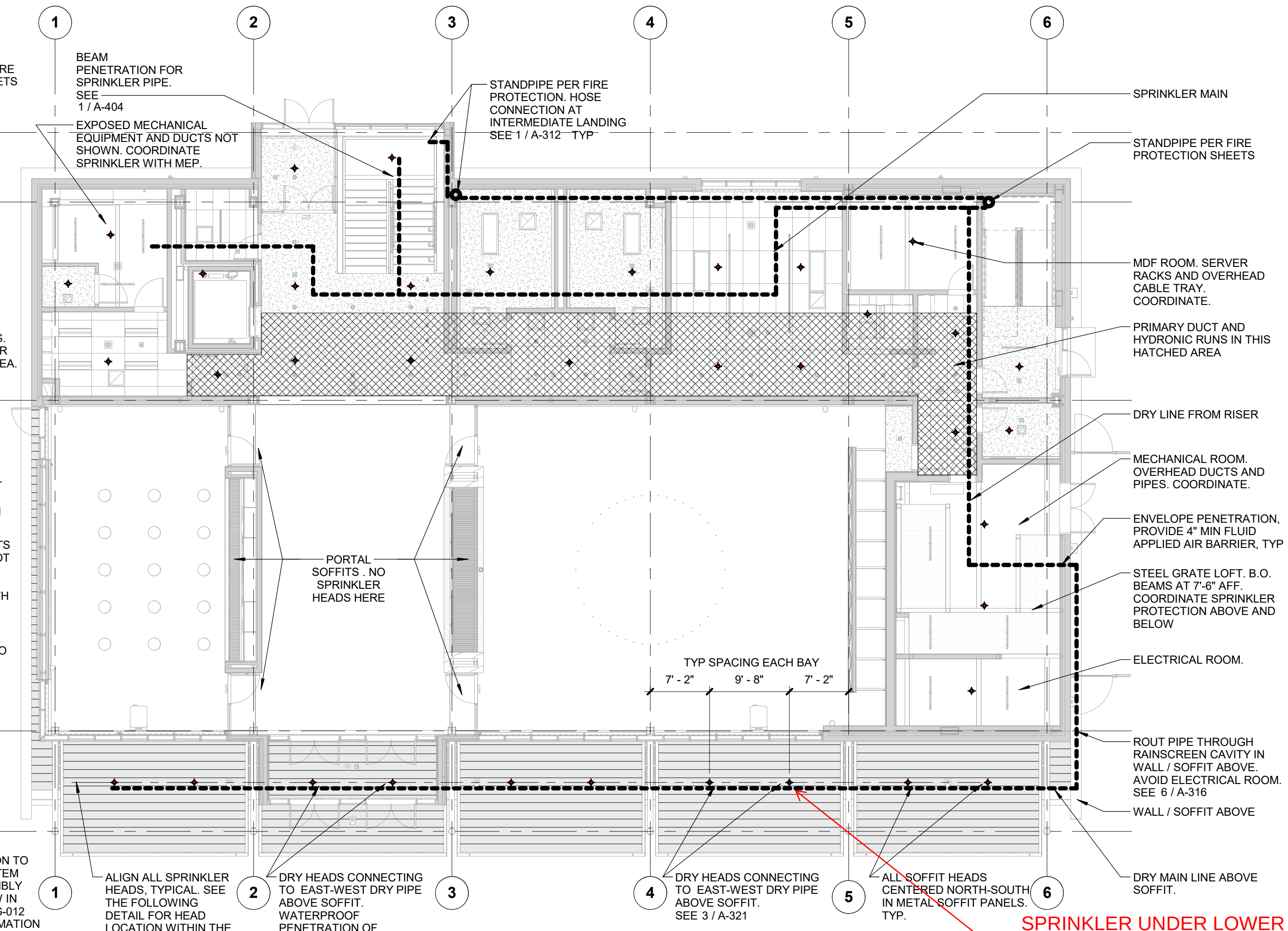
GENERAL NOTES:
FIRE SPRINKLER DIAGRAMS

1. CONCEPTUAL LAYOUT PROVIDED TO SHOW PREFERRED LOCATION OF SPRINKLER PIPE ROUTING & SPRINKLER HEAD LOCATIONS. THESE DRAWINGS DO NOT TAKE PLACE OF FIRE SPRINKLER COORDINATION DRAWINGS & CALCULATIONS. LAYOUT, DESIGN, & QUANTITY OF HEADS FOR FIRE SUPPRESSION SYSTEM TO BE DETERMINED BY FIRE PROTECTION CONTRACTOR.
2. COORDINATE LOCATIONS OF SEISMIC BRACING & SUSPENSION POINTS WITH ARCHITECT DURING SHOP DRAWING REVIEW IN ALL AREAS WHERE FIRE SPRINKLER PIPING OR BRACING IS EXPOSED TO VIEW IN THE FINISHED WORK.
3. IN DOUBLE SKIN, SPRINKLER PIPING AND BRACING TO RECEIVE HIGH PERFORMANCE PAINT WHEN EXPOSED TO VIEW IN FINISHED WORK.
4. WOOD PANELS NOT SHOWN IN SOUTH ELEVATION FOR CLARITY.
5. SEE A-144 FOR ALIGNMENT OF UPPER CANOPY SPRINKLER HEADS.

NOTED SPRINKLER DELETIONS
ARE POSSIBLE IF THE DOUBLE
SKIN IS DELETED. DELETION
OF THE DOUBLE SKIN IS NOT
DIAGRAMMED ON THIS SHEET.



2ND FLOOR FS CONCEPTUAL DIAGRAM
3/32" = 1'-0"



1ST FLOOR FS CONCEPTUAL DIAGRAM
3/32" = 1'-0"

SET	ISSUE	DATE
BID / PERMIT		2016-05-31

2016-09-01
COST REDUCTION
STRATEGIES

PROJECT TRACKING

RBA #: 1309

P.I.C: JOHN ROWELL
PM / PA: K. KNUDSON / P. KING

Owner

CITY OF EUGENE
210 CHESHIRE AVE.
EUGENE OR, 97401

Project Name
EUGENE CITY HALL

Project Address
215 E. 8TH AVE,
EUGENE OR

FIRE SPRINKLER
CONCEPTUAL
LAYOUT

G-011

GENERAL NOTES:
FIRE SPRINKLER DIAGRAMS

1. CONCEPTUAL LAYOUT PROVIDED TO SHOW PREFERRED LOCATION OF SPRINKLER PIPE ROUTING & SPRINKLER HEAD LOCATIONS. THESE DRAWINGS DO NOT TAKE PLACE OF FIRE SPRINKLER COORDINATION DRAWINGS & CALCULATIONS. LAYOUT, DESIGN, & QUANTITY OF HEADS FOR FIRE SUPPRESSION SYSTEM TO BE DETERMINED BY FIRE PROTECTION CONTRACTOR.
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REVISIONS TO THIS SHEET

REV. DATE

2016-09-01
COST REDUCTION
STRATEGIES

PROJECT TRACKING

RBA #: 1309

P.I.C: JOHN ROWELL
PM / PA: K. KNUDSON / P. KING

Owner

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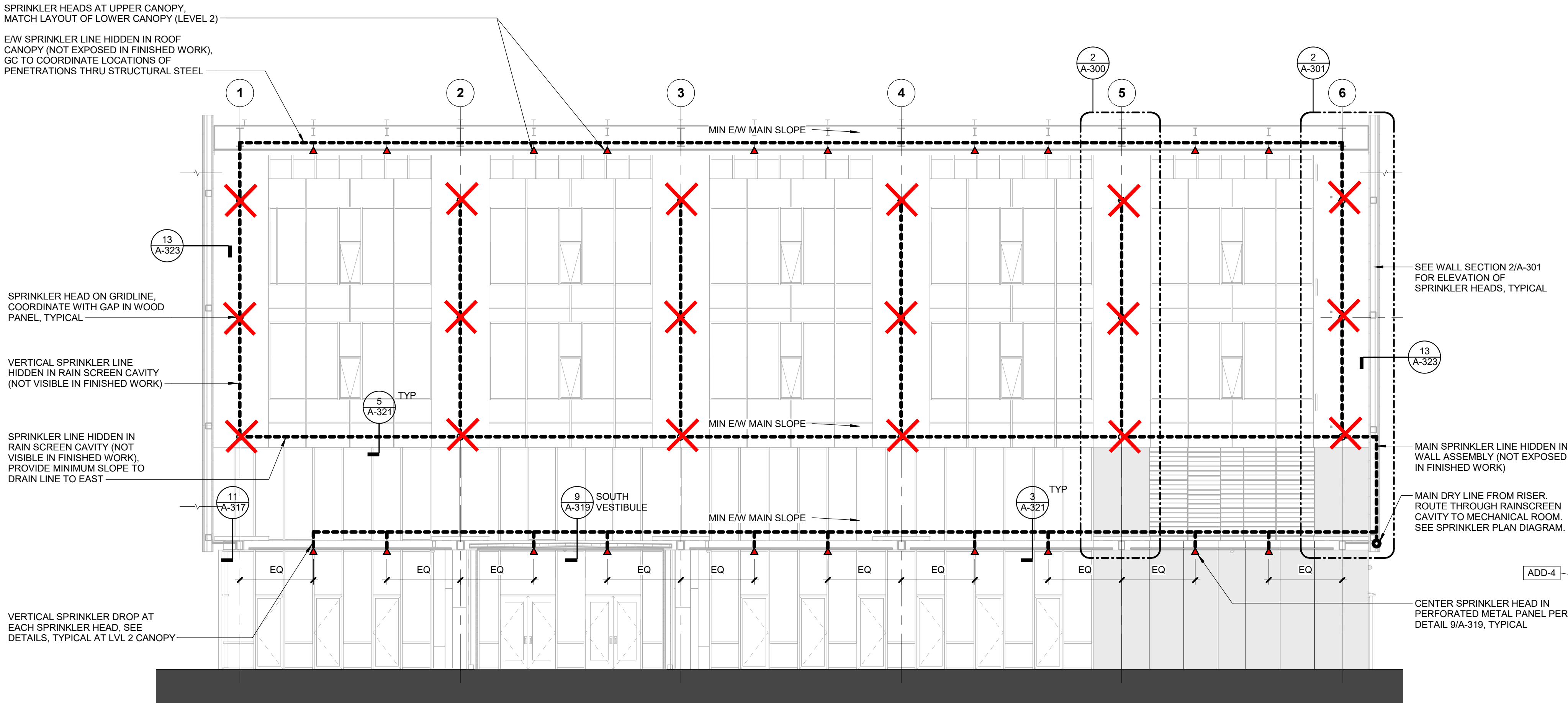


Project Name
EUGENE CITY HALL

Project Address
215 E. 8TH AVE,
EUGENE OR

FIRE SPRINKLER
CONCEPTUAL
LAYOUT

G-012



1 SOUTH DOUBLE SKIN - CONCEPTUAL SPRINKLER ROUTING
1/8" = 1'-0"

EUGENE CITY HALL | COST REDUCTION STRATEGIES | SCHEDULE DIAGRAM

