

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
PI	COVER SHEET
A1	SUMMARY OF PAY ITEMS
A2	ROOF DEMOLITION PLAN
A3	NEW ROOF PLAN
A4	EXTERIOR ELEVATIONS & BUILDING SECTION
R1	REFLECTED SOFFIT PLAN
R2	METAL ROOF DETAILS
R3	FASCIA & SOFFIT DETAILS
S0	METAL ROOF DETAILS
S1	GENERAL NOTES
S2	STEEL INSPECTIONS
S2	FRAMING PLAN AND DETAILS

CONSTRUCTION PLANS ROOF REPLACEMENT

AT
SOUTH SIDE SECONDARY PUMP STATION
6213 SOUTH SHERIDAN ROAD (APPROX)
GPS 36.073222, -95.903817
CITY OF TULSA OKLAHOMA
ENGINEERING SERVICES DEPARTMENT
PROJECT NO. SP 18-03,
ACCOUNT NO. 7403323-542601

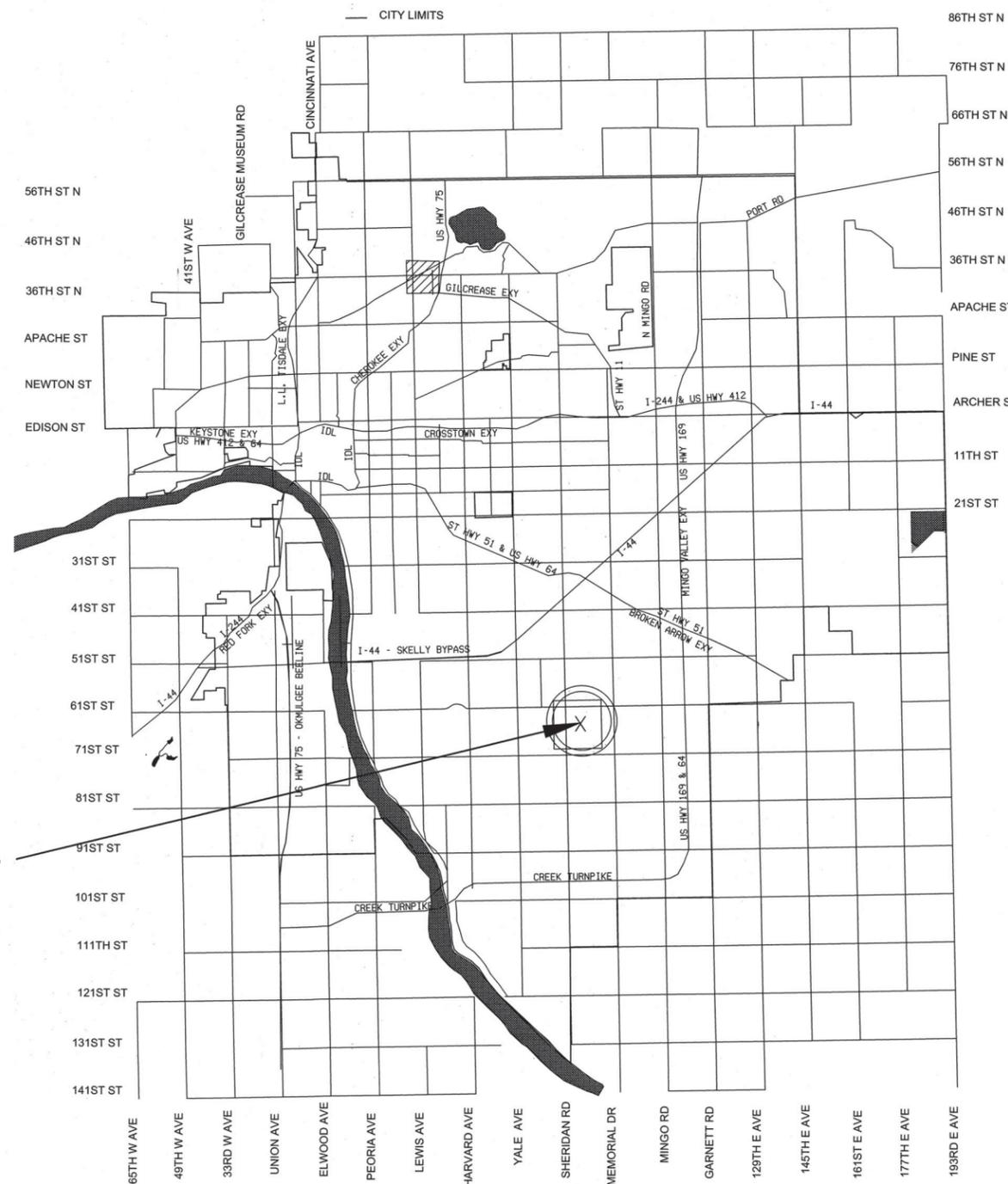
GENERAL NOTES

ALL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH CURRENT CITY OF TULSA CODES AND ORDINANCES, ENGINEERING SERVICES STANDARDS & SPECIFICATIONS (CITY OF TULSA ORDINANCE AND CODES AMENDMENTS SUPERCEDE NATIONAL CODES)

CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL STRUCTURES, LANDSCAPING, PAVING, AND ANY OTHER ITEMS LOCATED WITHIN AND OUTSIDE THE WORK AREA. ANY DAMAGE TO PERMANENT ITEMS INCURRED BY THE CONTRACTOR THROUGH HIS WORK IN THIS CONTRACT SHALL BE REPAIRED TO ORIGINAL CONDITION, BY THE CONTRACTOR. AT HIS OWN EXPENSE.

CONTRACTORS SHALL COORDINATE WITH IDENTIFIED MAINTENANCE OPERATIONS PERSONNEL FOR APPLICATION, SHUT OFF, AND REMOVAL OF ALL UTILITIES.

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES.



SSS PUMP STATION



OKLAHOMA ONE—CALL SYSTEM, INC.
1-800-552-6543
OR DIAL 811

UTILITY COORDINATION

ENGINEERING SERVICES	NUMBER
WATER DESIGN	918-596-9566
WASTEWATER DESIGN	918-596-9564
TRANSPORTATION DESIGN	918-596-9636
TRAFFIC ENGINEERING DESIGN	918-596-9749
STORMWATER DESIGN	918-596-9498
PARKS MAINTENANCE	918-596-2486
OKLAHOMA NATURAL GAS CO.	918-831-8293
COX COMMUNICATIONS	918-286-4666
PUBLIC SERVICE CO. / AEP	918-599-2233
AT&T	918-576-2142
BUILDING AND OPERATIONS	918-596-9389
CALL OKIE	800-522-6543 OR 811



OKLAHOMA CERTIFICATE OF AUTHORITY #911
EXPIRES 7-30-2021.

PLANS PREPARED BY:

CYNTERGY, L.L.C.
810 SOUTH CINCINNATI
SECOND FLOOR
TULSA, OK. 74119
918-877-6000
CYNTERGY ENGINEERING P.L.L.C. CA#3537
EXP. 6-30-22

ROOF CONSULTANTS
5350 E. 46TH ST. SUITE 116
TULSA, OK 74135
918-660-6844



APPROVED BY

[Signature]
CITY ENGINEER

Carston Edwards
DIRECTOR OF WATER & SEWER

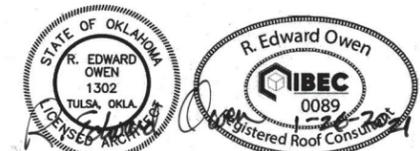
03.03.21
DATE

3-2-21
DATE

PAY ITEM SCHEDULE				
SPEC. NO.	DESCRIPTION	UNIT	QUANTITY	
000	ALL PAY ITEMS	NA	NA	QUANTITIES ARE ARCHITECT/ENGINEER ESTIMATES AND THE UNIT PRICES QUOTED ARE FOR CHANGE IN SCOPE PURPOSES ONLY. CONTRACTORS SHALL HAVE BID EACH ITEM AS COMPLETE, NET IN PLACE, FOR THE TOTAL PROJECT FROM PERSONAL OBSERVATION AND SHALL NOT RELY ON EXTENDED QUANTITIES TO INCREASE PRICE ABOVE ORIGINAL BID. NO EXTENDED QUANTITIES OR ADDITIONAL PAYMENT ALLOWED FOR GROSS QUANTITIES, EXCESS OR UNUSED CONSTRUCTION WASTE.
001	BIDDING DOCUMENTS & DIVISION ONE GENERAL REQUIREMENTS	EA	1	GENERAL REQUIREMENTS: GENERAL CONDITIONS AND MISCELLANEOUS DIRECT AND INDIRECT PROJECT COSTS REQUIRED BY THE CONTRACT DOCUMENTS BUT NOT LISTED AS A SPECIFIC UNIT PRICE PAY ITEM IN THE PROPOSAL INCLUDES, BUT IS NOT LIMITED TO: GENERAL CONDITIONS COVERING MISCELLANEOUS NON-STAFFING COSTS DIRECTLY RELATED TO THE PROJECT, SUCH AS JOB TRAILER, MOBILIZATION, PERMIT FEES (OTHER THAN BUILDING PERMIT PROVIDED BY THE CITY OF TULSA), TEMPORARY UTILITIES, PERMANENT UTILITY CONNECTION FEES, BARRIERS, SCAFFOLDING, EQUIPMENT RENTAL, CLEANING AND DUMPSTERS, ETC. EACH UNIT PRICE WILL BE DEEMED TO INCLUDE AND AMOUNT CONSIDERED BY THE CONTRACTOR TO BE ADEQUATE TO COVER CONTRACTOR'S OVERHEAD AND PROFIT FOR EACH SEPARATELY IDENTIFIED ITEM.
002	012100 OWNER ALLOWANCE	ALLOW	1	ALLOWANCE TO BE INCLUDED IN THE CONTRACT AMOUNT FOR UNFORSEEN WORK TO BE PERFORMED BY THE CONTRACTOR NOT EXPLICITLY DEFINED IN THE CONTRACT DOCUMENTS.
003	061100 REMOVE AND REPLACE DAMAGED WOOD NAILERS	LF	100	UNIT PRICE TO REMOVE EXISTING DAMAGED WOOD NAILERS AND REPLACE WITH NEW TREATED LUMBER OF EQUAL SIZE
004	030130 CONCRETE DECK REPAIR	SF	100	DAMAGED AREAS OF CONCRETE SHALL BE REPAIRED WITH REPAIR MORTAR. CRACKS SHALL BE INJECTED WITH EPOXY AS INSTRUCTED BY THE STRUCTURAL ENGINEER
005	070150 PREPARATION FOR REROOFING REMOVE ROOF AT AREA 1 & 2	SF	3145	REMOVE EXISTING ROOFING SYSTEM DOWN TO STRUCTURAL DECK. REMOVE ROOFING FROM PARAPETS AND OTHER SUBSTRATES. REMOVE EXISTING DESIGNATED COPINGS, FASCIA AND TRIM. REMOVE CANTS, DAMAGED WOOD BLOCKING AND DAMAGED NAILERS. REMOVE EXISTING FASTENERS. RECYCLE MATERIALS WHEN POSSIBLE. PROPERLY DISPOSE OF MATERIALS THAT CANNOT BE RECYCLED IN APPROVED LANDFILL. CONTRACTOR SHALL EXAMINE EXISTING SUBSTRATES AND ADJACENT MATERIALS AND ROOF TOP EQUIPMENT FOR RUST, DAMAGE OR OTHER AREAS OF CONCERN WHICH COULD PREVENT SUCCESSFUL APPLICATION OF NEW ROOFING SYSTEM. NOTIFY ARCHITECT IS AREAS OF CONCERN EXIST.
006	070150 PREPARATION FOR REROOFING REMOVE ROOF AREA 3	SF	515	REMOVE EXISTING ROOFING SYSTEM DOWN TO STRUCTURAL DECK. REMOVE ROOFING FROM PARAPETS AND OTHER SUBSTRATES. REMOVE EXISTING DESIGNATED COPINGS, FASCIA AND TRIM. REMOVE CANTS, DAMAGED WOOD BLOCKING AND DAMAGED NAILERS. REMOVE EXISTING FASTENERS. RECYCLE MATERIALS WHEN POSSIBLE. PROPERLY DISPOSE OF MATERIALS THAT CANNOT BE RECYCLED IN APPROVED LANDFILL. CONTRACTOR SHALL EXAMINE EXISTING SUBSTRATES AND ADJACENT MATERIALS AND ROOF TOP EQUIPMENT FOR RUST, DAMAGE OR OTHER AREAS OF CONCERN WHICH COULD PREVENT SUCCESSFUL APPLICATION OF NEW ROOFING SYSTEM. NOTIFY ARCHITECT IS AREAS OF CONCERN EXIST.
007	074100 PRIME ROOF DECK SURFACE AND INSTALL VAPOR BARRIER	SF	3145	PRIME ROOF DECK SURFACES AND INSTALL VAPOR BARRIER
008	051200 STRUCTURAL STEEL FRAMING W16X31	LF	67	UNIT PRICE FOR NEW STEEL FRAMING, INCLUDING CONNECTIONS AND RELATED MISCELLANEOUS STEEL, INCLUDING INSTALLATION
009	051200 STRUCTURAL STEEL FRAMING W16X40	LF	63	UNIT PRICE FOR NEW STEEL FRAMING, INCLUDING CONNECTIONS AND RELATED MISCELLANEOUS STEEL, INCLUDING INSTALLATION
010	051200 STRUCTURAL STEEL FRAMING HSS6X6X1/4	LF	74	UNIT PRICE FOR NEW STEEL FRAMING, INCLUDING CONNECTIONS, BASE PLATES AND RELATED MISCELLANEOUS STEEL, INCLUDING INSTALLATION
011	054000 COLD-FORMED STEEL FRAMEWORK TO SUPPORT NEW METAL SOFFIT PANELS	SF	943	UNIT PRICE FOR NEW COLD-FORMED STEEL FRAMING FOR SOFFIT, INCLUDING CONNECTORS AND INSTALLATION
012	054000 COLD-FORMED STEEL FURRING FOR NEW METAL FASCIA	SF	200	UNIT PRICE FOR NEW COLD-FORMED STEEL FRAMING FOR FASCIA INCLUDING CONNECTORS AND INSTALLATION
013	053100 22 GAUGE METAL DECK	SF	3948	UNIT PRICE FOR NEW STEEL ROOF DECK, INCLUDING CONNECTORS AND INSTALLATION
014	054400 COLD-FORMED STEEL TRUSSES	LF	5800	UNIT PRICE FOR NEW COLD-FORMED STEEL TRUSS FRAMING SYSTEM, INCLUDING CONNECTORS AND INSTALLATION
015	NOT USED			
016	061400 PLYWOOD CATWALK FOR ATTIC	SF	90	UNIT PRICE FOR NEW PLYWOOD FOR CATWALK, INCLUDING CONNECTORS AND INSTALLATION.
017	074100 2-1/2" ISOCYANURATE ROOF INSULATION MECHANICALLY FASTENED	SF	3948	INSTALL ISOCYANURATE ROOF INSULATION SYSTEM WITH MECHANICAL FASTENERS OVER METAL ROOF DECK.
018	074100 2" ISOCYANURATE ROOF INSULATION WITH NAIL BASE (TOTAL THICKNESS 2-1/2") MECHANICALLY FASTENED	SF	3948	INSTALL ISOCYANURATE ROOF INSULATION SYSTEM WITH MECHANICAL FASTENERS OVER 2-1/2" ISO ROOF INSULATION.
019	074100 ICE & WATER SHIELD UNDERLAYMENT	SF	3948	INSTALL ICE AND WATER SHIELD
020	074100 PREFINISHED STANDING SEAM METAL ROOF PANELS	SF	3948	UNIT PRICE FOR NEW STANDING SEAM METAL ROOFING, INCLUDING INSTALLATION OF SYSTEM.
021	074200 NEW PREFINISHED METAL SOFFIT PANELS	SF	958	FURNISH AND INSTALL NEW METAL SOFFIT PANELS
022	076200 PREFINISHED METAL FASCIA PANELS & TRIM	LF	238	FURNISH AND INSTALL NEW METAL FASCIA PANELS AND TRIM
023	076223 PREFINISHED GUTTER & DOWNSPOUT SYSTEM	EA	1	FURNISH AND INSTALL NEW PREFINISHED 6x6 GUTTER AND TRIM, 4x4 DOWNSPOUTS AND ELBOWS WITH GALVANIZED DUCTILE IRON BOOTS AND GUTTER EXPANSIONS JOINTS.
024	083100 ACCESS PANEL FOR ATTIC	EA	1	FURNISH AND INSTALL NEW ACCESS PANEL IN SOFFIT FOR ATTIC
025	099100 PAINT FOR ATTIC ACCESS PANEL	EA	1	PAINT ATTIC ACCESS PANEL AS DIRECTED BY ARCHITECT
026	220000 PLUMBING	EA	1	ALIGN EXISTING ROOF DRAINS WITH TOP OF DECK FOLLOWING DEMOLITION OF EXISTING ROOFING.
027	230000 HEATING, VENTILATING AND AIR CONDITIONING (HVAC)	EA	1	REMOVE EXISTING EXHAUST FAN.
028	260000 ELECTRICAL	EA	1	DISCONNECT POWER TO EXHAUST FAN TO BE REMOVED.

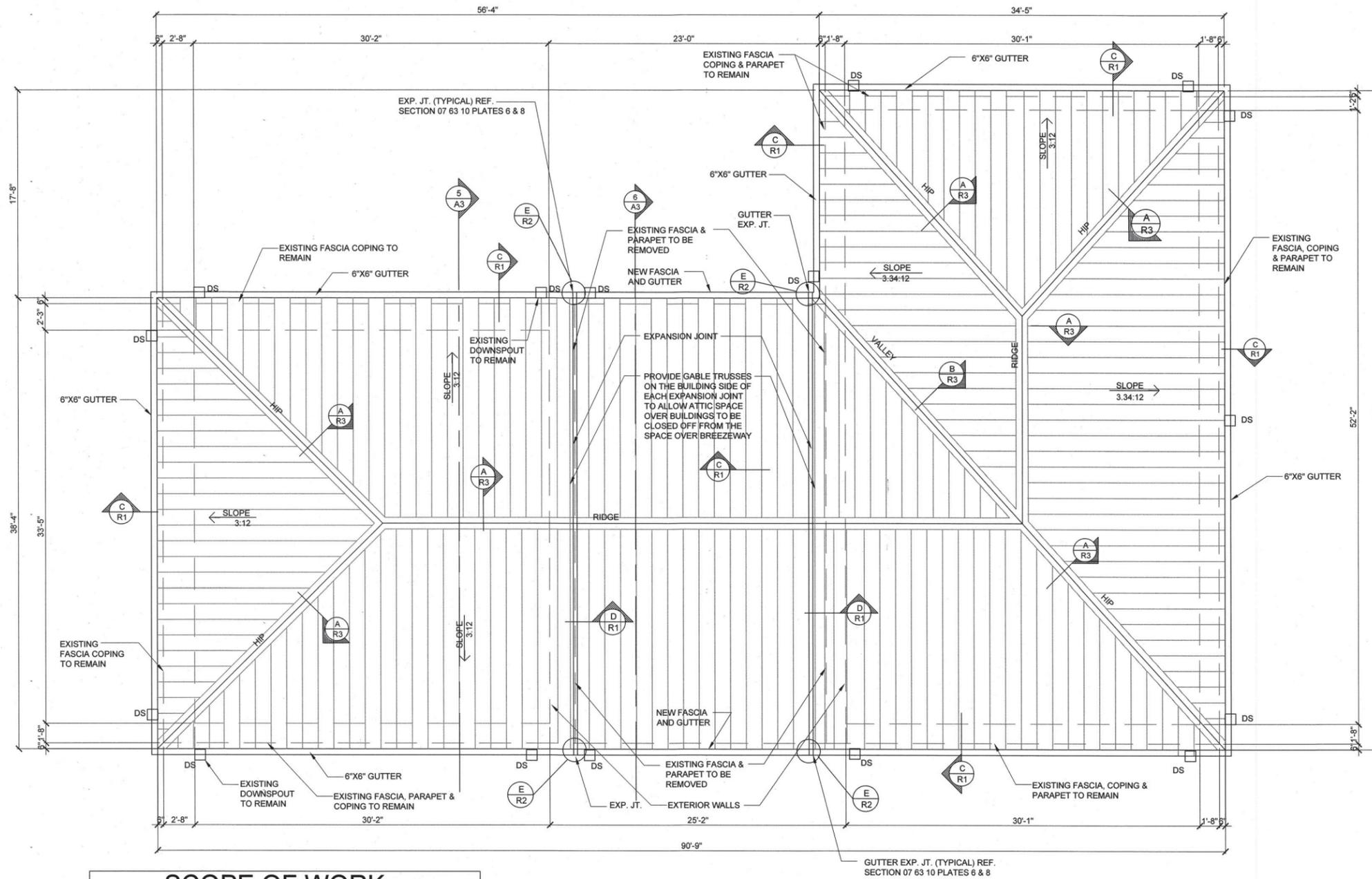
UNIT KEY	
Allow	Allowance
EA	Each
LF	Linear Feet
SF	Square Feet
SQ	Square (100 Square Feet)

SYMBOLS LEGEND	
SLOPE	ROOF SLOPE (NEW)
CORE #	ROOF CORE CUT LOCATION
E.F. (circle with slash)	EXHAUST FAN (TO REMAIN)
E.F. (circle with slash and X)	EXHAUST FAN TO BE REMOVED
RD (circle with dot)	ROOF DRAIN (TO REMAIN)
(Vertical lines symbol)	EXISTING STRUCTURE (TO BE REMOVED)
(Circle with 5 and A1)	PHOTO NUMBER REPORT SHEET NUMBER RE: APPENDIX IN SPECS
(Circle with 5 and A501)	DETAIL NUMBER SHEET NUMBER
DS (square)	DOWN SPOUT
(Vertical lines symbol)	NEW METAL SOFFIT PANELS
(Diagonal lines symbol)	NEW VENTED METAL SOFFIT PANELS
(Diagonal lines symbol)	3/4" PLYWOOD CATWALK IN ATTIC ABOVE AREA 3 NEW SOFFIT



OKLAHOMA CERTIFICATE OF AUTHORITY #911
EXPIRES 7-30-2021

ROOF REPLACEMENT AT SOUTH SIDE SECONDARY PUMP STATION	
PROJECT NO. SPI8-03 CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT	
PLANS AND ESTIMATES PREPARED BY: CYNERGY, L.L.C. ROOF CONSULTANTS 5350 E. 46TH ST. SUITE 116 TULSA, OK 74135 918-660-6844	
MARK	REVISION BY DATE
PLAN SCALE:	DRAWN: EAE
AS NOTED	DESIGNED: LLV
PROFILE SCALE:	SURVEY
HORIZONTAL:	PROJ. MGR. <i>LLV</i>
VERTICAL:	LEAD ENGR. <i>LLV 2/21</i>
FILE:	FIELD MGR. <i>LLV 2/21</i>
ATLAS PAGE NO.	RECOMMENDED: <i>LLV 2-21</i>
SHEET NAME:	DESIGN MANAGER
	CITY ENGINEER: <i>[Signature]</i>
	DATE: <i>3/3/21</i>
	SHEET 1 OF 11 SHEETS
	SHEET NO.
PAY ITEM SCHEDULE	
PI	



- SCOPE OF WORK**
1. INSTALL (1) LAYER 2-1/2" ISOCYANURATE FOAM INSULATION AND (1) 2" LAYER ISOCYANURATE FOAM INSULATION WITH 1/2" NAIL BASE TOP LAYER MECHANICALLY FASTENED TO NEW METAL DECK.
 2. INSTALL ICE & WATER SHIELD UNDERLAYMENT ON NAIL BASE.
 3. INSTALL STANDING SEAM METAL ROOF SYSTEM. REFER TO SECTION 07 41 00.
 4. INSTALL GUTTERS & DOWN SPOUTS

ROOF AREA 3,948 S.F.	EXPANSION JT. 77 L.F.
GUTTER LENGTH 295 L.F.	HIP LENGTH 124 L.F.
DOWN SPOUT LENGTH 169 L.F.	VALLEY LENGTH 24 L.F.
RIDGE LENGTH 76 L.F.	FASCIA AREA 1,550 S.F.

1 NEW ROOF PLAN
3/16" = 1'-0"



STATE OF OKLAHOMA
R. EDWARD OWEN
1302 TULSA, OKLA.
LICENSED ARCHITECT

R. Edward Owen
IBEC
0089
Registered Roof Contractor

OKLAHOMA CERTIFICATE OF AUTHORITY #911
EXPIRES 7-30-2021

ROOF REPLACEMENT AT
SOUTH SIDE SECONDARY PUMP STATION

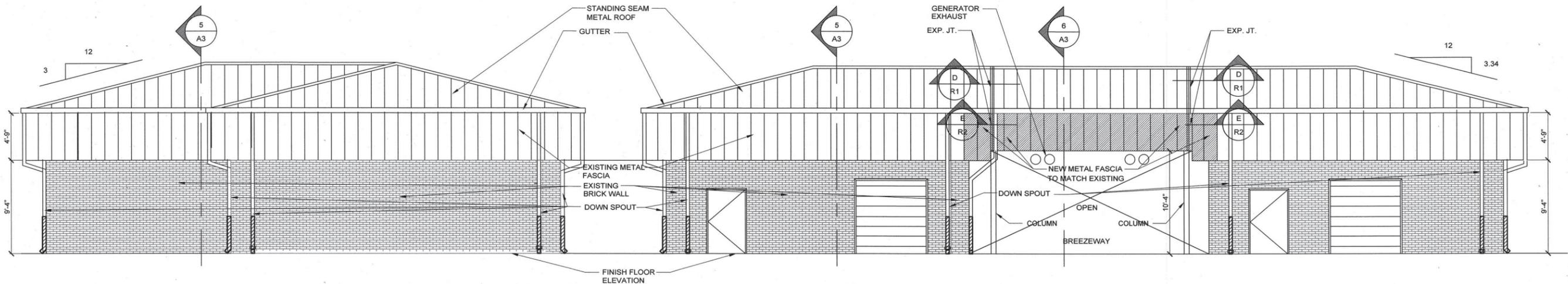
PROJECT NO. SPI8-03
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
CYNERGY, L.L.C.

ROOF CONSULTANTS
5350 E. 46TH ST. SUITE 116
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918-660-6844

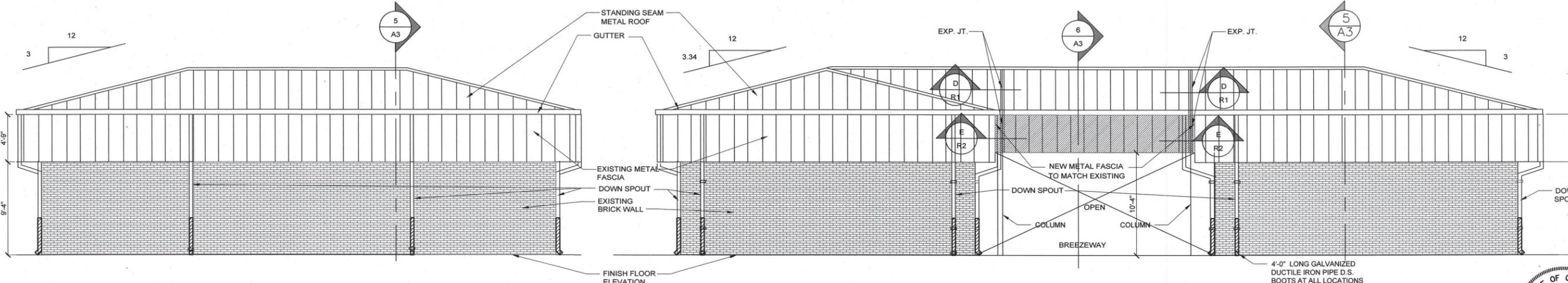
MARK	REVISION	BY	DATE	PLAN SCALE:	DRAWN	EAE	APPROVED:
				AS NOTED	DESIGNED	LLV	
				PROFILE SCALE:	SURVEY		
				HORIZONTAL:	PROJ. MGR. <i>MA 2/21</i>		
				1" =	LEAD ENGR. <i>max 2/21</i>		
				VERTICAL:	FIELD MGR. <i>Ben 2/21</i>		
				1" =	RECOMMENDED:		
				FILE:	DESIGN MANAGER		
				DRAWING:			
				ATLAS PAGE NO.			
				SHEET NAME:			
				NEW ROOF PLAN			

CITY ENGINEER
[Signature]
DATE: 3/13/21
SHEET 3 OF 11 SHEETS
SHEET NO. **A2**



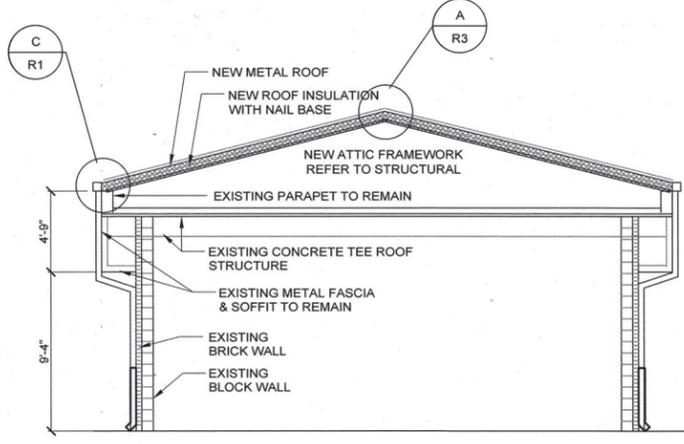
1 WEST ELEVATION
3/16" = 1'-0"

2 SOUTH ELEVATION
3/16" = 1'-0"

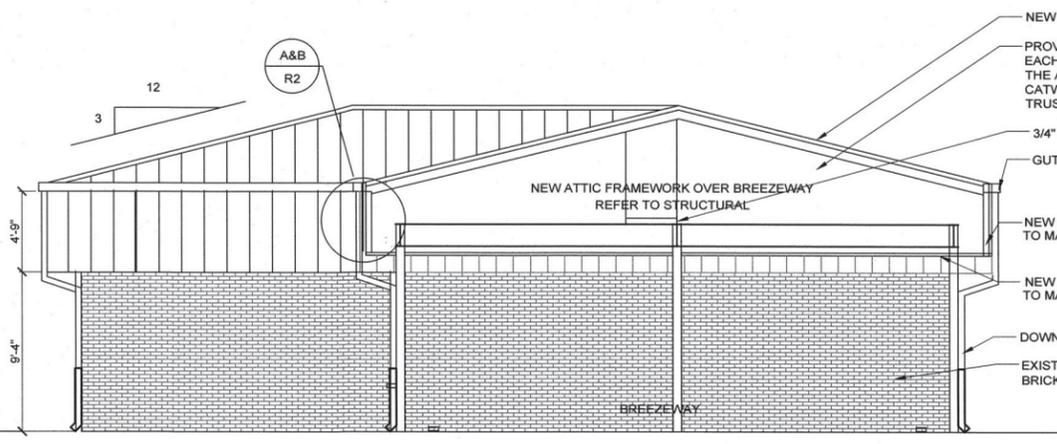


3 EAST ELEVATION
3/16" = 1'-0"

4 NORTH ELEVATION
3/16" = 1'-0"



5 BUILDING SECTION
3/16" = 1'-0"



6 BUILDING SECTION AT BREEZEWAY
3/16" = 1'-0"

STATE OF OKLAHOMA
R. EDWARD OWEN
1302 TULSA, OKLA.
REGISTERED ARCHITECT

R. Edward Owen
IBEC
0089
Registered Roof Consultant

OKLAHOMA CERTIFICATE OF AUTHORITY #911
EXPIRES 7-30-2021

ROOF REPLACEMENT AT
SOUTH SIDE SECONDARY PUMP STATION

PROJECT NO. SP18-03
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

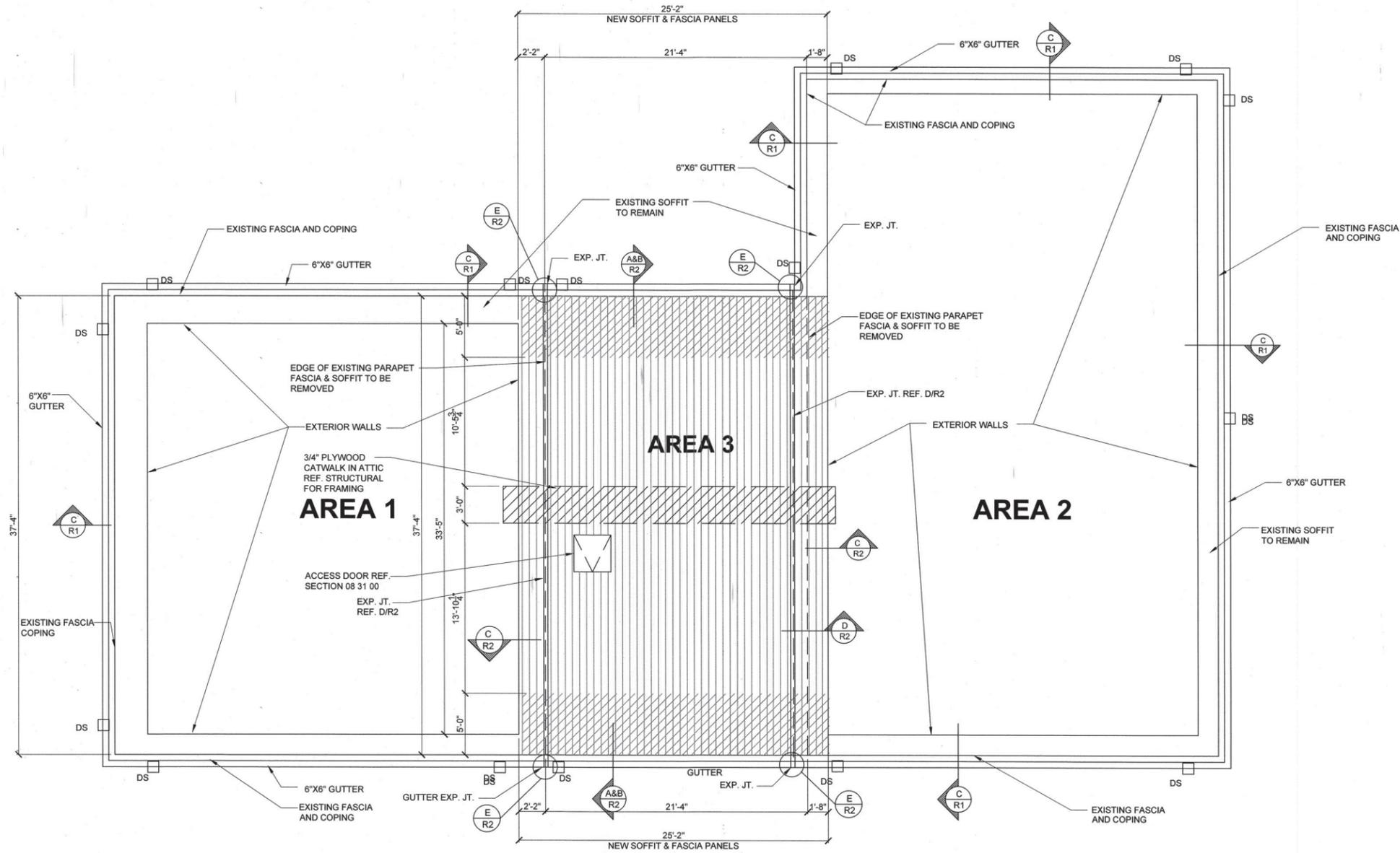
PLANS AND ESTIMATES PREPARED BY:

CYNERGY, L.L.C.
ROOF CONSULTANTS
5350 E. 46TH ST. SUITE 116
TULSA, OK 74135
918-660-6844

MARK	REVISION	BY	DATE	PLAN SCALE:	DRAWN	EAE	APPROVED:
				AS NOTED	DESIGNED	LLV	
				PROFILE SCALE:	SURVEY		
				HORIZONTAL:	PROJ. MGR.	1/1 2/21	
				FIELD MGR.	LEAD ENGR.	2/21 2/21	
				RECOMMENDED:	DESIGN MANAGER	1/1 2-21	
				FILE:	DRAWING:		
				ATLAS PAGE NO.			
				SHEET NAME:			
				EXTERIOR ELEVATIONS AND BUILDING SECTION			

A3

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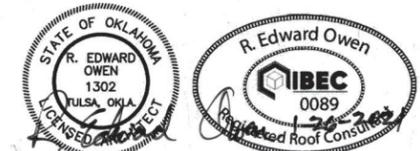


SCOPE OF WORK

1. INSTALL NEW SOFFIT PANELS ON NEW ROOF FRAMEWORK IN AREA 3 AT 10'-4" A.F.F. PROVIDE 5'-0" VENTED FLUSH SOFFIT PANELS EVERY OTHER ROW AT NORTH & SOUTH EAVES.
2. INSTALL ACCESS DOOR IN NEW SOFFIT UNDER RIDGE.
3. PROVIDE 3/4" PLYWOOD CATWALK SURFACE IN AREA 3 UNDER RIDGE ABOVE SOFFIT.
4. EXISTING SOFFIT & FASCIA TO REMAIN AT DESIGNATED AREAS OF AREAS 1 & 2.

1 REFLECTED SOFFIT PLAN

3/16" = 1'-0"



OKLAHOMA CERTIFICATE OF AUTHORITY #911
EXPIRES 7-30-2021

ROOF REPLACEMENT AT
SOUTH SIDE SECONDARY PUMP STATION

PROJECT NO. SPI8-03
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
CYNERGY, L.L.C.

ROOF CONSULTANTS
5350 E. 46TH ST. SUITE 116
TULSA, OK 74135
918-660-6844

MARK	REVISION	BY	DATE	PLAN SCALE:	DRAWN	EAE	APPROVED:
				AS NOTED	DESIGNED	LLV	
				PROFILE SCALE:	PROJ. MGR.	NA	
				HORIZONTAL:	LEAD ENGR.	3/21	
				VERTICAL:	RECOMMENDED:	2-21	
				FILE:	DRAWING:		
				ATLAS PAGE NO.:			
				SHEET NAME:			
				REFLECTED SOFFIT PLAN			

SHEET 5 OF 11 SHEETS
SHEET NO. **A4**

DESIGN CRITERIA

1. THE STRUCTURAL DESIGN IS BASED ON THE DESIGN REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2015 EDITION.

2. ROOF DESIGN LOADS

LIVE LOAD	20	PSF
CATWALK LIVE LOAD	20	PSF
DEAD LOADS		
	MAX	MIN
METAL ROOFING	2.5	PSF
NAIL BASE	1	PSF
INSULATION	12	PSF
METAL DECKING	2.5	PSF
TRUSSES AND BRIDGING	3	PSF
MISC	1	PSF
TOTAL DEAD LOAD	22	PSF
SNOW LOADS AND COEFFICIENTS		
SNOW EXPOSURE FACTOR	1.0	
GROUND SNOW	10	PSF
ROOF SNOW	10	PSF
IMPORTANCE FACTOR	1.0	
THERMAL FACTOR	1.2	

3. LATERAL LOADS

WIND LOADS AND COEFFICIENTS	
ULTIMATE DESIGN WIND VELOCITY	115 MPH
NOMINAL DESIGN WIND VELOCITY	90 MPH
EXPOSURE	C
WIDTH OF EDGE ZONE	5'-6"
BUILDING CATEGORY	II
INTERNAL PRESSURE COEFFICIENT	+/- 0.18
DESIGN WIND PRESSURES	
MWFRS	27.22 PSF
WALLS	RE:1-50
ROOF	RE:2-50

COMPONENTS & CLADDING - WALLS

TRIBUTARY AREA ≤ 10 FT ²	31.94 PSF
INTERIOR ZONE	39.42 PSF
EXTERIOR ZONE	
TRIBUTARY AREA ≥ 500 FT ²	24.45 PSF
INTERIOR ZONE	24.45 PSF
EXTERIOR ZONE	

ROOF UPLIFT RE:2-50

COMPONENTS AND CLADDING

SEISMIC DESIGN

f_{ps}	1.0
f_{ps}	0.131
S_s	0.069
SITE CLASS	D
S_{ps}	0.14
S_{pi}	0.11
SEISMIC DESIGN CATEGORY	B

BASIC SEISMIC FORCE RESISTING SYSTEM:
ORDINARY REINFORCED MASONRY SHEAR WALLS
ANALYSIS PROCEDURE:
EQUIVALENT LATERAL FORCE PROCEDURE

DESIGN BASE SHEAR	35 K
C_s	0.07
R	2

COLD FORMED STEEL FRAMING

- COLD FORMED STRUCTURAL STEEL FRAMING SHALL CONFORM TO THE AMERICAN IRON AND STEEL INSTITUTE (A.I.S.I.) "DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", MOST CURRENT ADOPTED EDITION.
- ALL FRAMING MEMBERS SHALL BE FINISHED WITH A CORROSION RESISTANT COATING, CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 AND THE FOLLOWING MATERIAL PROPERTIES.

FRAMING MEMBER	GAUGE	MINIMUM YIELD
STUDS, JOISTS	18,20	33 KSI
STUDS, JOISTS	10,12,14,16	50 KSI
TRACKS	18,20	33 KSI
SOLID BLOCKING SAME AS STUDS		

- ALL COLD FORMED STEEL FRAMING SHALL BE FASTENED WITH EITHER SELF-DRILLING SCREWS OR WELDING AS SHOWN ON THE CONSTRUCTION DOCUMENTS. WIRE TYING OF THE COMPONENTS IS NOT PERMITTED. ALL WELDS ARE TO BE PAINTED WITH ZINC RICH PAINT.
- ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS USING E70XX ELECTRODES IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) STANDARD D1.3.
- ATTACH NON BEARING STUDS TO STEEL FRAMING WITH VERTICAL DEFLECTION CLIPS.
- ALL COLD FORMED STEEL FRAMING MEMBERS SHALL HAVE A FLANGE WIDTH OF 1 5/8" AND A LIP WIDTH OF 1/2", U.N.O. ON PLANS AND DETAILS.
- COLD FORMED SECTIONS ARE PER SSMA STANDARDS. THE EXAMPLE DESIGNATION IS AS FOLLOWS:
A B C D
362 S 162 33

A=MEMBER DEPTH EXAMPLES: (362x.01=3.62=3 5/8") (600x.01=6.00=6")
B=STYLE DESIGNATION:
S=STUD OR JOIST, T=TRACK, U=CHANNEL, F=FURRING CHANNEL
C=FLANGE WIDTH EXAMPLE: (162x.01=1.62=1 5/8")
D=MATERIAL THICKNESS IN MILS (33x.001=0.33 IN);
22GA=.0269=27,
20GA DRYWALL=.0296=30,
20GA STRUCTURAL=.0329=33,
18GA=.0428=43,
16GA=.0538=54,
14GA=.0677=68,
12GA=.0966=97

- BRIDGING OF AXIAL AND TRANSVERSE LOADED STUD FRAMING SHALL BE ACCOMPLISHED BY EITHER COLD FORMED CHANNELS RUN HORIZONTALLY THROUGH THE STUD PUNCHOUTS AND ATTACHED AT EACH STUD OR BY 2" MINIMUM WIDE STEEL STRAPS RUN HORIZONTALLY, ON BOTH SIDES OF STUDS, AND ATTACHED TO EACH STUD. THE VERTICAL SPACING OF THE BRIDGING SHALL BE AT A MINIMUM OF 4'-0" O.C.

GENERAL

- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY SUPPORT AND STABILITY OF EXISTING STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
- COORDINATE ALL DIMENSIONS WITH FLOOR PLAN, NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND OPENINGS THROUGH CONCRETE, MASONRY, OR STUD WALLS AND CONCRETE FLOORS WITH ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
- SHOP DRAWINGS MUST INDICATE CHANGES TO CONSTRUCTION DOCUMENTS. THE CHANGES MUST BE CLEARLY IDENTIFIED. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR CHANGES SHOWN ON SHOP DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL CHANGES TO THE DESIGN PROVIDED ON SHOP DRAWINGS. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGN.
- PROJECT SPECIFICATIONS, IF PROVIDED, ARE PART OF THE CONSTRUCTION DOCUMENTS AND ARE TO BE USED IN CONJUNCTION WITH THE DRAWINGS.
- VERIFY ALL CONDITIONS, EXISTING AND NEW, SHOWN ON THE CONSTRUCTION DOCUMENTS PRIOR TO PROCEEDING WITH WORK. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITTEN FORM. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR WORK DONE IN THESE AREAS WITHOUT CLARIFICATION IN WRITING FROM THE ARCHITECT/ENGINEER.
- ALL PHASES OF CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE BUILDING CODE(S) NOTED IN "DESIGN CRITERIA".
- DIMENSIONS SHOWN ON CONSTRUCTION DOCUMENTS TAKE PRIORITY OVER SCALED DIMENSIONS. IN SOME CASES PLANS AND DETAILS MAY NOT BE DRAWN TO SCALE FOR CLARITY.
- DETAILS LABELED "TYPICAL" ON THESE DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER OF ANY CONDITIONS NOT APPLICABLE TO THESE "TYPICAL" DETAILS.
- DO NOT LOAD THE CONCRETE SLAB ON GRADE WITH ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR ERECTION EQUIPMENT LOADS. SHOULD THE CONTRACTOR REQUIRE ERECTION EQUIPMENT TO BE PLACED ON SLAB ON GRADE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SLAB IN THE AFFECTED AREAS.
- DO NOT STACK CONSTRUCTION MATERIALS ON FLOORS OR ROOFS DURING CONSTRUCTION IN EXCESS OF 80 PERCENT OF THE DESIGN LIVE LOAD NOTED ON THESE PLANS.
- THESE STRUCTURAL CONSTRUCTION DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, LANDSCAPE, AND CIVIL CONSTRUCTION DOCUMENTS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE INFORMATION SHOWN ON ALL REFERENCED PLANS. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING SHOULD DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS BE FOUND PRIOR TO COMMENCING WORK IN THE AREA WHERE THE DISCREPANCY OCCURS. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR WORK DONE IN THESE AREAS WITHOUT CLARIFICATION IN WRITING FROM THE ARCHITECT/ENGINEER.
- SUBSTITUTION REQUESTS: APPROVAL FROM THE ARCHITECT/ENGINEER IS REQUIRED PRIOR TO SUBSTITUTING COMPARABLE MATERIALS OR MANUFACTURED OR PRE-ENGINEERED PRODUCTS THAT ARE INDICATED IN THE CONSTRUCTION DOCUMENTS. ALL REQUESTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE. ALL NECESSARY INFORMATION REQUIRED TO DETERMINE THE EQUIVALENCY OF THE SUBSTITUTED PRODUCT SUCH AS ICC EVALUATION REPORTS AND TESTING REPORTS SHALL BE PROVIDED. COMPARABLE PRODUCTS SUBMITTED MUST INCLUDE A DETAILED LINE-BY-LINE COMPARISON OF HOW THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE GENERAL DESIGN, PERFORMANCE, AND QUALITY INDICATED IN THE CONSTRUCTION DOCUMENTS. THE MANUFACTURER OR CATALOG NUMBERS SHOWN IN THE CONSTRUCTION DOCUMENTS ESTABLISH A STANDARD FOR THE GENERAL DESIGN, PERFORMANCE, AND QUALITY OF THE PRODUCT REQUIRED. WHERE "OR APPROVED EQUAL" IS INDICATED, OTHER PRODUCTS SIMILAR TO DESIGN AND OF EQUAL QUALITY AND PERFORMANCE, AND COMPLYING WITH THE PLANS AND SPECIFICATIONS MAY BE APPROVED IF FOUND ACCEPTABLE BY THE ARCHITECT/ENGINEER. ALL SUBSTITUTION REQUESTS, INCLUDING "ENGINEER APPROVED EQUALS", FOR EQUIPMENT AND MATERIALS SHALL BE SUBMITTED FOR REVIEW AFTER AWARD IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. UNLESS NOTED OTHERWISE, SUBSTITUTION REQUESTS SHALL BE SUBMITTED WITHIN 14 DAYS AFTER AWARD. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS FOR REVIEW AND APPROVAL OF ALL REQUESTED SUBSTITUTIONS.
- CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, AS WELL AS SEQUENCE OF CONSTRUCTION THAT DOES NOT IMPACT THE FINAL DESIGN AS SHOWN ON CONSTRUCTION DOCUMENTS.
- MECHANICAL UNITS AND OTHER SYSTEMS, SUCH AS ELEVATORS, SHOWN ON THE STRUCTURAL PLANS INDICATE A SPECIFIC WEIGHT AND LOCATION. SHOULD THE CONTRACTOR INSTALL UNITS AND SYSTEMS WITH DIFFERENT WEIGHTS OR LOCATIONS THAN SHOWN, THE CONTRACTOR SHALL PROVIDE THIS INFORMATION TO THE STRUCTURAL ENGINEER FOR APPROVAL, PRIOR TO PURCHASING, CLEARLY INDICATING THE DIFFERENCES IN SIZE, WEIGHT AND LOCATION. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGNS.

COLD-FORMED STEEL TRUSSES

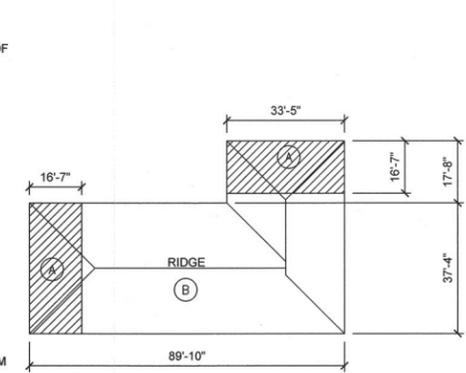
- ALL PRE-FABRICATED PRE-ENGINEERED COLD-FORMED STEEL TRUSS DESIGN, DETAILING AND INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
A. NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS (AISI-S100).
B. AISI/COFS GENERAL PROVISIONS (AISI-S200)
C. AISI/COFS CODE OF STANDARD PRACTICE (AISI-S202)
D. AISI/COFS TRUSS DESIGN (AISI-S214)
E. COLD-FORMED STEEL ENGINEERS INSTITUTE. (CFSEI)
- TRUSS DESIGNER SHALL DESIGN AND PROVIDE ALL TEMPORARY BRACING PER CFSEI AND COLD-FORMED STEEL BUILDING COMPONENTS SAFETY INFORMATION (CFSBCSI).
- TRUSS DESIGNER SHALL DESIGN AND PROVIDE ALL PERMANENT BRACING IN ACCORDANCE WITH THE CFSEI RECOMMENDATIONS.
- TRUSS MANUFACTURER SHALL PROVIDE A COMPLETE SET OF SHOP DRAWINGS INDICATING THE TRUSS MANUFACTURER, VERIFICATION OF MEETING STEEL TRUSS AND COMPONENT ASSOCIATION (STCA) "QUALITY STANDARD FOR STEEL TRUSS AND COMPONENT MANUFACTURING" AND STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED, PRIOR TO FABRICATION.
- SUBMIT A COMPLETE SET OF ERECTION DRAWINGS WITH SIZE AND LOCATION OF TEMPORARY AND PERMANENT BRACING, INCLUDING ANY PROVISIONS FOR FIELD ASSEMBLY OF SPECIAL INDIVIDUAL TRUSSES. ERECTION DRAWING SHALL BE PREPARED SPECIFICALLY FOR THIS PROJECT. REFERENCE TO COMMENTARY AND RECOMMENDATIONS NOTED ABOVE IS NOT ACCEPTABLE AS A SUBSTITUTION FOR THIS REQUIREMENT.
- ANY FIELD CHANGES TO THE TRUSSES IS NOT ALLOWED UNLESS DOCUMENTATION IS PROVIDED BY THE TRUSS ENGINEER SIGNED AND SEALED, PRIOR TO THESE CHANGES BEING MADE.
- TRUSS TO TRUSS CONNECTIONS ARE THE RESPONSIBILITY OF THE TRUSS DESIGNER.
- REPAIR OR REPLACE DAMAGED CHORDS, WEBS AND COMPLETED TRUSS AS DIRECTED AND APPROVED IN WRITING BY THE ENGINEER OF RECORD FOR THE BUILDING, THE ENGINEER FOR THE TRUSS DESIGN AND THE TRUSS MANUFACTURER

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE DETAILED, DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL BUILDINGS, AISC MANUAL OF STEEL CONSTRUCTION (ALLOWABLE STRESS DESIGN), AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AND THE AWS STRUCTURAL WELDING CODE. ALL CODES AND MANUALS SHALL BE THE LATEST ADOPTED EDITIONS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
WIDE FLANGE SHAPES A992 (F_y=50 KSI)
CHANNELS, ANGLES, PLATES, ETC. A36 (F_y=36 KSI)
STRUCTURAL TUBE A500 GRADE B (F_y=46 KSI)
STRUCTURAL PIPE A53 TYPE B GRADE B (F_y=35 KSI)
BOLTS A325 OR A490
WELDING ELECTRODES E70XX
HARDENED STEEL WASHERS ASTM F436
- CONNECTION MATERIALS FOR STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
BEAM OR COLUMN STIFFENER PLATES SHALL BE OF THE SAME GRADE OF STEEL AS THE STRUCTURAL ELEMENT.
ALL BOLTED CONNECTIONS ARE TO BE ERECTED WITH HIGH STRENGTH BOLTS, ASTM A325 OR ASTM A490, WITH BEARING TYPE "N" ALLOWABLE LOADS EXCEPT FOR BRACE CONNECTIONS WHICH ARE SLIP CRITICAL CONNECTIONS.
ALL BEAM TO BEAM AND COLUMN TO BEAM CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE.
ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) STANDARD D1.1. ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED IN THE TYPE OF WELD REQUIRED USING E70XX ELECTRODES OR IN A CERTIFIED SHOP TO DO SUCH WORK.
- MINIMUM SIZE AND STRENGTH OF WELDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.
PROVIDE THE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.
DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED, WITH SHOP AND FIELD WELDS, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS.
WHERE CONNECTIONS ARE NOTED ON CONSTRUCTION DOCUMENTS AS FULL MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP THE FULL FLEXURAL CAPACITY OF THE LEAST CAPACITY MEMBER OF THE CONNECTION.
- ALL STRUCTURAL STEEL EXPOSED TO THE WEATHER IS TO BE HOT-DIP GALVANIZED. PROVIDE BOLTS, NUTS AND WASHERS THAT ARE HOT-DIP GALVANIZED ACCORDING TO ASTM A153, CLASS C.
- ALL NEW STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- SPlicing OF STRUCTURAL STEEL MEMBERS IS NOT ALLOWED UNLESS SPECIFICALLY DETAILED ON THESE PLANS.
- DO NOT FIELD CUT ANY STRUCTURAL STEEL MEMBERS IN CONFLICT WITH THE WORK WITHOUT APPROVAL BY THE ENGINEER OR UNLESS SPECIFICALLY SHOWN ON THE CONSTRUCTION DOCUMENTS.
- PROVIDE HARDENED STEEL WASHERS CONFORMING TO ASTM F436 FOR CONNECTIONS WITH STANDARD AND SHORT-SLOTTED HOLES. FOR LONG SLOTTED HOLES, PROVIDE STRUCTURAL-GRADE STEEL 3/8" PLATE WASHERS OR CONTINUOUS BARS. IN ALL CASES, WASHER OR PLATE MUST BE OF SUFFICIENT SIZE TO COVER THE HOLE OR SLOT.
- ALL HOLES IN STEEL MEMBERS SHALL BE DRILLED OR PUNCHED. TORCH CUT HOLES ARE NOT ALLOWED.
- PROVIDE 14x3x1/4 (LLV) FRAME SPANNING FROM JOIST TO JOIST AROUND ALL ROOF PENETRATIONS LARGER THAN 12"x12", UNLESS NOTED OTHERWISE.
- ERECT AND MAINTAIN TEMPORARY BRACING TO ENSURE THE ALIGNMENT AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION UNTIL PERMANENT CONDITIONS HAVE BEEN COMPLETED.
- PROVIDE 1 1/2 INCHES OF NON-SHRINK GROUT UNDER ALL COLUMN BASE PLATES. NON-SHRINK GROUT SHALL BE NONMETALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS.
- SHOP DRAWINGS ARE REQUIRED TO BE REVIEWED PRIOR TO FABRICATION.
- THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS THAT ARE NOT FULLY DETAILED ON THESE DRAWINGS. BEAM CONNECTIONS SHALL BE DESIGNED TO RESIST ONE HALF THE TOTAL ALLOWABLE UNIFORM LOAD CAPACITY OF GIVEN SHAPE AND SPAN IN ADDITION TO ANY AXIAL FORCE NOTED ON THE PLANS IN ACCORDANCE WITH THE AISC SPECIFICATION. CALCULATIONS AND DETAILS SHALL BE PERFORMED, SIGNED AND SEALED BY AN ENGINEERING LICENSED IN THE STATE OF OKLAHOMA AND SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR APPROVAL. RE: DETAILS FOR TYPICAL CONNECTION REQUIREMENTS.

TEST AND INSPECTIONS

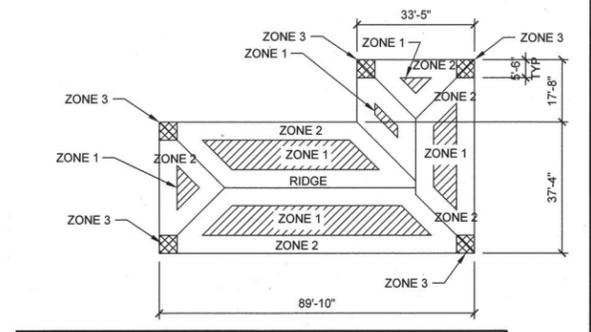
- SPECIAL TESTS AND INSPECTIONS: ENGAGE A QUALIFIED TESTING AGENCY AND SPECIAL INSPECTOR TO CONDUCT SPECIAL TESTS AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION, AS INDICATED ON CONTRACT DOCUMENTS.
- SPECIAL TESTS AND INSPECTIONS: CONDUCTED BY A QUALIFIED TESTING AGENCY AND SPECIAL INSPECTOR AS REQUIRED BY AUTHORITIES HAVING JURISDICTION AND AS FOLLOWS:
2.1. VERIFYING THAT MANUFACTURER MAINTAINS DETAILED FABRICATION AND QUALITY-CONTROL PROCEDURES AND REVIEWING THE COMPLETENESS AND ADEQUACY OF THOSE PROCEDURES TO PERFORM THE WORK.
2.2. NOTIFYING ENGINEER AND CONTRACTOR PROMPTLY OF IRREGULARITIES AND DEFICIENCIES OBSERVED IN THE WORK DURING THE PERFORMANCE OF ITS SERVICE.
2.3. SUBMITTING A CERTIFIED WRITTEN REPORT OF EACH TEST, INSPECTION AND SIMILAR QUALITY-CONTROL SERVICE TO ENGINEER WITH COPY TO CONTRACTOR AND TO AUTHORITIES HAVING JURISDICTION.
2.4. SUBMITTING A FINAL REPORT OF SPECIAL TESTS AND INSPECTIONS AT SUBSTANTIAL COMPLETION, WHICH INCLUDES A LIST OF UNRESOLVED DEFICIENCIES.
2.5. INTERPRETING TESTS AND INSPECTIONS AND STATING IN EACH REPORT WHETHER TESTED AND INSPECTED WORK COMPLIES WITH OR DEVIATES FROM THE CONTRACT DOCUMENTS.
2.6. RE-TESTING AND RE-INSPECTING CORRECTED WORK.
3. ALL MATERIALS FOR CONCRETE (CEMENT, AGGREGATE, REBAR, ETC.) SHALL BE TESTED FROM STOCK. COPIES OR CERTIFICATIONS TO MEET SPECIFICATION REQUIREMENTS SHALL BE SUPPLIED UPON REQUEST BY THE CONTRACTING OFFICER'S REPRESENTATIVE. REFER TO SPECIFICATIONS FOR INSPECTION AND TESTING REQUIREMENTS FOR EACH MATERIAL (MASONRY, CONCRETE, STEEL, ETC.). ALL TESTS SHALL BE PER ASTM STANDARDS.
4. SPECIAL INSPECTIONS ARE REQUIRED FOR BUILDING CODE(S) NOTED IN "DESIGN CRITERIA". REFER TO "SPECIAL INSPECTIONS REQUIRED" TABLE PROVIDED ON THIS SHEET.
5. COMPACTION FOR FILL BENEATH SLABS SHALL BE TESTED AT EACH LIFT WITH MINIMUM THREE TESTS PER 2,000 SQUARE FEET.
6. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR WHEN WORK IS READY FOR INSPECTION AND SHALL PROVIDE ACCESS FOR INSPECTIONS AND TESTING



MWFRS UPLIFT PRESSURES

ZONE	UPLIFT PRESSURE	
	GROSS	NET
A	23.58 PSF	13.68 PSF
B	16.82 PSF	6.92 PSF

1 MWFRS UPLIFT DIAGRAM NOT TO SCALE



COMP. & CLADDING UPLIFT PRESSURES

ZONE	UPLIFT PRESSURE			
	A ≤ 10 FT ²		A > 100 FT ²	
	GROSS	NET	GROSS	NET
1	26.9 PSF	17 PSF	24.8 PSF	14.9 PSF
2	46.9 PSF	37 PSF	36 PSF	26.1 PSF
3	69.4 PSF	59.5 PSF	56.3 PSF	48.4 PSF

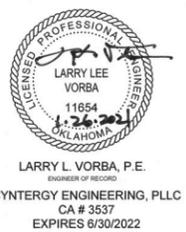
2 COMPONENTS & CLADDING UPLIFT DIAGRAM NOT TO SCALE

SPECIAL INSPECTIONS REQUIRED

PERIODIC SPECIAL INSPECTIONS:		CONTINUOUS SPECIAL INSPECTIONS:	
STEEL	1. MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS, AND WASHERS	STEEL	1. INSPECTIONS OF HIGH STRENGTH BOLTING (SLIP-CRITICAL CONNECTIONS)
	2. INSPECTIONS OF HIGH STRENGTH BOLTING (BEARING TYPE CONNECTIONS)		2. INSPECTION OF STRUCTURAL STEEL WELDING: A. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS B. MULTIPASS FILLET WELDS C. SINGLE PASS FILLET WELDS GREATER THAN 5/16"
	3. INSPECTION OF STRUCTURAL STEEL WELDING: A. SINGLE PASS FILLET WELDS ≤ 5/16" B. FLOOR AND DECK WELDING		
	4. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS A. DETAILS SUCH AS BRACING AND STIFFENING B. MEMBER LOCATIONS C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION		

STEEL DECKING

- ROOF STEEL DECK SHALL CONFORM TO ASTM A1008 OR A653 WITH A MINIMUM YIELD STRENGTH OF 33 KSI.
- ROOF DECK SHALL BE GALVANIZED ACCORDING TO THE SPECIFICATIONS.
- FURNISH DECK PANELS OF SIZE AND GAUGE AS NOTED ON THE CONSTRUCTION DOCUMENTS.
- FURNISH DECK PANELS IN LENGTHS ADEQUATE FOR A THREE SPAN CONDITION WHERE POSSIBLE FOR TYPE OF PROFILE AND GAUGE SHOWN.
- ATTACH DECK PANELS SECURELY TO SUPPORTS AND PROVIDE SIDE LAP CONNECTIONS AS SHOWN.
- PROVIDE A CONTINUOUS CLOSURE SECTION TO FACILITATE DECK SUPPORT AND ATTACHMENT AS REQUIRED OR WHERE CHANGES OF DECK DIRECTION OCCUR. THE CLOSURE STRIP IS TO BE THE SAME GAUGE AS DECKING, MINIMUM.



ROOF REPLACEMENT AT SOUTH SIDE SECONDARY PUMP STATION

PROJECT NO. SPI8-03

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

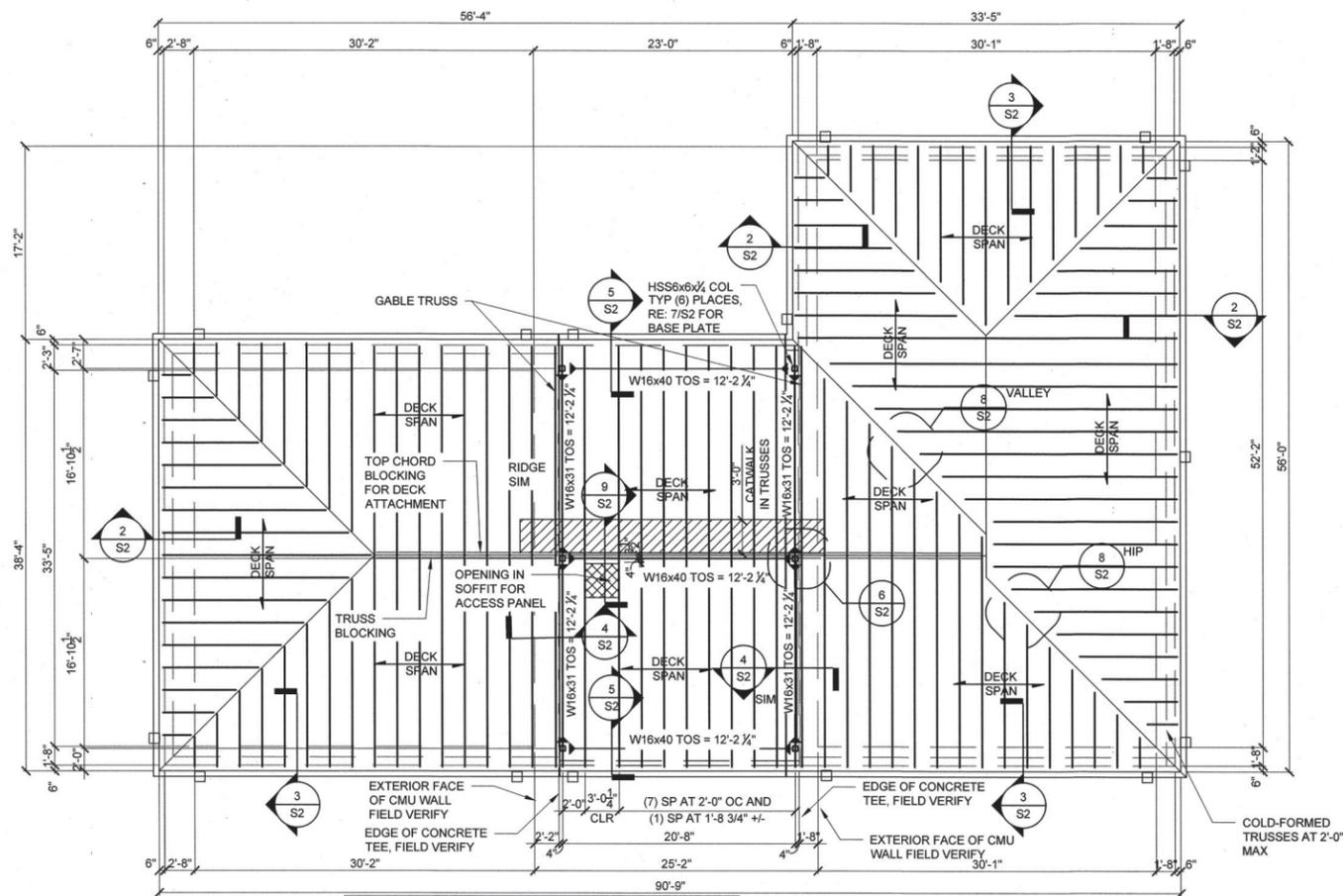
PLANS AND ESTIMATES PREPARED BY:

CYNERGY, L.L.C.

ROOF CONSULTANTS
5350 E. 46TH ST. SUITE 116
TULSA, OK 74135
918-660-6844

MARK	REVISION	BY	DATE	PLAN SCALE:	DRAWN	EAE	APPROVED:
				AS NOTED	DESIGNED	DDW	
				PROFILE SCALE:	PROJ. MGR.	MM	
				HORIZONTAL:	LEAD ENGR.	MM 2/21	
				VERTICAL:	FIELD MGR.	MM 2/21	
				FILE:	RECOMMENDED:	MM 2/21	
				ATLAS PAGE NO.	DESIGN MANAGER:		
				SHEET NAME:	DATE:		5/3/21
				GENERAL NOTES	SHEET 9 OF 11 SHEETS		

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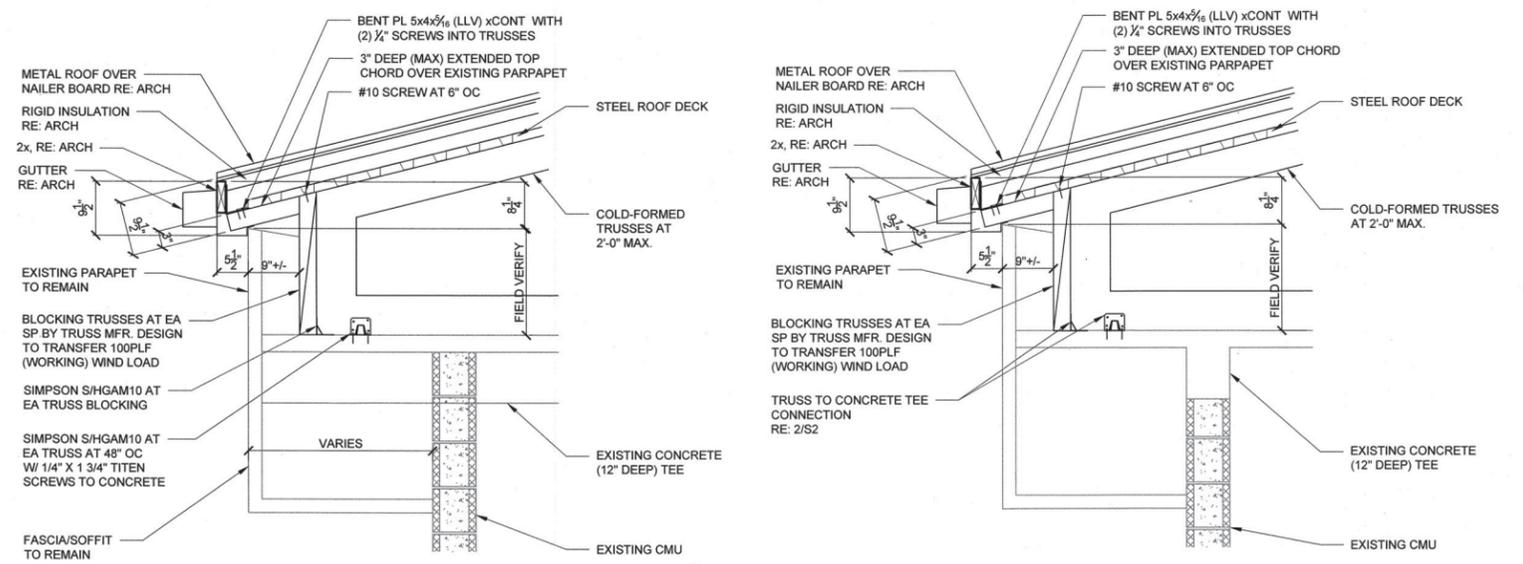


1 FRAMING PLAN

1/8" = 1'-0"

- FIELD VERIFY FOR FABRICATION OF TRUSSES:
- OVERHANG DIMENSIONS FROM FACE OF BUILDING TO EXTERIOR FINISH AT EXISTING FASCIA.
 - EXISTING PARAPET WIDTH.
 - DISTANCE AT ALL NEW COLUMN LOCATIONS BETWEEN CONCRETE TEES AFTER FASCIA BETWEEN BUILDINGS IS REMOVED. ALLOW 1" MIN. BETWEEN COL AND EDGE OF CONCRETE TEES.
 - DISTANCE FROM TOP OF PARAPET TO CONCRETE TEE DECK

DECK SPAN 1 1/2" x 22ga TYPE B STEEL ROOF DECK ATTACH TO STRUCTURE WITH #12 SCREWS 7/8" PATTERN. PROVIDE (2) #10 SIDELAPS PER SPAN.

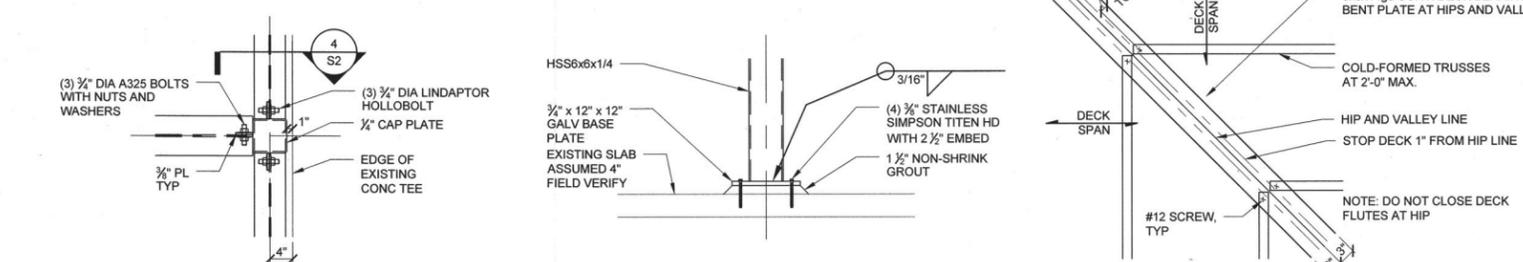


2 DETAIL AT ROOF TRUSS

3/4" = 1'-0"

3 DETAIL AT ROOF TRUSS

3/4" = 1'-0"



6 DETAIL AT ROOF TRUSS

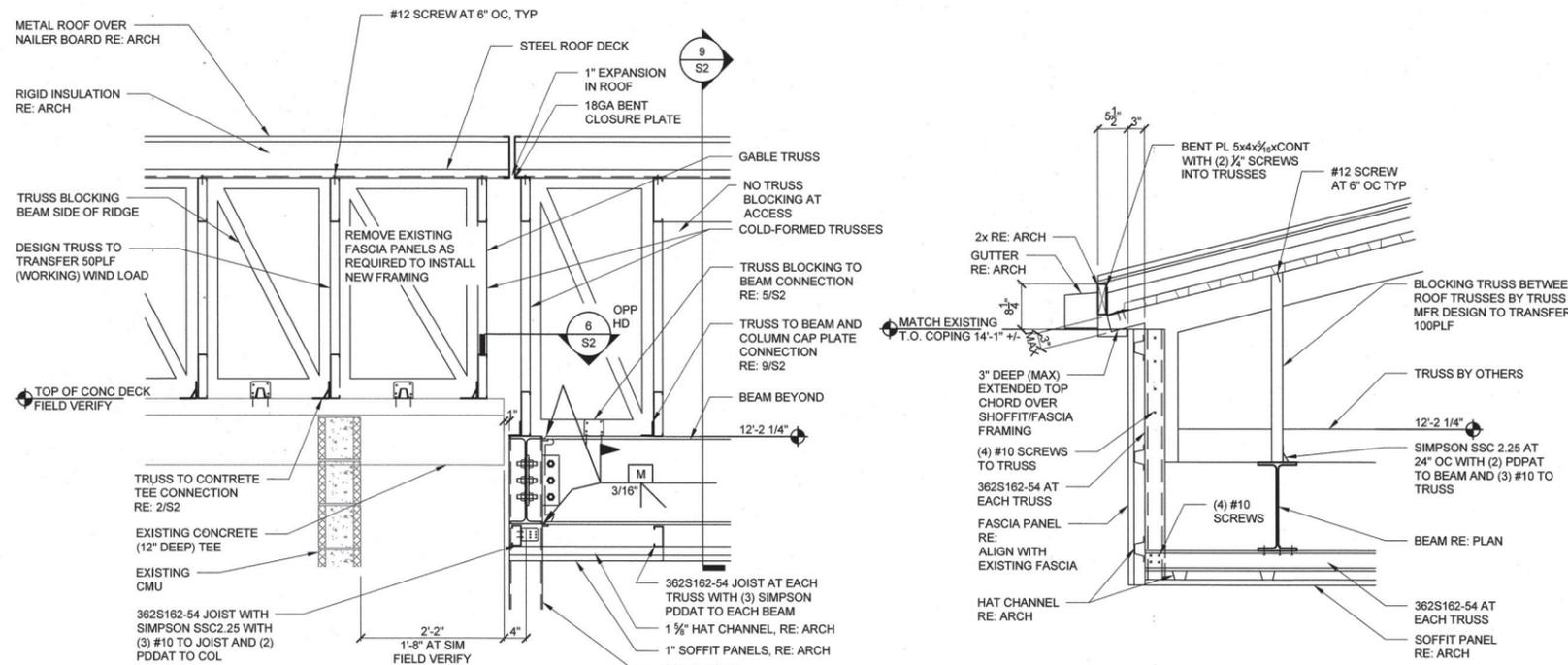
3/4" = 1'-0"

7 BASE PLATE DETAIL

3/4" = 1'-0"

8 DECK BEARING PLATE

3/4" = 1'-0"

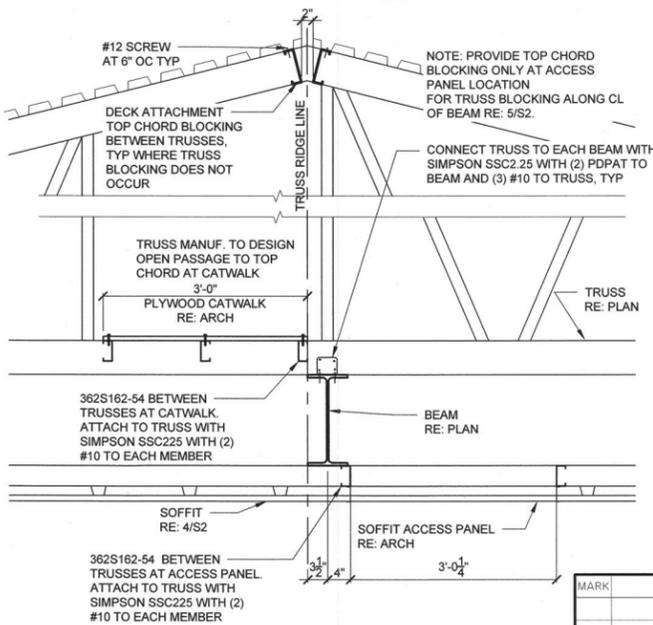


4 DETAIL AT ROOF TRUSS

3/4" = 1'-0"

5 DETAIL AT ROOF TRUSS

3/4" = 1'-0"



FRAMING AT ACCESS AND CATWALK

3/4" = 1'-0"



LARRY L. VORBA, P.E.
ENGINEER OF RECORD
CYNERGY ENGINEERING, PLLC
CA # 3537
EXPIRES 6/30/2022

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PROJECT NO. SPI8-03
CITY OF TULSA, OKLAHOMA
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				VERTICAL:	FIELD MGR.	2/21	
					RECOMMENDED:	2/21	
					DESIGN MANAGER:	2/21	
				FILE:	DRAWING:		
				ATLAS PAGE NO.			
				SHEET NAME:			
				FRAMING PLAN AND DETAILS			

S2