



EAGLE MOUNTAIN CITY
City Council Staff Report

MAY 5, 2015

Project: **Willis Miller Site Plan**
Applicant: Willis Miller
Request: Site Plan Approval
Type of Action: Approve/ Deny
Planning Commission Action: Recommended approval w/conditions (4-0)

PREFACE

The applicant, Willis Miller, has submitted an application to install a storage shed for construction equipment on the 131.7 acre parcel owned by Monte Vista Ranch LC. The building is a steel structure that is approximately 56' x 40'. The site is located to the west of the City's Public Works facilities and is accessed via

Pony Express Parkway. The applicant states that the shed will be used to store construction equipment used for his business; currently, the applicant stores construction equipment on the site. The applicant has consent of the landowner to seek a site plan approval



for this structure and has indicated that he will be leasing the 5 acres that the site plan is on. Since the property is located in an area that has historically been an agricultural use, current zoning notwithstanding, the applicant has elected to proceed with an application that the applicant believes is compatible with the surrounding area despite not meeting development standards for a property in the Industrial Zone.

Zoning

The property is located within the Monte Vista Ranch, LC & Eagle Mountain Properties, LLC Master Development Plan and is zoned 'Industrial.' A storage shed would be a permitted use within this zone; however, there are typically development standards that are required when an individual proceeds with development in certain zones

Development Standards

The applicant has not submitted a site plan that follows the Development Standards for the Industrial Zone standards found in Chapter 17.40.080 of the Development Code. These standards can be found below:

A. Architectural Review. The planning commission shall review the site plan and building elevations. The planning commission shall confirm compliance with architectural design standards for buildings and structures to assure compliance with the general plan and with the city's generally applicable policies and regulations.

B. Landscaping. All landscaping shall be completed in accordance with the approved site plan and all city ordinances, and shall be installed prior to the issuance of a certificate of occupancy for the building. The city building official may approve exceptions as seasonal conditions warrant. It shall be the responsibility of the property owner to maintain all approved landscaping in accordance with the approved site plan and in compliance with the city's parking and landscaping requirements.

C. Uses within Buildings. All uses in the industrial zone shall be conducted entirely within a fully enclosed building except those uses deemed by the planning commission and city council to be customarily and appropriately conducted outside. Such uses include service stations, gas pumps, plant nurseries, home improvement material yards, automobile sales, etc. Outside storage of merchandise shall be accommodated entirely within an enclosed structure unless the planning commission and city council deem such storage to be customarily and appropriately conducted outside.

D. Trash Storage. No trash, used materials, wrecked or abandoned vehicles or equipment shall be stored in an open area. All such materials shall be kept within an opaque enclosure that is architecturally compatible with the main building. Garbage dumpsters shall be located out of sight and away from major roads.

E. Screening Requirements. A wall, fence and/or landscaping of acceptable design shall effectively screen the borders of any commercial or industrial lot, which abuts an agricultural or residential use. Such a wall, fence or landscaping shall be at least six feet in height, unless a wall or fence of a different height is required by the city council in consideration of a prior recommendation by the planning commission as part of a site plan review. Such wall, fence or landscaping shall be maintained in good condition with no advertising thereon, except as permitted by the city's signage regulations. [Ord. O-23-2005 § 3 (Exh. 1(1) § 8.8)].

Access/Parking

The applicant is providing an asphalt entrance with 30-foot radii in the right-of-way. The applicant's site plan identifies the project access road as impervious; it is unclear if this means current or future plans for paving the access road.

Fire

The Fire Marshal has required that the applicant maintains a gravel access road to provide year-round emergency access. Additionally, the Fire Marshal has stipulated that the structure is to be used only for

storage purposes, meaning that the structure cannot be used as a repair garage. If used as a repair facility, the Fire Marshal would require asphalt throughout the site and a fire hydrant.

RECOMMENDATION SECTION

Recommended Motion

The City Council may choose to deny or approve this application. The motions are provided for the benefit of the City Council and may be read or referenced when making a motion.

- (a) *I move that the City Council denies the Willis Miller Site Plan.*

- (b) *I move that the City Council approves the Willis Miller Site Plan with the following conditions:*
 - 1. *Only storage of equipment is allowed within the structure.*
 - 2. *Maintain gravel access road to provide year-round emergency access.*
 - 3. *Provide portable fire extinguishers inside the building.*
 - 4. *Provide street improvements for frontage as required by the City Engineer.*

ATTACHMENTS:

- Site Plan
- Building Plans

GENERAL NOTES

- 1.1 Fabrication shall be in accordance with A.S.C. standard practices in compliance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of the "AWS Structural Welding Code D1.1 and D1.3".
- 1.2 **MATERIALS**
- | | ASTM DESIGNATION | MIN. YIELD STRENGTH |
|---------------------------------------|------------------|---------------------|
| Hot Rolled Steel Shapes (W, S, C & L) | A572 | Fy = 50 KSI |
| Steel Pipes | A500 | Fy = 42 KSI |
| Structural Tubing | A500 | Fy = 42 KSI |
| Structural Steel Web Plate | A572/A1011 | Fy = 50 KSI |
| Structural Steel Flange Plates/Bars | A572/A572 | Fy = 50 KSI |
| Cold Formed Light Gage | A653/A1011 | Fy = 50, 55 KSI |
| Roof and Wall Sheets | A792/A653 | Fy = 50, 80 KSI |
| Cable Brace | A475 - TYPE 1 | Extra High Strength |
| Rod Brace | A36 | Fy = 36 KSI |
-
- | | ASTM DESIGNATION | MIN. TENSILE STRENGTH |
|-------------------------------------|------------------|-----------------------|
| Machine Bolts & Nuts | A307 | Fu = 60 KSI |
| High Strength Bolts (1" and less) | A325-TYPE 1 | Fu = 120 KSI |
| High Strength Bolts (>1" to 1 1/2") | A325-TYPE 1 | Fu = 105 KSI |
| Anchor Bolts (if supplied) | A36/A307/F1554 | Fu = 60 KSI |
- 1.3 **PRIMER**
Shop primer paint is a rust inhibitive primer which meets the end performance of Federal Specification SSPC No. 15 and is A.S.C. Gray Oxide color. This paint is not intended for long term exposure to the elements. A.S.C. is not responsible for any deterioration of the shop primer paint as a result of improper handling and/or jobsite storage. A.S.C. shall not be responsible for any field applied paint and/or coatings. (Section 6.5 AISC Code of Standard Practice, 9th Edition). Nominal thickness of primer will be 1 mil unless otherwise specified in contract documents.
- 1.4 **GALVANIZED OR SPECIAL COATINGS:**
See Contract Documents
- 1.5 **ALL BOLTS ARE 1/2" x 0'-1 1/4" A307 EXCEPT:**
a) Endwall rafter splice - 5/8" x 0'-1 3/4" A325-N
b) Endwall column to rafter connection - 5/8" x 0'-1 1/2" A325-N
c) Main frame connections - SEE CROSS SECTION
d) Flange Brace connections - 1/2" x 0'-1 1/4" A325
NOTE: Washers are not supplied unless noted otherwise on drawing
- 1.6 **A325 BOLT TIGHTENING REQUIREMENTS**
All high strength bolts are A325-N unless specifically noted otherwise. Structural bolts shall be tightened by the turn-of-the-nut method in accordance with the 9th Edition AISC "Specification For Structural Joints" using ASTM A325 or A490 Bolts, when specifically required. A325-N bolts are supplied without washer unless otherwise noted on the drawings. All bolted connections unless noted are designed as bearing type connections with bolt threads not excluded from the shear plane.
- 1.7 **CLOSURE STRIPS ARE FURNISHED FOR APPLICATION:**
INSIDE- Under roof panels at eave & base
OUTSIDE - Between endwall panels and rake trim
- Under continuous ridge vent skirts
- 1.8 **ERECTION NOTE:**
All bracing, strapping, & bridging shown and provided by A.S.C. for this building is required and shall be installed by the erector as a permanent part of the structure. If additional bracing is required for stability during erection, it shall be the erector's responsibility to determine the amount of such bracing and to procure and install as needed.
- 1.9 **ERECTION AND UNLOADING NOT BY A.S.C.**
- 1.10 **SHORTAGES**
Any claims or shortages by buyer must be made to A.S.C. within five (5) working days after delivery, or such claims will be considered to have been waived by the customer and disallowed.
- 1.11 **CORRECTIONS OF ERRORS AND REPAIRS (MBMA 6.10)**
Claims for correction of alleged misfits will be disallowed unless A.S.C. shall have received prior notice thereof and allowed reasonable inspection of such misfits. The correction of minor misfits by the use of drift pins to draw the components into line, moderate amounts of reaming, chipping and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to claim. No part of the Building may be returned for alleged misfits without the prior approval of A.S.C.
- BUYER/END USE CUSTOMER RESPONSIBILITIES**
- 2.1 It is the responsibility of the BUYER/END USE CUSTOMER to obtain appropriate approvals and secure necessary permits from City, County, State, or Federal Agencies as required, and to advise/release A.S.C. to fabricate upon receiving such.
- 2.2 Armstrong Steel Corp (hereafter referred to as A.S.C.) standard specifications apply unless stipulated otherwise in the Contract Documents. A.S.C. design, fabrication, quality criteria, standards, practice, methods and tolerances shall govern the work with any other interpretations to the contrary notwithstanding. It is understood by both Parties that the BUYER/END USE CUSTOMER is responsible for clarification of inclusions or exclusions from the architectural plans and/or specifications.
- 2.3 In case of discrepancies between A.S.C. structural steel plans and plans for other trades, A.S.C. plans shall govern. (Section 3 AISC Code of Standard Practices, 9th Edition)
- 2.4 Approval of A.S.C. drawings and calculations indicates that A.S.C. has correctly interpreted and applied the Contract Documents. This approval constitutes the contractor/owners acceptance of the A.S.C. design concepts, assumptions, and loading. (Section 4 AISC Code and MBMA 3.3.3)
- 2.5 Once the BUYER/END USE CUSTOMER has signed A.S.C. Approval Package and the project is released for fabrication, changes shall be billed to the BUYER/END USE CUSTOMER including material, engineering and other costs. An additional fee may be charged if the project must be moved from the fabrication and shipping schedule.

FEB 06 2014



PHONE: 800-345-4610
www.armstrongsteel.com

JOB NO. : 53498

CUSTOMER : ARROW ENGINEERING
END USER : ARROW ENGINEERING
END USE : GARAGE/STORAGE
LOCATION : TBD
: EAGLE MOUNTAIN, UT 84005
: UTAH COUNTY
PH. NO. : 801-420-2061 EMAIL: ARROWINC@HOTMAIL.COM

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING AS INDICATED:

DESIGN LOADS:

Design Code / Wind Code : IBC-12/ASCE 7-10
Enclosure : Closed
Dead Load (psf) : 2.00
Collateral Load (psf) : 1.00
Wind Load
Basic Wind Speed, 3 sec gust (Vult) : 115.00
Nominal Wind Speed (Vasd) : 89.08
Wind Importance Factor, Iw : 1.00
Wind Exposure : C
Internal Pressure Coefficient, GCp1 : +0.18 / -0.18
Wall Panel Design Wind Pressure : +26.7 / -29.0
Live Load
Primary Framing (psf) : 20.00
Trib. Area Reduction : No
Secondary Framing (psf) : 20.00
Snow Load
Ground Snow Load, Pg (psf) : 43.00
Roof Snow Load, Pf (psf) : 30.10
Sloped Roof Snow Load, Ps (psf) : 30.10
Snow Exposure Factor, Ce : 1.00
Snow Importance Factor, Is : 1.00
Thermal Factor, Ct : 1.00
Sloped Factor, Cs : 1.00
Seismic Load
Seismic Importance Factor, Ie : 1.00
Seismic Use Group : II - Normal
Site Class : D
Mapped Spectral Response Acceleration : Ss = 0.74 : S1 = 0.25
Spectral Response Coefficients : Sds = 0.60 : Sd1 = 0.32
Seismic Design Category : D
Basic Force Resisting Systems Used : Rigid Frames
: Braced Frames
Total Design Base Shear, V (kips) : Longitudinal = 5.10
: Transverse = 5.16
Response Modification Factors, R : Rigid Frames = 3.25 : Omega = 3.00
: SW X-Bracing = 3.25 : Omega = 2.00
Seismic Response Coefficient, Cs : Rigid Frames = 0.1832
: SW X-Bracing = 0.1832
Analysis Procedure Used : Equivalent Lateral Force Procedure
Other Loads/Requirements

BUILDING DESCRIPTION:

Width (ft) : 40
Length (ft) : 56
Eave Ht. at BSW (ft) : 16
Eave Ht. at FSW (ft) : 16
Roof Slope at BSW : 1:0:12
Roof Slope at FSW : 1:0:12
Bay Spacing (ft) : 3 at 18.67

COVERING AND TRIMS:

Roof Panels & Trims
Panel Type : 26 Ga. PR
Panel Color : Galvalume +
Trim Colors
Gable/Eave Trim: Colony Green

Wall Panel & Trims
Panel Type : 26 Ga. PR
Panel Color : Saddle Tan
Trim Colors
Corner Trims : Colony Green
Opening Trims : Colony Green
Base Trim : Saddle Tan

Insulation

Roof Insulation : 6" Thick (R-19)WMP-VR
Wall Insulation : 4" Thick (R-13)WMP-VR

Drawing Index	
Drawing Name	Page(s)
Drawing Cover	----
3D Reference	----
Anchor Bolt Plan	1
Anchor Bolt Details	2
Anchor Bolt Reactions	3
Rigid Frame	4
Front Sidewall	5
Back Sidewall	6
Left Endwall	7
Right Endwall	8
Roof Plan	9
Details	10,11,12

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7423 HOLLOW RIDGE DR
HOUSTON, TX 77095

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- 2.6 The BUYER/END USE CUSTOMER is responsible for overall project coordination. All interface, compatibility, and design considerations concerning any materials not furnished by A.S.C. and A.S.C. steel system are to be considered and coordinated by the BUYER/END USE CUSTOMER. Specific design criteria concerning this interface between materials must be furnished before release for fabrication or A.S.C. assumptions will govern (Section 4 and Commentary, AISC Code of Standard Practice, 9th Edition)
- 2.7 It is the responsibility of the BUYER/END USE CUSTOMER to insure that A.S.C. plans comply with the applicable requirements of any governing building authorities. The supplying of needed engineering data and drawings for the metal building system does not imply or constitute an agreement that A.S.C. or its design engineers are acting as the engineer of record or design professional for a construction project. These drawings are sealed only to certify the design of the structural components furnished by A.S.C.
- 2.8 The BUYER/END USE CUSTOMER is responsible for setting of anchor bolts and erection of steel in accordance with A.S.C. "For Construction" drawings only. Temporary supports such as guys, braces, falsework, cribbing or other elements required for the erection operation shall be determined furnished and installed by the erector. No items should be purchased from a preliminary set of drawings, including anchor bolts. Use only final "FOR CONSTRUCTION DRAWINGS" for this use. (Section 7 AISC Code of Standard Practice, 9th Edition.)
- 2.9 Armstrong Steel Corp is responsible for the design of the anchor bolt to permit the transfer of forces between the base plate and the anchor bolt in shear, bearing and tension, but is not responsible for the transfer of anchor bolt forces to the concrete or the adequacy of the anchor bolt in relation to the concrete. Unless otherwise provided in the Order Documents, A.S.C. does not design and is not responsible for the design, material and construction of the foundation or foundation embedments. The END USE CUSTOMER should assure himself that adequate provisions are made in the foundation design for loads imposed by column reactions of the building, other imposed loads, and bearing capacity of the soil and other conditions of the building site. It is recommended that the anchorage and foundation of the building be designed by a Registered Professional Engineer experienced in the design of such structures. (Section A10 1998 MBMA Low Rise Building Systems Manual)
- 2.10 Normal erection operations include the corrections of minor misfits by moderate amounts of reaming, chipping, welding or cutting, and the drawing of elements into line through the use of drift pins. Errors which cannot be corrected by the foregoing means or which require major changes in member configuration are to be reported immediately to A.S.C. by the BUYER/END USE CUSTOMER, to enable whoever is responsible either to correct the error or to approve the most efficient and economic method of correction to be used by others. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 2.11 Neither the fabricator nor the BUYER/END USE CUSTOMER will cut, drill or otherwise alter his work, or the work of other trades, to accommodate other trades, unless such work is clearly specified in the contract documents. Whenever such work is specified, the BUYER/END USE CUSTOMER is responsible for furnishing complete information as to materials, size, location and number of alterations prior to preparation of shop drawings. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 2.12 **WARNING:** In no case should Galvalume steel panels be used in conjunction with lead or copper. Both lead and copper have harmful corrosive effects on the Galvalume alloy coating when they are in contact with Galvalume steel panels. Even run-off from copper flashing, wiring, or tubing onto Galvalume should be avoided.
- 2.13 **SAFETY COMMITMENT:** Armstrong Steel Corp has a commitment to manufacture quality building components that can be safely erected. However, the safety commitment and job site practices of the erector are beyond the control of A.S.C. It is strongly recommended that safe working conditions and accident prevention practices be the top priority of any job site. Local, State, and Federal safety and health standards should always be followed to help insure workers safety. Make certain all employees know the safest and most productive way of erecting a building. Emergency procedures should be known to all employees. Daily meetings highlighting safety procedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended.
- 2.14 Roof drainage systems (gutter, downspouts, etc.) must be free of any obstruction to ensure smooth operation at any given time.
- 2.15 It is recommended by Factory Mutual (Reference: B2.44) that roofs be cleared of snow when half of the maximum snow depth is reached. The maximum snow depth can be estimated based on the design snow load and the density of snow and/or ice buildup. See Chart below.

ROOF SNOW LOAD (IN PSF)	EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD START (IN INCHES)
20	16.60	8.30
25	17.25	8.62
30	17.80	8.95
35	18.55	9.28
40	19.20	9.60
45	19.85	9.92
50	20.50	10.25
55	21.15	10.58
60	21.80	10.90
65	22.45	11.22
70	23.10	11.55
75	23.75	11.88
80	24.40	12.20

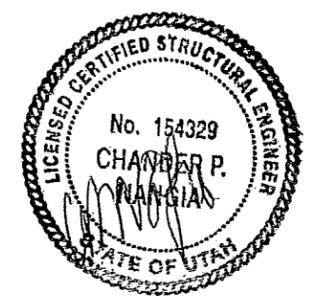
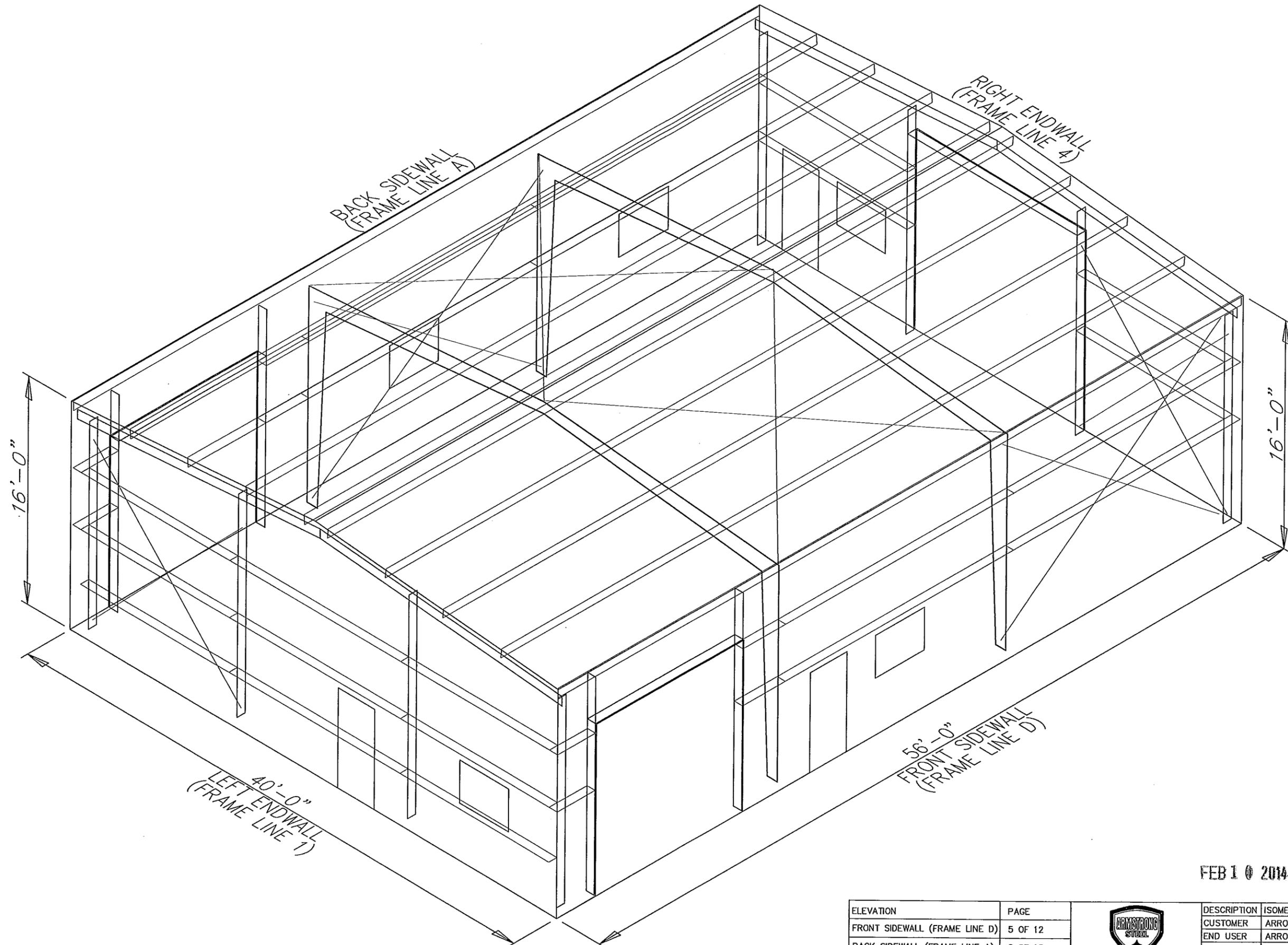
NOTE: For Snow/Ice Removal Procedure, Refer to Metal Building System Manual 2002 Edition, Section A8.4, Page XI-AB-2.

Drawing Status

- APPROVAL: REVISED APPROVAL:
These drawings are conceptual only and are not to be used for the permit or construction process.
- PERMIT: REVISED PERMIT:
These drawings are Final and are for review by the building official or others. This set is not intended for construction as piece marks and dimensions have not been finalized.
- CONSTRUCTION:
Final drawings to be used for the erection of the building.

JOB NO : 53498 ARROW ENGINEERING

SEALING OF THIS DRAWING DOES NOT IMPLY OR CONSTITUTE THAT ARMSTRONG STEEL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT. ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY A.S.C. IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONE OTHER THAN ARMSTRONG ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS IMPLIED.

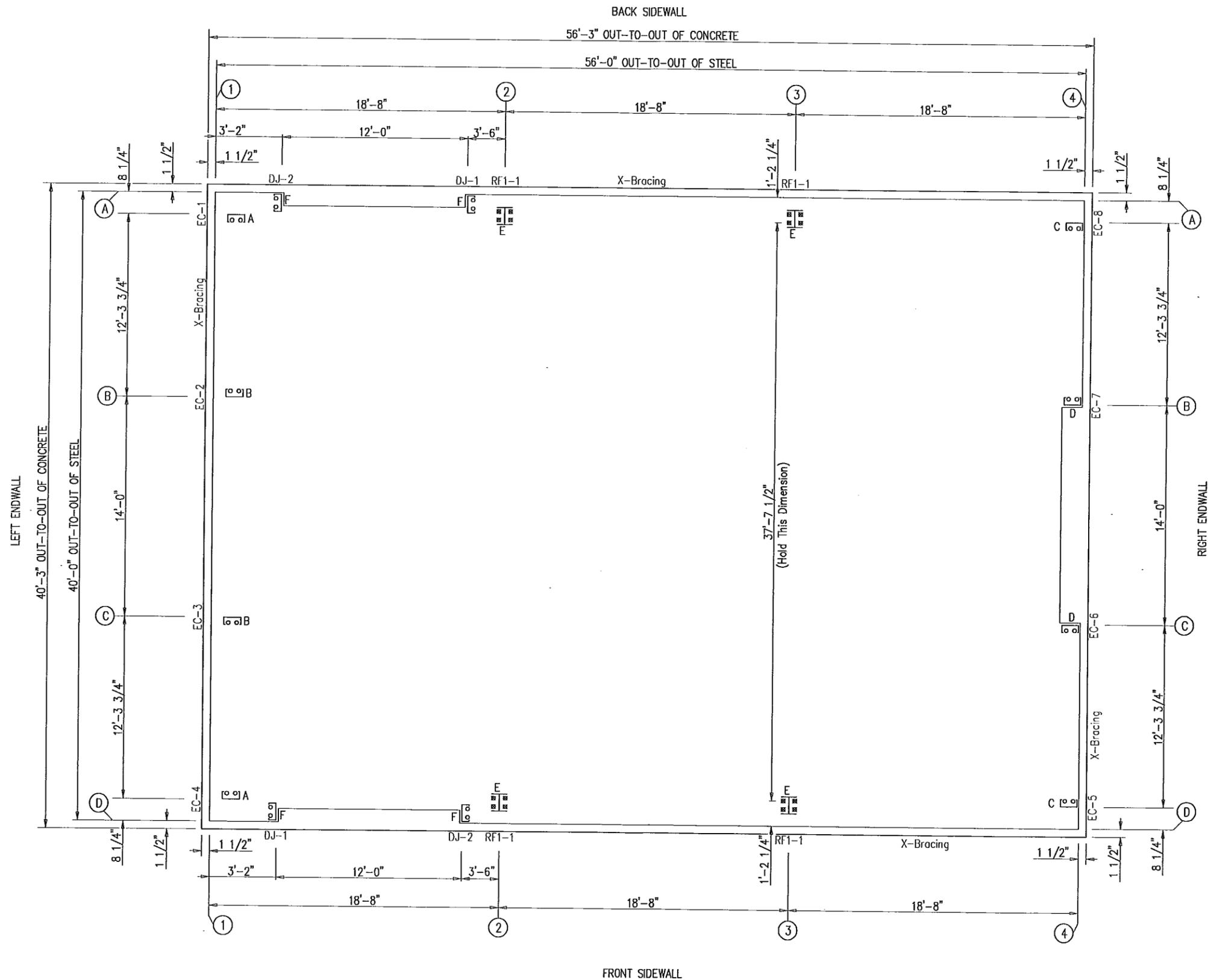


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ELEVATION	PAGE	 5889 S. Greenwood Plaza Blvd, Ste#300 Greenwood Village, Colorado 80111 PHONE: 800-345-4610 www.armstrongsteel.com	DESCRIPTION	ISOMETRIC VIEW	
FRONT SIDEWALL (FRAME LINE D)	5 OF 12		CUSTOMER	ARROW ENGINEERING	
BACK SIDEWALL (FRAME LINE A)	6 OF 12		END USER	ARROW ENGINEERING	
LEFT ENDWALL (FRAME LINE 1)	7 OF 12		END USE	GARAGE/STORAGE	
RIGHT ENDWALL (FRAME LINE 4)	8 OF 12		LOCATION	TBD, EAGLE MOUNTAIN, UT 84005	
		DES. BY: NANG	DATE: 02/03/14	ENG. BY: NANG	DATE: 02/03/14
		JOB NO.: 53498	SCALE: N.T.S.	DWG. NO.: 3D REFERENCE	ISSUE: P

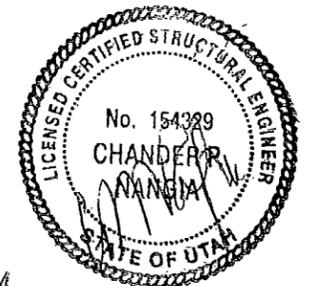
ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type
8	Jamb	5/8"	
16	Endwall	5/8"	A307
16	Frame	3/4"	A307



ANCHOR BOLT PLAN
NOTE: All Base Plates @ 100'-0" (U.N.)

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ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL	11.21.13	JC	RAJ	NANG
A1	REVISED APPROVAL	01.21.14	JC	RAJ	NANG
P	PERMIT	02.05.14	JC	RAJ	NANG



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CUSTOMER	ARROW ENGINEERING		
END USER	ARROW ENGINEERING		
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LOCATION	TBD, EAGLE MOUNTAIN, UT 84005		
DES. BY:	NANG	DATE:	02/03/14
ENG. BY:	NANG	DATE:	02/03/14
JOB NO.:	53498	SCALE:	N.T.S.
DWG. NO.:	1 OF 12	ISSUE:	P

