Concept elevations, final design pending.

VP BUILDINGS
VARCO PRUDEN
A BlueScope Steel Company

DRAWING INDEX

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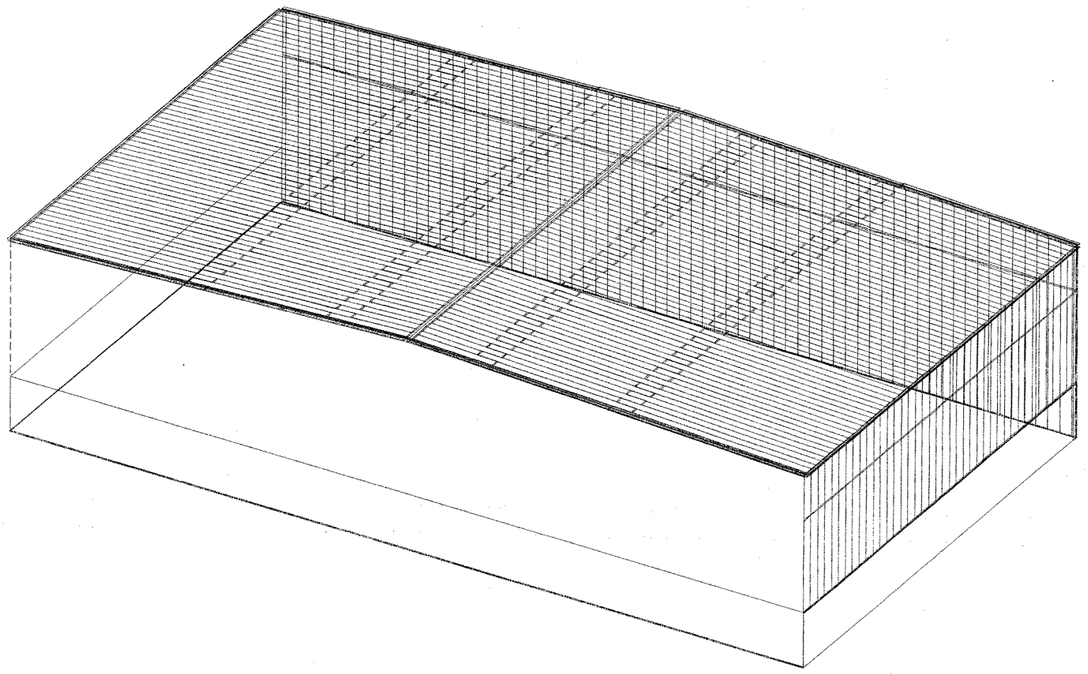
DRAWING RELEASE HISTORY

TYPE	DATE	DESCRIPTION
A. Rod drawings	2-5-09	FOR CONSTRUCTION
ERECTION DRAWINGS	2-13-09	FOR CONSTRUCTION



VP Buildings 3200 Players Club Circle Memphis TN 38125

GENERAL NOTES

MATERIALS

	ASTM DESIGNATION	
3 PLATE WELDED SECTIONS	A529, A572, A1011, A1018	GRADE 55
COLD FORMED LIGHT GAGE SHAPES	A653, A1011	GRADE 60
BRACE RODS	A572	GRADE 50
HOT ROLLED MILL SHAPES	A36, A529, A572, A588, A709, A992	GRADE 36 KSI UNLESS NOTED
HOT ROLLED ANGLES	A529, A572, A588, A709, A992	GRADE 50
HOLLOW STRUCTURAL SECTION (HSS)	A500	GRADE B
CLADDING	A653, A792	GRADE 50 OR GRADE 80

A325 & A490 BOLT TIGHTENING REQUIREMENTS

IT IS THE RESPONSIBILITY OF THE ERECTOR TO INSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPROPRIATE REGULATIONS. THE FOLLOWING CRITERIA IS IN COMPLIANCE WITH THE LATEST SPECIFICATIONS, HOWEVER THE ERECTOR IS RESPONSIBLE TO VERIFY LOCAL AUTHORITY REQUIREMENTS.
ALL CONNECTIONS MADE WITH A325 BOLTS MAY BE TIGHTENED TO THE "SNUG TIGHT" CONDITION AS PERMITTED BY THE SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS (2004 ED), UNLESS INDICATED AS "PRE-TENSIONED" ELSEWHERE IN THESE DRAWINGS, OR AS INDICATED BELOW.

PRE-TENSION BOLTS ON PRIMARY FRAMING, BOLTED BRACING, AND STRUT CONNECTIONS IF LOCATED IN IBC SEISMIC PERFORMANCE / DESIGN CATEGORY D, E OR F, UBC ZONE 3 OR 4. SEE CODES AND LOADS NOTES BELOW FOR FOR SEISMIC DESIGN CATEGORY. PRE-TENSION ALL PRIMARY FRAMING CONNECTIONS IN CANADA.

PRE-TENSION BOLTS ON PRIMARY FRAMING, BOLTED BRACING, STRUTS AND CRANE RUNWAY CONNECTIONS IF BUILDING SUPPORTS A CRANE WITH A CAPACITY GREATER THAN 5 TONS.

CONNECTIONS THAT SUPPORT RUNNING MACHINERY AND OTHER SOURCES OF IMPACT OR STRESS REVERSAL MUST BE PRE-TENSIONED.

ALL SLIP CRITICAL CONNECTIONS AS INDICATED IN THESE DRAWINGS WITH -SC DESIGNATION MUST BE PRE-TENSIONED. SC TYPE CONNECTIONS MUST BE FREE OF PAINT, OIL OR OTHER MATERIALS THAT REDUCE THE FRICTION AT CONTACT SURFACES.

CONNECTIONS DESIGNATED AS A325-X OR A490-X SHALL BE INSTALLED WITH BOLT HEAD ON SIDE OF THE THINNEST PLATE BEING CONNECTED.

SECONDARY MEMBERS AND FLANGE BRACE CONNECTIONS ARE ALWAYS "SNUG TIGHTENED", EVEN IF ABOVE CONDITIONS EXIST, UNLESS SPECIFICALLY NOTED OTHERWISE ON DETAILS.
WASHERS ARE NOT REQUIRED FOR "SNUG-TIGHT" CONNECTIONS. PRE-TENSIONED A325 OR A490 CONNECTIONS TIGHTENED USING THE TURN-OF-THE-NUT METHOD DO NOT REQUIRE WASHERS. A490 BOLTS MUST ALWAYS BE PRE-TENSIONED.

CODES AND LOADS

WHEN MULTIPLE BUILDINGS ARE INVOLVED, SPECIFIC LOAD FACTORS FOR DIFFERING OCCUPANCIES, BUILDING DIMENSIONS, HEIGHTS, FRAMING SYSTEMS, ROOF SLOPES, ETC., MAY RESULT IN DIFFERENT LOAD APPLICATION FACTORS THAN INDICATED BELOW. SEE CALCULATIONS FOR FURTHER DETAILS.

Building Code: 2006 International Building Code
Waste Transfer Station : Building Use:Standard Occupancy Structure, Collateral Gravity: 3.00 psf (Not Including bldg wt)
LIVE LOADS AND RAINFALL
Live Load 20.00 psf (Reducible)
Rainfall: 8.00 inches per hour

SNOW LOAD
Ground Snow: 15.00 psf, Flat Roof Snow: 12.60 psf
Snow Exposure Category (Factor): 2 Partially Exposed (1.00)
Snow Importance: 1.000 Thermal Category (Factor): Unheated (1.20)

WIND LOAD
Wind Speed: 95.00 mph, Wind Exposure: B
Basic Wind Pressure: 15.83 psf
Wind Importance Factor: 1.000, Ft= Topographic Factor: 1.0000
Wind Enclosure: Partially Enclosed, 0.550
Note: All windows, doors, skylights and other covered openings must be designed for the specified above wind loads

EARTHQUAKE DESIGN DATA
Lateral Force Resisting Systems using Equivalent Force Procedure
Mapped Spectral Response - Ss:24.10 %g, S1:10.10 %g
Seismic Hazard / Use Group: Group 1
Seismic Performance / Design Category: C (See Bolt Tightening Note Above)
Seismic Snow Load: 0.00 psf
Seismic Importance: 1.000
Soil Profile Type: Stiff soil (D, 4)
Design Spectral Response - Sds: 0.2571, Sd1: 0.1616

Ordinary Steel Moment Frames
Frame Redundancy Factor:1.0000
Framing R-Factor: 3.0000, Frame Seismic Factor (%s): 0.0855, Design Base Shear = 0.0855 W
Ordinary Steel Concentric Braced Frames
Brace Redundancy Factor:1.0000
Bracing R-Factor: 3.0000, Brace Seismic Factor (%s): 0.0857, Design Base Shear = 0.0857 W

NORTH CAROLINA PROFESSIONAL SEAL 026505 ENGINEER MENG K. WONG

1-6-09
2-18-09

JRO 2-5-09 AR pg 1-3, JRO 2-17-09 pg 4-22

THE VP ENGINEER'S SEAL APPLIES ONLY TO THE WORK PRODUCT OF VP AND DESIGN AND PERFORMANCE REQUIREMENTS SPECIFIED BY VP. THE VP ENGINEER'S SEAL DOES NOT APPLY TO THE PERFORMANCE OR DESIGN OF ANY OTHER PRODUCT OR COMPONENT FURNISHED BY VP EXCEPT TO ANY DESIGN OR PERFORMANCE REQUIREMENTS SPECIFIED BY VP.

THE GENERAL CONTRACTOR AND/OR ERECTOR IS SOLELY RESPONSIBLE FOR ACCURATE, GOOD QUALITY WORKMANSHIP IN ERECTING THIS BUILDING IN CONFORMANCE WITH THIS DRAWING, DETAILS REFERENCED IN THIS DRAWING, ALL APPLICABLE VP BUILDINGS ERECTION GUIDES, AND INDUSTRY STANDARDS PERTAINING TO PROPER ERECTION, INCLUDING THE CORRECT USE OF TEMPORARY BRACING.

CAN/CSA A660 QUASAR Certified

IAS ACCREDITED AC172

2/5/2009 8:21:13

COVER SHEET

BUILDER	Annis Building Corp.	JOBNO	09-379
CUSTOMER		DATE	2-5-2009
LOCATION	Raleigh, North Carolina	DRAWN / CHECK	VEM
PROJECT	Shotwell W.T.P.	PAGE	1
BUILDERS PO#			

VP BUILDINGS VARCO PRUDEN — A BlueScope Steel Company — VPC VERSION: 7.1c

FILENAME 2256-08-1403 revised lc at 1 & 2.VPC

Concept elevations, final design pending.

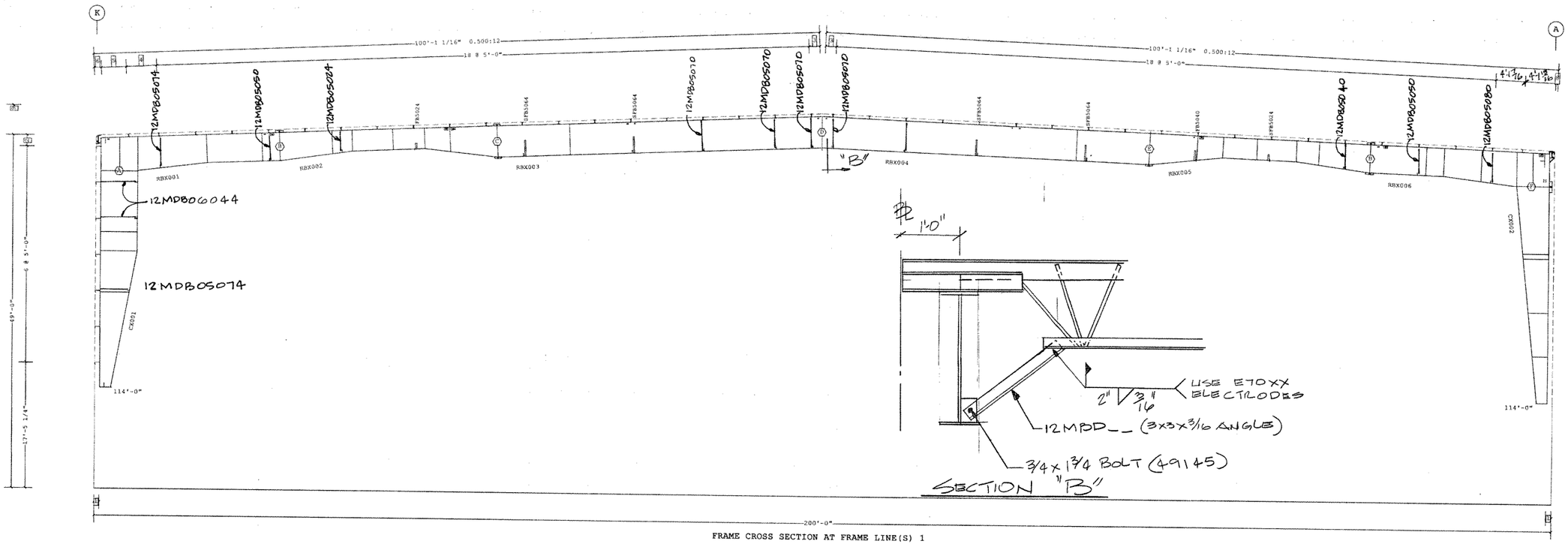
Frame Member Schedule

Part	Mem	Width	Thick	WebThk.	Depth1	Depth2	Approx.Lgth
CX001	1	8"	.6250	.3125	1'-6"	5'-0"	30'-0 7/8"
	2	8"	.7500	.5000	5'-0"	5'-0"	
RBX001	3	1'-0"	.7500	.3750	4'-9"	3'-11"	24'-4 1/2"
	4	1'-0"	.7500	.2500	3'-11"	3'-11"	
RBX002	5	8"	.7500	.2500	3'-11"	2'-11"	30'-0"
	6	8"	.5000	.2500	2'-11"	2'-11"	
	7	8"	.6250	.2500	2'-11"	4'-4"	
RBX003	8	8"	.7500	.3125	4'-4"	4'-4"	44'-11 15/16"
	9	8"	1.0000	.2500	4'-4"	4'-4"	
RBX004	10	8"	1.0000	.2500	4'-4"	4'-4"	44'-11 15/16"
	11	8"	.7500	.3125	4'-4"	4'-4"	
RBX005	12	8"	.6250	.2500	4'-4"	2'-11"	30'-0 1/8"
	13	8"	.5000	.2500	2'-11"	2'-11"	
	14	8"	.7500	.2500	2'-11"	3'-11"	
RBX006	15	1'-0"	.7500	.2500	3'-11"	3'-11"	24'-6 3/4"
	16	1'-0"	.7500	.3750	3'-11"	4'-9"	
CX002	17	1'-3"	.7500	.3125	3'-5 15/16"	4'-6"	30'-0 9/16"
	18	1'-3"	.7500	.2500	1'-6"	3'-5 15/16"	

Bolt Connection & Plate Schedule

Id	Qty	ASTM	Bolt Dia.	Bolt Length	Plate Thick.	Rows Out	Rows In	Tension Bolt	Washer
A	12	A325	1 1/2"	4 1/2"	1 1/4"	4	2		
B	16	A325	7/8"	2 3/4"	3/4"	4	4		
C	16	A325	3/4"	2 1/4"	5/8"	4	4		
D	14	A325	1"	3 1/2"	1"	3	4		
E	14	A325	3/4"	2 1/4"	5/8"	3	4		
F	14	A325	1 1/4"	4"	1"	4	3		

Frame Clearances
Horiz. Clearance between members 1(CX001) and 17(CX002): 189'-1"
Horiz. Clearance between members 1(CX001) and 18(CX002): 190'-1 1/16"
Horiz. Clearance between members 2(CX001) and 17(CX002): 189'-1"
Horiz. Clearance between members 2(CX001) and 18(CX002): 190'-1 1/16"
Vert. Clearance at member 2(CX001): 44'-0 13/16"
Vert. Clearance at member 17(CX002): 44'-0 9/16"
Finished Floor Elevation = 100'-0" (Unless Noted Otherwise)



FRAME CROSS SECTION AT FRAME LINE(S) 1

9 53'-2" Ridge Ht.
8 3 1/2"
6 3 1/2"
5 4'-1 15/16"
4 4'-1 7/16"
3 1'-6 3/16"
2 1'-6 3/4"
1 8 1/2"
Dimension Key

1. USE 1/2 X 1 1/2 A325 SNUG TIGHTENED BOLTS FOR PURLIN TO FRAME, GIRT TO FRAME, AND GIRT TO CLIP CONNECTIONS UNLESS NOTED OTHERWISE.
2. SLOT REINFORCEMENT PLATES NEED NOT BE LOCATED ON THE SAME SIDE OF THE WEB AS THE HILLSIDE WASHER.

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Shape Name = Waste Transfer Station Wall 4, Frame 1

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VP Buildings
3200 Players Club Circle Memphis TN 38125

REV	DATE	BY	DESCRIPTION

NTS
2/12/2009 13:56:30

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER MENG K. WONG
2-18-09

FOR CONSTRUCTION

FRAME CROSS SECTION AT FRAME LINE(S) 1

BUILDER	Annis Building Corp.
CUSTOMER	
LOCATION	Raleigh, North Carolina
PROJECT	Shotwell W.T.P.
BUILDERS PO#	
FILENAME:	2256-08-1403 revised ic at 1 & 2.VPC

VP BUILDINGS VARCO PRUDEN
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VPC VERSION: 7.1c

JOBNO	09-379
DATE	2/11/2009
DRAWN/CHECK	JTI / BLM
PAGE	5