QC Development
PO Box 916
Storrs, CT 06268
860-670-9068
Mark.Roberts@QCDevelopment.net

January 7, 2016

Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Notice of Exempt Modification – New Cingular Wireless PCS, LLC (AT&T) – CT2036
751 Higgins Road, Cheshire, CT 06410
N 41-29-14.8
W 72-55-45.7

Dear Ms. Bachman:

AT&T currently maintains six (6) antennas at the 255-foot level of the existing 250-foot Self Support Tower at 751 Higgins Road, Cheshire, CT. The structure and the property are owned by AT&T. AT&T now intends to remove three (3) existing antennas and replace them with three (3) new CCI antennas. AT&T also intends to remove three (3) Ericsson RRUS-11 and replace them with three (3) Ericsson RRUS-32 B2. The new antennas would be installed at the 255-foot level of the tower.

This facility was built in 1968, however the Town's oldest Land Use Approval records for the property only date back as far as 1982.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Rob Oris, Town Council Chair for the Town of Cheshire, as well as the property owner and the tower owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.

2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

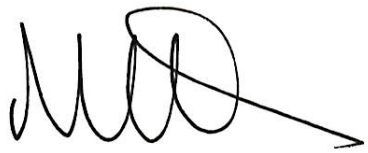
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Please feel free to call me at (860) 670-9068 with any questions regarding this matter. Thank you for your consideration.

Sincerely,



Mark Roberts
QC Development
Consultant for AT&T

Attachments

cc: Rob Oris - as elected official
AT&T - as structure and property owner (via e-mail)

Power Density

Existing Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm^2)	Freq. Band (MHz**)	Limit S (mW /cm^2)	%MPE
Other Carriers*							1.18%
AT&T GSM	2	500	255	0.0058	880	0.5867	0.10%
AT&T UMTS	1	500	255	0.0029	1900	1.0000	0.03%
AT&T LTE	1	500	255	0.0029	700	0.4667	0.06%
AT&T LTE	1	500	255	0.0029	1900	1.0000	0.03%
AT&T LTE	1	500	255	0.0029	2300	1.0000	0.03%
Site Total							1.43%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Proposed Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm^2)	Freq. Band (MHz**)	Limit S (mW /cm^2)	%MPE
Other Carriers*							1.18%
AT&T GSM	1	248	255	0.0014	850	0.5667	0.03%
AT&T UMTS	2	312	255	0.0036	850	0.5667	0.06%
AT&T UMTS	2	304	255	0.0035	1900	1.0000	0.04%
AT&T LTE	1	1476	255	0.0086	700	0.4667	0.18%
AT&T LTE	1	3664	255	0.0213	1900	1.0000	0.21%
Site Total							1.70%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Note: Proposed Loading may also include corrections to certain Existing Loading values

PROJECT INFORMATION

SCOPE OF WORK:	ON THE TOWER: PER SECTOR – REPLACE EXISTING (1) LTE ANTENNA IN POS 4 WITH (1) 8' HEXPORT FOR ALPHA AND 6' FOR BETA AND GAMMA, REPLACE (1) LTE 1900 RRUS–11 WITH (1) RRUS–32 B2 IN POS 4. BY THE EQUIPMENT: UPGRADE DUL TO DUS AND ADD XMU
SITE ADDRESS:	751 HIGGINS ROAD CHESHIRE, CT 06410
LATITUDE:	41° 29' 14.78" (NAD 83)*
LONGITUDE:	72° 55' 45.55" (NAD 83)* *PER AT&T EXISTING PLANS
JURISDICTION:	CONNECTICUT SITING COUNCIL
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY
NAME OF APPLICANT:	AT&T MOBILITY 500 ENTERPRISE DRIVE, SUITE 3A ROCKY HILL, CT 06067
TOWER OWNER:	AT&T CORPORATION f/k/a AMERICAN TELEPHONE AND TELEGRAPH CORPORATION
TOWER NUMBER:	N/A

DRAWING INDEX

		REV
T01	TITLE SHEET	1
G01	GENERAL NOTES	1
A01	COMPOUND PLAN & SHELTER LAYOUT	1
A02	ELEVATION & CONSTRUCTION DETAILS	1
A03	CONSTRUCTION DETAILS	1
E01	GROUNDING DETAILS	1

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

STRUCTURAL NOTE:

1. AS REQUIRED BY THE TIA/EIA 222F – STANDARD, SAI COMMUNICATIONS, INC. SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED CONNECTICUT STRUCTURAL ENGINEER CERTIFYING THAT, THE EXISTING TOWER, ANTENNA MOUNTS AND ANY REQUIRED IMPROVEMENTS AND REINFORCEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, CABLES, SUPPORTS AND APPURTENANCES AND COMPLIES WITH THE CURRENT CONNECTICUT STATE BUILDING CODE AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORCEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, CABLES, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWINGS OR OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.

CONTACT INFORMATION

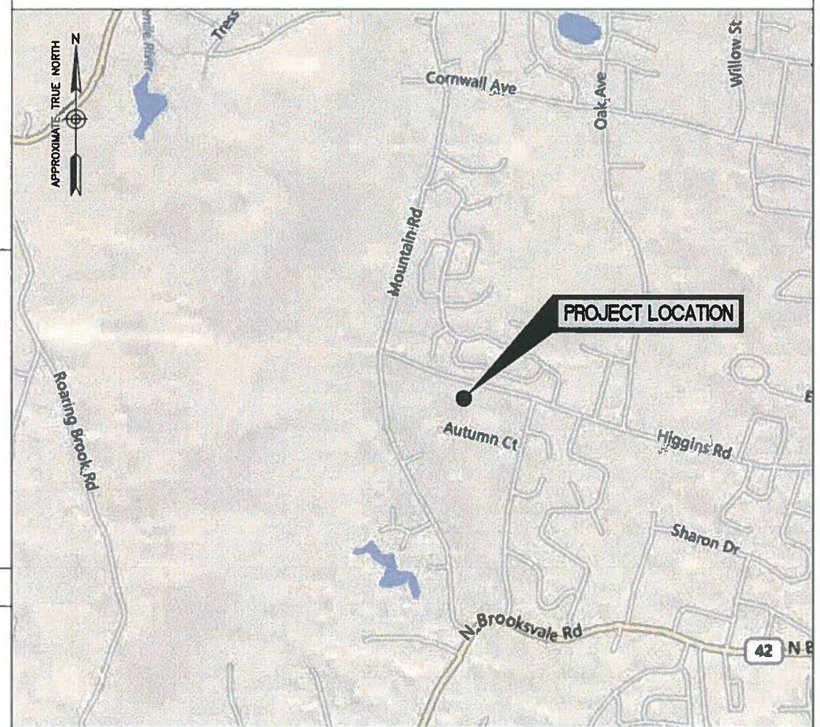
CONTACT	CONTACT	COMPANY	PHONE NO.
ENGINEERING:	GREG H. NAWROTZKI	DEWBERRY	(973) 576–9653
SAC:	CARL AQUILINA	SAI	(603) 560–6185
CONST.:	SCOTT KELLEY	SAI	(978) 979–7638

SITE NAME: CHESHIRE SW
SITE NUMBER: CT2036
LTE BWE - LATTICE TOWER

VICINITY MAP

DIRECTIONS: (FROM 500 ENTERPRISE DRIVE, ROCKY HILL, CT):

HEAD NORTHEAST ON ENTERPRISE DRIVE TOWARD CAPITAL BOULEVARD. TURN LEFT ONTO CAPITAL BOULEVARD. TURN LEFT ONTO WEST STREET. TAKE RAMP FOR I–91 S. AT EXIT 18, TAKE RAMP RIGHT FOR I–691 WEST TOWARD WATERBURY/MERIDEN. AT EXIT 3, TAKE RAMP RIGHT FOR CT–10 TOWARD CHESHIRE/MILLDALE. TURN LEFT ONTO CT–10 HIGHLAND AVE. KEEP STRAIGHT ONTO CT–10/CT–68/CT–70/HIGHLAND AVE. KEEP STRAIGHT ONTO CT–10/S MAIN ST. TURN RIGHT ONTO HIGGINS RD. SITE WILL BE ON THE LEFT.



APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH TYPICAL DRAWING PACKAGE). CONTRACTOR WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
CONNECTICUT STATE BUILDING CODE (2005) & ALL SUBSEQUENT AMENDMENTS

ELECTRICAL CODE:
NATIONAL ELECTRICAL CODE (NEC 2011)

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), *MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION*
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222–F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR–1503, COAXIAL CABLE CONNECTIONS

ANSI T1.311, FOR TELECOM – DC POWER SYSTEMS – TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036
751 HIGGINS ROAD
CHESHIRE, CT 06410

at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

STATE OF CONNECTICUT
JIANG YU
No. 30222
LICENSED PROFESSIONAL ENGINEER
JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

TITLE SHEET

DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	T01	1

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   PROJECT MANAGEMENT – SAI COMMUNICATIONS, INC.
   CONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY
   OEM – ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF PROJECT MANAGEMENT.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
5. DRAWINGS PROVIDED HERE ARE NOT TO SCALE UNLESS OTHERWISE NOTED AND ARE INTENDED TO SHOW OUTLINE ONLY.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY PROJECT MANAGEMENT.
9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. CONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. CONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH PROJECT MANAGEMENT.
10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
14. CONTRACTOR SHALL NOTIFY DEWBERRY 48 HOURS IN ADVANCE OF POURING CONCRETE, OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEER REVIEW.
15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. CONTRACTOR SHALL NOTIFY PROJECT MANAGEMENT OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
16. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY CONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH OWNER. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
17. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
18. CONTRACTOR, SUBCONTRACTORS AND ANY SITE SPECIFIC PART/ PRODUCT/ CONCEALMENT MANUFACTURER TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO MANUFACTURING, FABRICATION OR CONSTRUCTION.

SITE WORK GENERAL NOTES:

1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO:
   A) FALL PROTECTION
   B) CONFINED SPACE
   C) ELECTRICAL SAFETY
   D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, TOP SOIL AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE TRANSMISSION EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION, SEE SOIL COMPACTION NOTES.
11. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
12. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000 PSI) MAY BE USED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE (UNO). SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC 1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TESTS PERFORMED AT THE SUPPLIER'S PLANT,
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
   FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
8. AS AN ALTERNATIVE TO ITEM 7, TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS UNLESS NOTED OTHERWISE. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) *MANUAL OF STEEL CONSTRUCTION.*
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
7. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
4. COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
5. AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOFROLL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL, AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
   CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, AT&T ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE REPLACED.
2. COORDINATION OF WORK:
   CONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH PROJECT MANAGEMENT.
3. CABLE LADDER RACK:
   CONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. CONTRACTOR SHALL SUBMIT MODIFICATIONS TO PROJECT MANAGEMENT FOR APPROVAL.
3. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
4. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
5. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
6. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
7. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
8. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
9. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
10. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
11. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL.) PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
13. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (SIZE 6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
14. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
15. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
16. ALL POWER AND POWER GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
17. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
18. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
19. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
20. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
21. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
22. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
23. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
24. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
25. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
26. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
27. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
28. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
29. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
30. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
31. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM PROJECT MANAGEMENT BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
32. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

STATE OF CONNECTICUT
JIANG YU
No. 23222
REGISTERED
PROFESSIONAL ENGINEER

JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036
751 HIGGINS ROAD
CHESHIRE, CT 06410

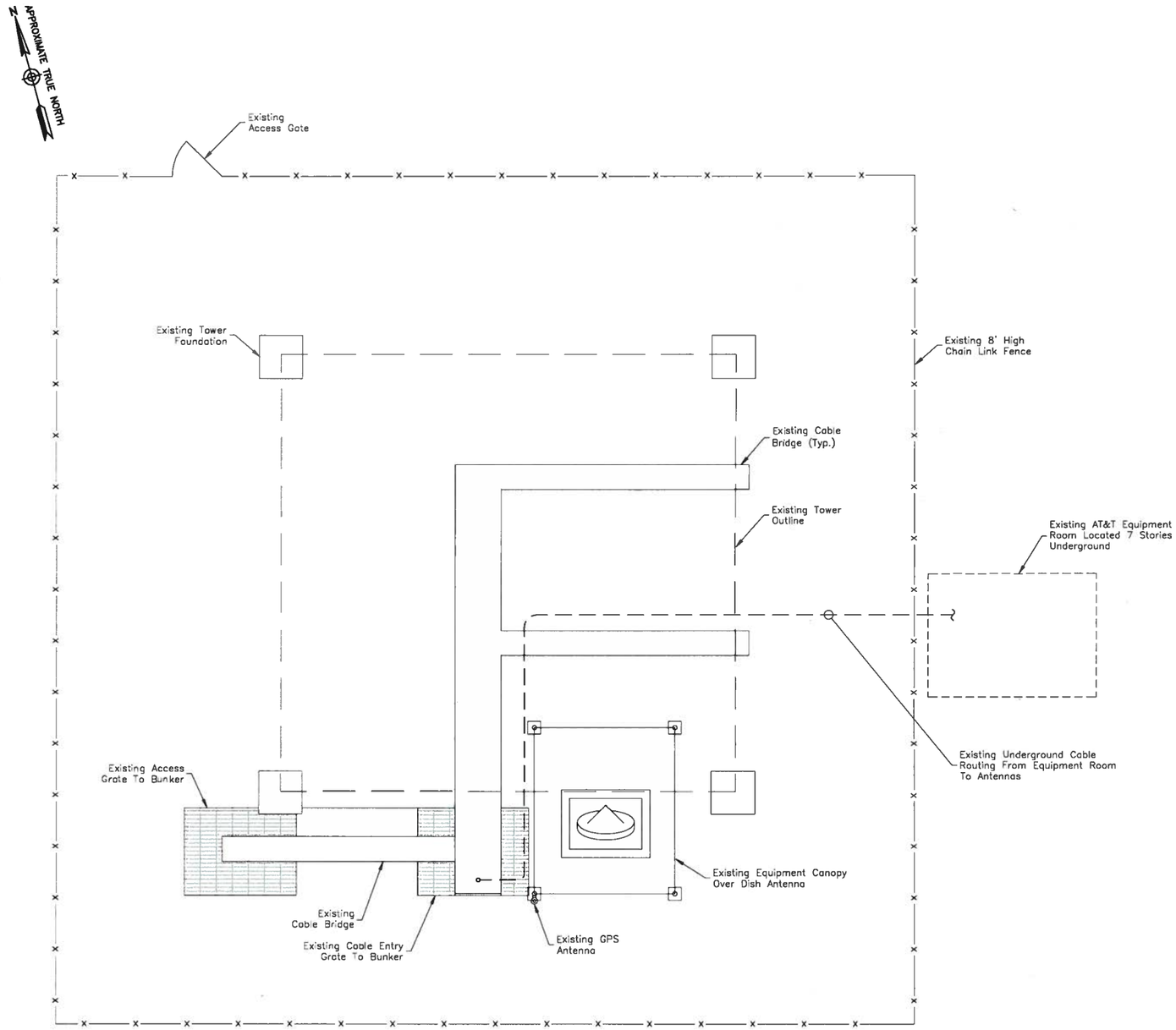
at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

GENERAL NOTES

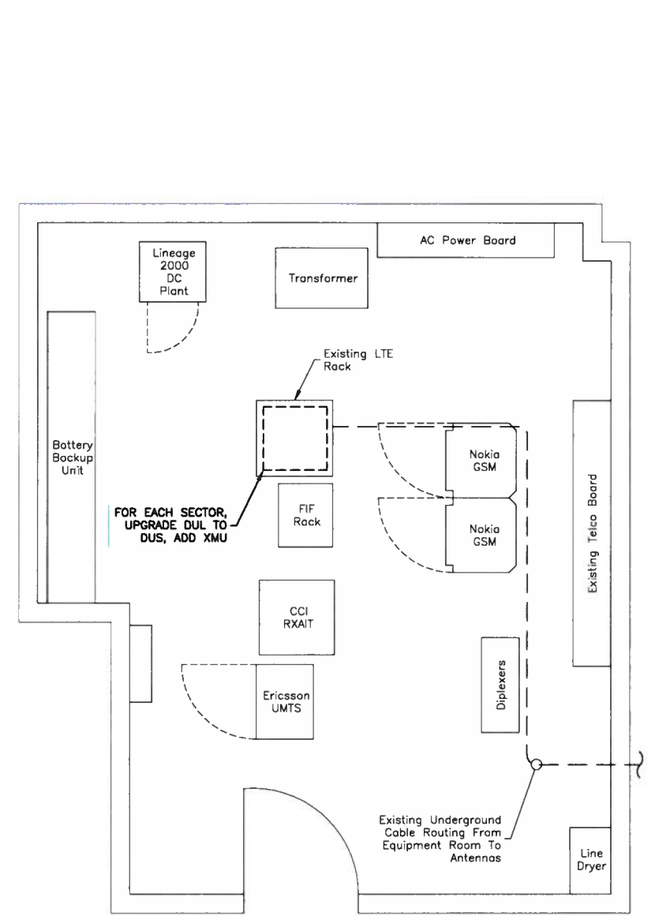
DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	G01	1



COMPOUND PLAN 1

SCALE:1"=10' FOR 11"x17"
1"=5' FOR 22"x34"

0' 5' 10'



SHELTER LAYOUT DETAIL 2

SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"

0' 1' 2' 4'

NOTES:

1. PRIOR TO START OF ANY WORK, A PASSING STRUCTURAL ANALYSIS SHALL BE PROVIDED BY A CT LICENSED P.E. CONTRACTOR TO OBTAIN COPY BEFORE STARTING ANY WORK.
2. ALL ANTENNAS AND COAX TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS AND FINAL AT&T RF DATA SHEET.

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. MOUNT ALL ANTENNAS, COAX, SURGE ARRESTORS, RRU's, ETC. IN ACCORDANCE WITH STRUCTURAL ANALYSIS BY OTHERS.
3. NOT ALL INFORMATION SHOWN FOR CLARITY.
4. FOR EACH SECTOR, UPGRADE DUL TO DUS AND ADD XMU

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036
751 HIGGINS ROAD
CHESHIRE, CT 06410

at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

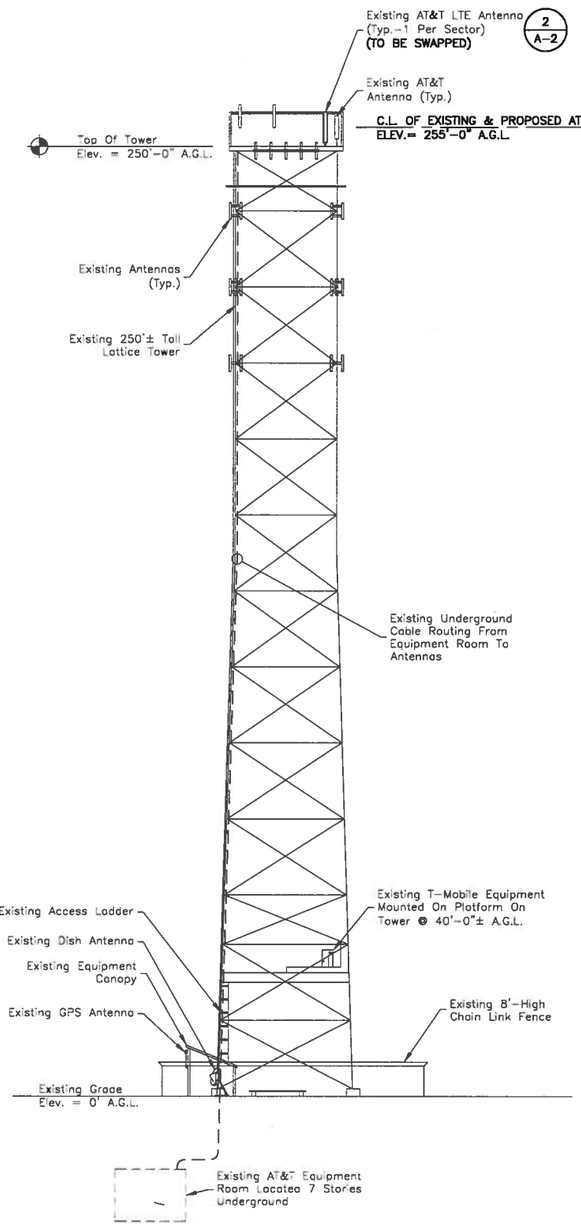
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

STATE OF CONNECTICUT
JIANG YU
No. 23222
LICENSED PROFESSIONAL ENGINEER
JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

COMPOUND PLAN & SHELTER LAYOUT

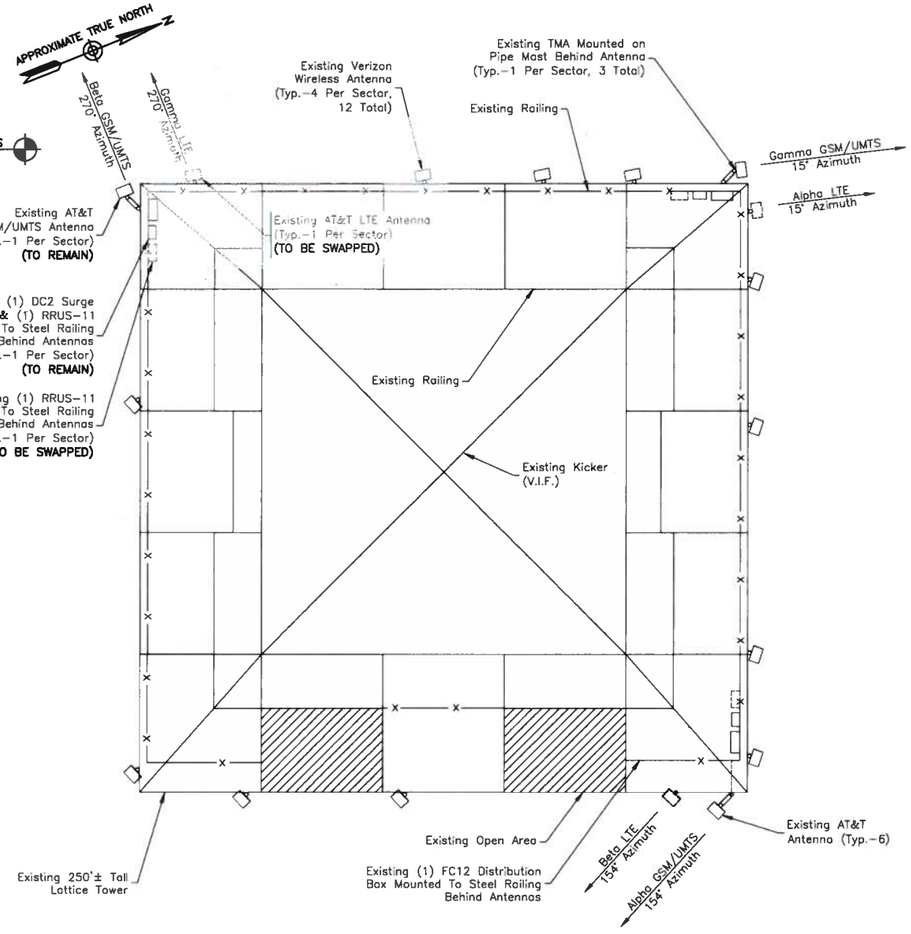
DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	A01	1



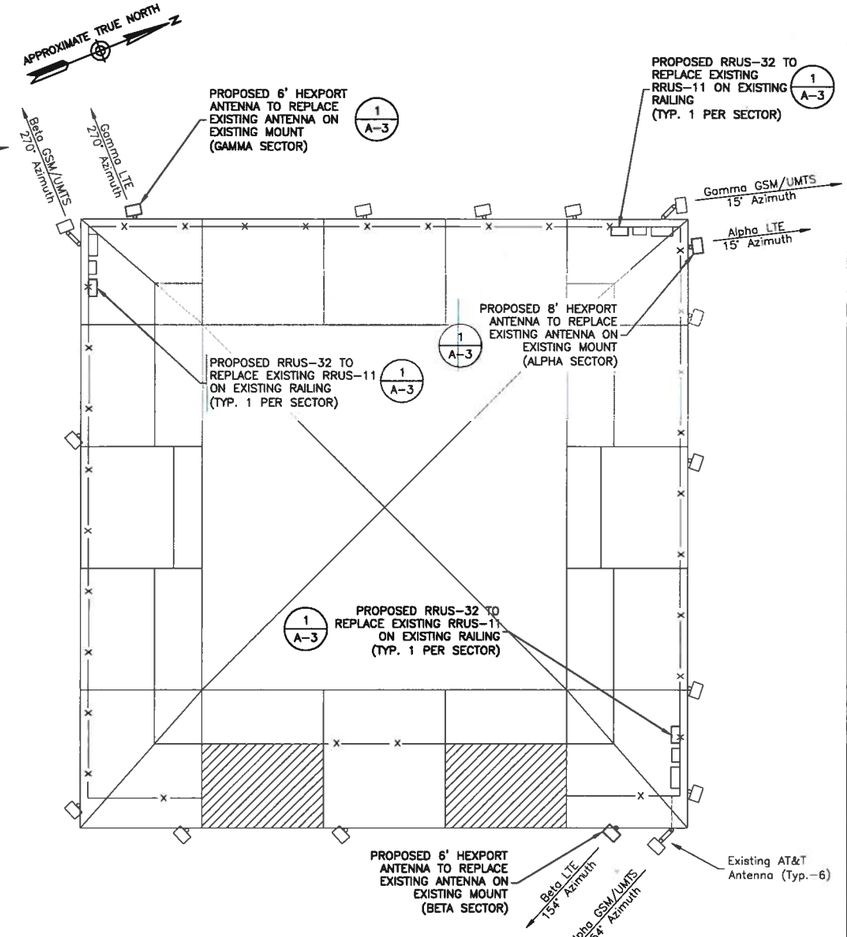
A.G.L. = ABOVE GRADE LEVEL
C.L. = CENTER LINE

EAST ELEVATION
1
SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"

0' 20' 40'



EXISTING @ 255' AGL



PROPOSED @ 255' AGL

ANTENNA PLATFORM ORIENTATION
2
SCALE: 1"=10' FOR 11"x17"
1"=5' FOR 22"x34"

0' 5' 10'

NOTES:
1. AZIMUTHS BASED ON TRUE NORTH.

NOTES:
1. THE PROPOSED DESIGN FOR THIS SCOPE IS PENDING STRUCTURAL ANALYSIS.

DESIGN CONFIGURATION

	ANTENNAS		AZIMUTH	
	EXISTING	PROPOSED	EXISTING	PROPOSED
ALPHA	GSM/UMTS – KMW AM-X-CD-16-65-00T-RET	–	154°	–
	LTE – ANDREW SBNH-1D6565C	LTE – HPA-65R-BUU-H8	15°	–
BETA	GSM/UMTS – KMW AM-X-CD-16-65-00T-RET	–	270°	–
	LTE – KMW AM-X-CD-16-65-00T-RET	LTE – HPA-65R-BUU-H6	154°	–
GAMMA	GSM/UMTS – ANDREW SBNH-1D6565C	–	15°	–
	LTE – KMW AM-X-CD-16-65-00T-RET	LTE – HPA-65R-BUU-H6	270°	–

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036
751 HIGGINS ROAD
CHESHIRE, CT 06410

at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

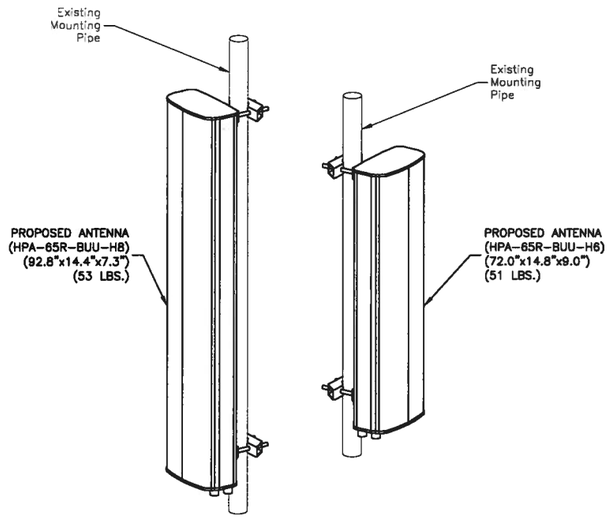
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

STATE OF CONNECTICUT
JIANG FU
No. 23222
LICENSED PROFESSIONAL ENGINEER
JIANG FU, P.E.
CONNECTICUT LICENSE NO. 0023222

ELEVATION & CONSTRUCTION DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	A02	1

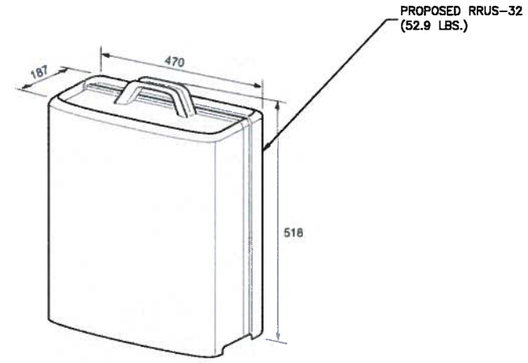


NOTE:

1. PLEASE SEE RFDS FOR SPECIFIC ANTENNA MODEL AND MANUFACTURER'S SPECS FOR INSTALLATION INFO.

ISOMETRIC ANTENNA DETAIL (1)

SCALE: N.T.S.



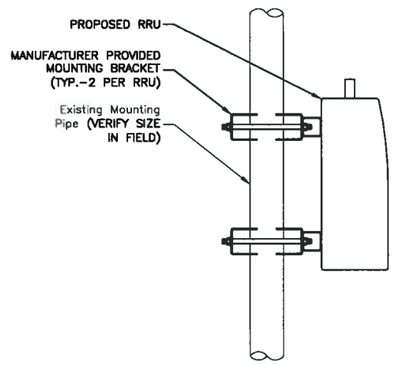
NOTES:

1. MOUNT EQUIPMENT TO UNISTRUT PER MANUFACTURER SPECIFICATIONS.
2. MAINTAIN ALL MANUFACTURER RECOMMENDED CLEARANCES.
3. FIELD-VERIFY RACK DIMENSIONS & HEIGHT.
4. RRUS DIRECTLY BOLTED TO UNISTRUT OR PIPE USING MANUFACTURER PROVIDED BRACKETS.

RRU MODEL & DIMENSIONS	
ERICSSON MODEL	DIMENSIONS (HxWxD)
RRUS-32	29.9" X 13.3" X 6.7"

RRUS DETAIL (2)

SCALE: N.T.S.



RRU MOUNTING DETAIL AT EXISTING RAILING (3)

SCALE: N.T.S.

Dewberry
Dewberry Engineers Inc.
800 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036

751 HIGGINS ROAD
CHESHIRE, CT 06410

at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

STATE OF CONNECTICUT
JIANG YU
No. 23222
LICENSED
PROFESSIONAL ENGINEER

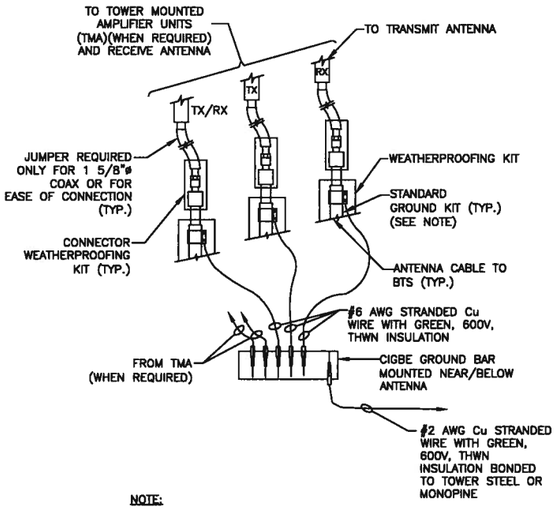
JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

CONSTRUCTION DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	A03	1

GROUNDING NOTES:

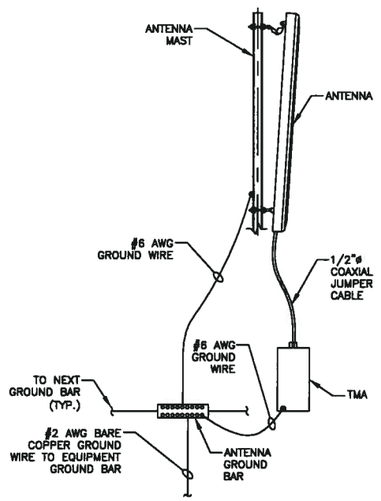
1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ). THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS. ALL AVAILABLE GROUNDING ELECTRODES SHALL BE CONNECTED TOGETHER IN ACCORDANCE WITH THE NEC.
3. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. USE OF OTHER METHODS MUST BE PRE-APPROVED BY CONTRACTOR IN WRITING.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS ON TOWER SITES AND 10 OHMS OR LESS ON ROOFTOP SITES. WHEN ADDING ELECTRODES, CONTRACTOR SHALL MAINTAIN A MINIMUM DISTANCE BETWEEN THE ADDED ELECTRODE AND ANY OTHER EXISTING ELECTRODE EQUAL TO THE BURIED LENGTH OF THE ROD. IDEALLY, CONTRACTOR SHALL STRIVE TO KEEP THE SEPARATION DISTANCE EQUAL TO TWICE THE BURIED LENGTH OF THE RODS.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
6. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
7. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO TRANSMISSION EQUIPMENT.
8. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. IN ALL CASES, BENDS SHALL BE MADE WITH A MINIMUM BEND RADIUS OF 8 INCHES.
11. EACH INTERIOR TRANSMISSION CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH 6 AWG STRANDED, GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRE UNLESS NOTED OTHERWISE IN THE DETAILS. EACH OUTDOOR CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER WIRE UNLESS NOTED OTHERWISE IN THE DETAILS.
12. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE 2 AWG SOLID TIN-PLATED COPPER UNLESS OTHERWISE INDICATED.
13. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE. CONNECTIONS TO ABOVE GRADE UNITS SHALL BE MADE WITH EXOTHERMIC WELDS WHERE PRACTICAL OR WITH 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS. HIGH PRESSURE CRIMP CONNECTORS MAY ONLY BE USED WITH WRITTEN PERMISSION FROM SAI COMMUNICATIONS MARKET REPRESENTATIVE.
14. EXOTHERMIC WELDS SHALL BE PERMITTED ON TOWERS ONLY WITH THE EXPRESS APPROVAL OF THE TOWER MANUFACTURER OR THE CONTRACTORS STRUCTURAL ENGINEER.
15. ALL WIRE TO WIRE GROUND CONNECTIONS TO THE INTERIOR GROUND RING SHALL BE FORMED USING HIGH PRESS CRIMPS OR SPLIT BOLT CONNECTORS WHERE INDICATED IN THE DETAILS.
16. ON ROOFTOP SITES WHERE EXOTHERMIC WELDS ARE A FIRE HAZARD COPPER COMPRESSION CAP CONNECTORS MAY BE USED FOR WIRE TO WIRE CONNECTORS. 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS SHALL BE USED FOR CONNECTION TO ALL ROOFTOP TRANSMISSION EQUIPMENT AND STRUCTURAL STEEL.
17. COAX BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR USING TWO-HOLE MECHANICAL TYPE BRASS CONNECTORS AND STAINLESS STEEL HARDWARE.
18. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
19. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
20. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
21. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER GROUND CONDUCTOR. DURING EXCAVATION FOR NEW GROUND CONDUCTORS, IF EXISTING GROUND CONDUCTORS ARE ENCOUNTERED, BOND EXISTING GROUND CONDUCTORS TO NEW CONDUCTORS.
22. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT WITH LISTED BONDING FITTINGS.



NOTE:

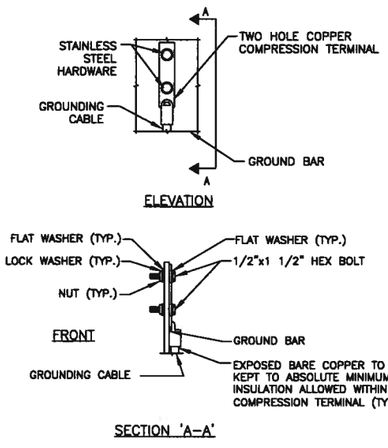
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

CONNECTION OF GROUND WIRES TO GROUNDING BAR (CIGBE) 1



TYPICAL ANTENNA GROUNDING DETAIL 3

SCALE: N.T.S

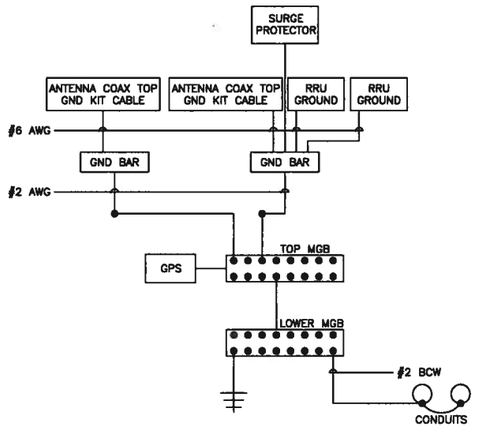


NOTES:

1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL 2

SCALE: N.T.S.

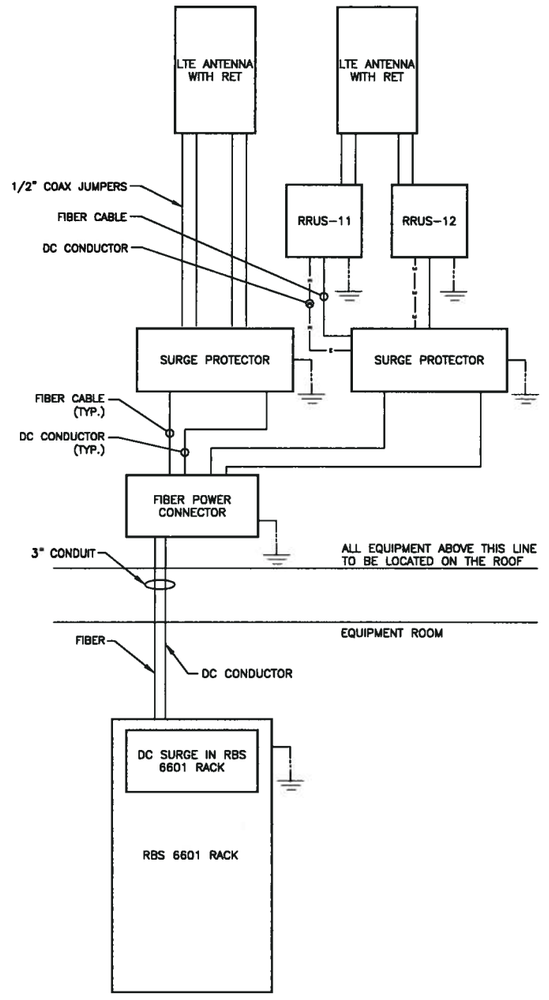


NOTES:

1. BOND ANTENNA GROUNDING KIT CABLE TO TOP CIGBE
2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIGBE.

SCHEMATIC GROUNDING DIAGRAM 4

SCALE: N.T.S.



NOTES:

1. CONTRACTOR TO CONFIRM ALL PARTS.
2. INSTALL ALL EQUIPMENT TO MANUFACTURER RECOMMENDATION.

PLUMBING DIAGRAM 5

SCALE: N.T.S.

Dewberry®
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

SAI
500 ENTERPRISE DRIVE SUITE 3A
ROCKY HILL, CT 06067

CHESHIRE SW
SITE NO. CT2036
751 HIGGINS ROAD
CHESHIRE, CT 06410

at&t
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08/30/16	REVISED PER COMMENTS	GWY	BSH	GHN
0	08/10/16	PRELIMINARY SUBMISSION	GWY	BSH	GHN

SCALE: AS SHOWN | DESIGNED BY: BSH | DRAWN BY: JC

STATE OF CONNECTICUT
JIANG YU
No. 21022
LICENSED
PROFESSIONAL ENGINEER

JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

GROUNDING DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50055106/50065670	E01	1

SAI Communications, Inc.
27 Northwestern Drive
Salem, NH 03079
(603) 421-0470

GPD Engineering and Architecture
Professional Corporation
Chris Scheks
520 South Main Street, Suite 2531
Akron, OH 44311
(614) 588-8973
cscheks@gpdgroup.com

GPD #: 2017723.13.TAG0053.07
December 6, 2016

RIGOROUS STRUCTURAL ANALYSIS REPORT

AT&T DESIGNATION:	**Site USID:**	**TAG0053**
	Site FA:	**10136365**
	Site Name:	**CHESHIRE**
ANALYSIS CRITERIA:	**Codes:**	**TIA-222-G, 2012 IBC, & 2016 CT State Building Code** **125 mph (Ultimate) 3-Second Gust with 0" ice** **97 mph (Nominal) 3-Second Gust with 0" ice** **50 mph fastest-mile with 3/4" ice**
SITE DATA:		**751 Higgins Road, Cheshire, CT 06410, New Haven County** **Latitude 41° 29' 15" N, Longitude 72° 55' 47" W** **Market: NEW ENGLAND** **250' Radio Relay Towers Self Support Tower**

Mr. Thomas Wilson,

GPD is pleased to submit this Rigorous Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the existing and proposed loading configuration detailed in the analysis report.

Analysis Results

Tower Stress Level with Proposed Equipment:	63.7%	Pass
Building Pedestal Ratio with Proposed Equipment:	Adequate	Pass

We at GPD appreciate the opportunity of providing our continuing professional services to you and SAI Communications. If you have any questions or need further assistance on this or any other projects please do not hesitate to call.

Respectfully submitted,

Christopher J Scheks, P.E.
Connecticut #: 0030026

SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing structure is capable of carrying the proposed loading configuration as specified by AT&T Mobility to SAI Communications. This report was commissioned by Mr. Thomas Wilson of AT&T Towers.

This analysis is limited to the above grade tower structure. A detailed analysis of the below grade building structure is beyond the scope of this report; however, based on a comparison of the existing base reactions and the base reactions from the existing, proposed, and reserved loading case the below grade building structure will see a loading increase less than 5% in capacity. Therefore the below grade building structure will be sufficient to support the proposed loading per section 3403.2 of the 2012 IBC.

This analysis has been performed in accordance with the 2016 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 125 mph converted to a nominal 3-second gust wind speed of 97 mph per Section 1609.3 and Appendix N as required for use in the TIA-222-G Standard per Exception #5 of Section 1609.1.1. Exposure Category B with a maximum topographic factor, Kzt, of 1.0 and Risk Category II were used in this analysis.

Modifications designed by GPD (Project #: 2012856.05, dated 7/25/12) have been installed and were considered in this analysis.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Legs	63.0%	Pass
Leg Bolts	63.2%	Pass
Diagonals	52.7%	Pass
Horizontals	44.9%	Pass
Redundant Members	61.7%	Pass
Inner Bracing	63.7%	Pass
Member Bolts	62.1%	Pass
Anchor Rods	32.0%	Pass
Building Pedestals	13.5%	Pass
Foundation	Adequate	Pass

ANALYSIS METHOD

RISA-3D (Version 14.0.0) and tnxTower (Version 7.0.7.0), commercially available software programs, were used to create a three-dimensional model of the tower and calculate primary member stresses for various dead, live, wind, and ice load cases. Selected output from the analysis is included in Appendix B. The following table details the information provided to complete this structural analysis. This analysis is solely based on this information and is being completed without the benefit of a recent GPD site visit.

DOCUMENTS PROVIDED

Document	Remarks	Source
Site Lease Application	AT&T Mobility Application, dated 8/24/2016	Siterra
Construction Drawings	Dewberry No#: 50055106/50065670 Rev. 1, dated 8/30/2016	Siterra
Original Building Drawings	AT&T Co. L-4 Junction Building, Cheshire, CT, dated 12/1/1965	Siterra
Foundation Exploration	FDH Project #: 11-12049E-N1, dated 12/20/11	Siterra
Geotechnical Report	Not Provided	N/A
Previous Structural Analysis	GPD Project #: 2016708.42 Rev. 1, dated 6/1/2016	Siterra
Tower Mapping	Tower Engineering Professionals Project #: 111343, dated 4/8/2011	Siterra
Tower Mapping	Hudson Design Group, Site Name: CHESHIRE, dated 2/4/2013	Siterra
Modification Drawings	GPD Project #: 2012856.05, dated 7/25/2012	Siterra
Ground Mapping	GPD Project #: 2013723.01.TAG0053.01, dated 6/14/2013	Siterra
Tower Mapping	GPD Project #: 2013723.01.TAG0053.03, dated 1/17/2014	Siterra

ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the tower. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The tower member sizes and shapes are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The antenna configuration is as supplied and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
3. Some assumptions are made regarding antennas and mount sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type and industry practice.
4. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
5. The soil parameters are as per data supplied or as assumed and stated in the calculations.
6. Foundations are properly designed and constructed to resist the original design loads indicated in the documents provided.
7. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
8. All welds and connections are assumed to develop at least the member capacity unless determined otherwise and explicitly stated in this report.
9. All prior structural modifications are assumed to be as per data supplied/available and to have been properly installed.
10. Loading interpreted from photos is accurate to $\pm 5'$ AGL, antenna size accurate to ± 3.3 sf, and coax equal to the number of existing antennas without reserve.
11. All existing loading was obtained from the previous structural analysis by GPD (Project #: 2016708.42 Rev. 1, dated 6/1/2016), site photos, and the provided AT&T Mobility Site Lease Application (dated 8/24/2016), and is assumed to be accurate.
12. The final AT&T Mobility configuration was confirmed by Mr. Thomas Wilson of AT&T Towers.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and GPD should be allowed to review any new information to determine its effect on the structural integrity of the tower.

DISCLAIMER OF WARRANTIES

GPD has not performed a recent site visit to the tower to verify the antenna/coax loading or the member sizes. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

This analysis is limited to the designated maximum wind and seismic conditions per the governing tower standards and code. Wind forces resulting in tower vibrations near the structure's resonant frequencies were not considered in this analysis and are outside the scope of this analysis. Lateral loading from any dynamic response was not evaluated under a time-domain based fatigue analysis.

GPD does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the capability of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Towers are designed to carry gravity, wind, and ice loads. All members, legs, diagonals, struts, and redundant members provide structural stability to the tower with little redundancy. Absence or removal of a member can trigger catastrophic failure unless a substitute is provided before any removal. Legs carry axial loads and derive their strength from shorter unbraced lengths by the presence of redundant members and their connection to the diagonals with bolts or welds. If the bolts or welds are removed without providing any substitute to the frame, the leg is subjected to a higher unbraced length that immediately reduces its load carrying capacity. If a diagonal is also removed in addition to the connection, the unbraced length of the leg is greatly increased, jeopardizing its load carrying capacity. Failure of one leg can result in a tower collapse because there is no redundancy. Redundant members and diagonals are critical to the stability of the tower.

GPD makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD pursuant to this report will be limited to the total fee received for preparation of this report.

APPDENDIX A

Tower Analysis Summary

Tower Analysis Summary Form

General Info

Site Name	CHESHIRE
Site Number	TAG0053
FA Number	10136365
Date of Analysis	12/6/2016
Company Performing Analysis	GPD

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

Tower Info	Description	Date
Tower Type (G, SST, MP)	SST	
Tower Height (top of steel AGL)	250'	
Tower Manufacturer	Radio Relay Towers	
Tower Model	Type "J"	
Tower Design	AT&T Co. Drawing #: NA4J03-902 Rev 3	6/5/1967
Original Building Drawings	AT&T Co. L-4 Junction Building, Cheshire, CT	12/1/1965
Geotech Report	n/a	
Tower Mapping	Tower Engineering Professionals Project #: 111343	4/8/2011
Tower Mapping	Hudson Design Group, Site Name: CHESHIRE	2/4/2013
Tower Mapping	GPD Project #: 2013723.01.TAG0053.03	1/17/2014
Previous Structural Analysis	GPD Project #: 2013723.01.TAG0053.02	6/1/2016
Modification Design	GPD Project #: 2012856.05	7/25/2012
Ground Mapping	GPD Project #: 2013723.01.TAG0053.01	6/14/2013
Foundation Mapping	FDH Project #: 11-12049E-N1	12/20/2011

Design Parameters

Design Code Used	TIA-222-G, 2012 IBC 2016 CT BC
Location of Tower (County, State)	New Haven, CT
Basic Wind Speed (mph)	97 (Nominal 3-Second Gust)
Ice Thickness (in)	0.75
Structure Classification (I, II, III)	II
Exposure Category (B, C, D)	B
Topographic Category (1 to 5)	1

Modifications designed by GPD (Project #: 2012856.05, dated 7/25/12) have been installed and were considered in this analysis.

Analysis Results (% Maximum Usage)

Existing/Reserved + Future + Proposed Condition	
Tower (%)	63.7%
Anchor Rods (%)	32.0%
Foundation (%)	Adequate
Foundation Adequate?	Yes

Steel Yield Strength (ksi)

Legs	36
Bracing Members	36
Connection Bolts	A307
Anchor Rods	C1015

Note: Material grades are assumed based on experience with similar towers.

Existing / Reserved Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Leg/Face
Unknown	252	265	1	Lightning Rod	Unknown	4' Lightning Rod		1	Unknown	Top Platform	1	Unknown	5/8"	Face D
Unknown	252	263	1	Beacon	Unknown	Flash Beacon		1	Unknown	13' I Beam				
AT&T Mobility	252	255	4	Panel	KMW	AM-X-CD-16-65-00T-RET	154/270			On the same mount	6	Unknown	1-5/8"	Face D
AT&T Mobility	252	255	2	Panel	Andrew	SBNH-1D6565C	5/15			On the same mount				
AT&T Mobility	252	255	3	TMA	CCI	DTMABP7819VG12A				On the same mount	2	DC Power	5/8"	Face D
AT&T Mobility	252	255	6	RRU	Ericsson	RRUS-11				On the same mount	1	Fiber	1.34"	Face D
AT&T Mobility	252	255	3	Surge Arrestor	Raycap	DC2-48-60-0-9E				On the same mount				
AT&T Mobility	252	255	1	Surge Arrestor	Raycap	FC12-PC6-10E				On the same mount				
Verizon	252	254	6	Panel	Andrew	SBNHH-1D65B	30/140/260	4	Unknown	4' Standoff on platform	12	Unknown	1-5/8"	Face D
Verizon	252	254	4	Panel	Antel	LPA 80063/6CF	30/140/260			On the same mount	3	Fiber	1-5/8"	Face D
Verizon	252	254	2	Panel	Antel	LPA 80080/6CF	260			On the same mount				
Verizon	252	254	6	Diplexers	RFS	FD9R6004/2C-3L				On the same mount				
Verizon	252	254	3	RRH	Alcatel Lucent	RRH 2X60AWS				On the same mount				
Verizon	252	254	3	RRH	Alcatel Lucent	RRH 2X60 PCS				On the same mount				
Verizon	252	254	3	RRH	Alcatel Lucent	RRH 2X60AWS LTE				On the same mount				
Verizon	252	254	3	Distribution Box	RFS	DB-T1-6Z-8AB-OZ				On the same mount				
Verizon	252	254	1	GPS	Lucen	GPS				On the same mount				
Unknown	239.5							1	Unknown	Platform				
Sprint	225	225.6	6	Panel	Decibel	DB980H65E-M	30/130/210	8	Unknown	20' Pipe Mount	6	Unknown	1-5/8"	Face D
Nextel	210	212	6	Panel	Decibel	DB844H90E-XY	30/255	2	Unknown	14' T-Frame	6	Unknown	1-5/8"	Face D
T-Mobile	210	212	2	Panel	Ericsson	AIR21 B4A/B2P	60/140	2	Unknown	14' T-Frame	2	Hybrid	7/8"	Face B
T-Mobile	210	212	2	Panel	Ericsson	KRC 118 048/1 B4A/B12P-B8P	60/140			On the same mounts				
T-Mobile	210	212	2	RRU	Ericsson	RRUS11B12				On the same mounts				
T-Mobile	210	212	2	RRU	Ericsson	RRUS11B2				On the same mounts				
Unknown	210	207	1	Panel	Unknown	26"x26"x2" FP	160			On the same mounts	1	Unknown	1/2"	Face D
Nextel	198	200	3	Panel	Andrew/Decibel	DB844H90E-XY	135	1	Unknown	14' T-Frame	3	Unknown	1-5/8"	Face D
SGI	190	196	2	Omni	Unknown	PG1-NOF-0091		2	Unknown	5' Standoff	2	Unknown	7/8"	Face D
SGI	171	177	1	Omni	Unknown	PG1-DOF-0093		1	Unknown	5' Standoff	1	Unknown	7/8"	Face D
Unknown	139.5							2	Unknown	Platforms w/ Rails				
AT&T Internet Services	85	88	1	Yagi	Wade	WL 7-13/S		3	Unknown	Standoffs	7	Unknown	5/8"	Face D
AT&T Internet Services	85	85	1	Yagi	Wade	WL 14-69/S				On the same mounts				
AT&T Internet Services	85	84	1	Yagi	Wade	WL 14-69/S				On the same mounts				
AT&T Internet Services	85	83	1	Yagi	Wade	WL 14-69/S				On the same mounts				
AT&T Internet Services	85	81	1	Yagi	Wade	WL 14-69/S				On the same mounts				
Unknown	37	37	1	Camera	Vicon Environmental	Camera - V8300H		1	Unknown	2.5' Box Mount	1	Rigid Conduit	1"	Face A
Unknown	36.5	36.5	1	GPS	Lucent	407517689		1	Unknown	3' Side Arm	1	Unknown	1/2"	Face D
Unknown	21	21	2	Box	Unknown	Junction Box		1	Unknown	Platform	5	Conduit	1"	Face A
Unknown	21	21	1	RRU	Unknown	28" x 15.5" x 10" RRU				on the same mount				

Note: (2) of the existing AM-X-CD-16-65-00T-RET Antennas, (1) of the existing SBNH-1D6565C Antenna, (3) of the existing RRUS-11 RRUs, the (3) DC2-48-60-0-9E Boxes, and the (1) FC12-PC6-10E Box at 255' shall be removed prior to the installation of the proposed configuration and have not been considered in this analysis. All other existing/reserved equipment shall be reused.

Proposed Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Leg/Face
AT&T Mobility	252	255	3	Panel	CCI	HPA-65R-BUU-H8				On the existing mount	4	DC Power	5/8"	
AT&T Mobility	252	255	3	RRU	Ericsson	RRUS 32 B2				On the existing mount	2	Fiber	1.34"	
AT&T Mobility	252	255	3	DC Box	Raycap	DC6-48-60-18-8F				On the existing mount				

Note: The proposed equipment shall be installed in addition to the remaining existing/reserved loading at the same elevation.

Future Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Leg/Face

APPDENDIX B

Software Output Files

Tower Input Data

The main tower is a 4x free standing tower with an overall height of 250.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 33.50 ft at the top and 37.00 ft at the base.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Basic wind speed of 97 mph.
Structure Class II.
Exposure Category B.
Topographic Category 1.
Crest Height 0.00 ft.
Nominal ice thickness of 0.7500 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	*Face or Leg*	*Allow Shield*	*Component Type*	*Placement ft*	*Face Offset in*	*Lateral Offset (Frac FW)*	*#*	*# Per Row*	*Clear Spacing in*	*Width or Diameter in*	*Perimeter in*	*Weight plf*
7/8" Hybrid Cable	B	No	Ar (CaAa)	210.00 - 8.00	0.0000	0.45	2	2	0.8750	0.8750		0.28
LDF4RN-50A (1/2 FOAM)	C	No	Ar (CaAa)	210.00 - 8.00	0.0000	-0.35	1	1	0.6300	0.6300		0.15
Power Cable (1/2")	C	No	Ar (CaAa)	250.00 - 8.00	0.0000	0.35	1	1	0.6300	0.5000		0.15
2-1/4" Conduit	C	No	Ar (CaAa)	250.00 - 8.00	0.0000	0.35	1	1	2.2500	2.2500		0.32
2.5" Rigid Conduit	C	No	Ar (CaAa)	40.00 - 8.00	0.0000	-0.3	1	1	2.5000	2.5000		3.00
LDF5-50A (7/8 FOAM)	D	No	Ar (CaAa)	171.00 - 8.00	8.0000	0	3	3	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	D	No	Ar (CaAa)	190.00 - 171.00	8.0000	0	2	2	1.0900	1.0900		0.33
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CaAa)	198.00 - 8.00	0.0000	0.45	9	9	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CaAa)	210.00 - 198.00	0.0000	0.45	6	6	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CaAa)	225.00 - 8.00	0.0000	0.05	3	1	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CaAa)	225.00 - 8.00	0.0000	-0.05	3	1	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CaAa)	250.00 - 8.00	0.0000	0.02	18	6	1.9800	1.9800		0.82
LDF4.5-50 (5/8 FOAM)	D	No	Ar (CaAa)	85.00 - 8.00	6.0000	0	7	4	0.8700	0.8700		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CaAa)	100.00 - 8.00	0.0000	0.055	1	1	0.6300	0.6300		0.15
Feedline Ladder Af	B	No	Ar (CaAa)	209.00 - 8.00	0.0000	0.45	1	1	2.5000	2.5000		7.00
Feedline Ladder Af	C	No	Ar (CaAa)	212.00 - 8.00	2.0000	-0.042	1	1	2.5000	2.5000		7.00
Feedline Ladder Af	D	No	Ar (CaAa)	250.00 - 8.00	0.0000	0	1	1	2.5000	2.5000		7.00
Feedline Ladder Af	D	No	Ar (CaAa)	209.00 - 8.00	0.0000	0.43	1	1	2.5000	2.5000		7.00
1.34" Fiber Cable	D	No	Ar (CaAa)	250.00 - 8.00	5.0000	0.02	3	3	1.3400	1.3400		0.82
5/8" DC cable	D	No	Ar (CaAa)	250.00 - 8.00	5.0000	0.02	6	6	0.6250	0.6250		0.30
1-5/8" Fiber Cable	D	No	Ar (CaAa)	250.00 - 8.00	0.0000	0.02	3	3	1.9800	1.6250		0.82

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#		C_AA_A ft^2/ft	Weight plf
Climbing Ladder	C	No	CaAa (Out Of Face)	250.00 - 8.00	-24.0000	0	1	No Ice	0.29	7.90
								1/2" Ice	0.55	10.60
								1" Ice	0.81	13.30
Safety Line 3/8	C	No	CaAa (Out Of Face)	250.00 - 8.00	-24.0000	0	1	No Ice	0.04	0.22
								1/2" Ice	0.14	0.75
								1" Ice	0.24	1.28

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Tower Top Platform	C	None		0.0000	252.00	No Ice	85.00	85.00	4425.00
						1/2" Ice	97.00	97.00	5752.50
						1" Ice	110.00	110.00	7080.00
2' Standoff - Round (GPD)	B	From Face	4.00 -21.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	1.14 1.79 2.44	1.62 2.41 3.20	37.40 55.34 73.28
2' Standoff - Round (GPD)	C	From Face	4.00 -21.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	1.14 1.79 2.44	1.62 2.41 3.20	37.40 55.34 73.28
2' Standoff - Round (GPD)	A	From Face	4.00 -21.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	1.14 1.79 2.44	1.62 2.41 3.20	37.40 55.34 73.28
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	B	From Face	4.00 -22.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	8.02 8.48 8.94	6.37 7.18 8.00	83.24 148.46 222.18
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	C	From Face	4.00 -22.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	8.02 8.48 8.94	6.37 7.18 8.00	83.24 148.46 222.18
SBNH-1D6565C w/ Mount Pipe	A	From Face	4.00 -22.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	11.45 12.06 12.69	9.36 10.68 11.71	86.35 170.71 264.63
HPA-65R-BUU-H8 w/ Mount Pipe	B	From Face	4.00 -20.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	94.20 189.07 293.65
HPA-65R-BUU-H8 w/ Mount Pipe	C	From Face	4.00 -20.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	94.20 189.07 293.65
HPA-65R-BUU-H8 w/ Mount Pipe	A	From Face	4.00 -20.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	13.05 13.66 14.27	9.42 10.82 12.07	94.20 189.07 293.65
RRUS 32 B2	B	From Face	4.00 -20.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	2.73 2.95 3.18	1.67 1.86 2.05	52.90 73.96 98.21
RRUS 32 B2	C	From Face	4.00 -20.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	2.73 2.95 3.18	1.67 1.86 2.05	52.90 73.96 98.21
RRUS 32 B2	A	From Face	4.00 -20.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	2.73 2.95 3.18	1.67 1.86 2.05	52.90 73.96 98.21

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
RRUS-11	B	From Face	4.00 -20.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	47.62 68.42 92.25
RRUS-11	C	From Face	4.00 -20.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	47.62 68.42 92.25
RRUS-11	A	From Face	4.00 -20.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	2.78 2.99 3.21	1.19 1.33 1.49	47.62 68.42 92.25
DTMABP7819VG12A	B	From Face	4.00 -20.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	0.98 1.10 1.23	0.34 0.42 0.51	19.18 26.48 35.63
DTMABP7819VG12A	C	From Face	4.00 -20.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	0.98 1.10 1.23	0.34 0.42 0.51	19.18 26.48 35.63
DTMABP7819VG12A	A	From Face	4.00 -20.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	0.98 1.10 1.23	0.34 0.42 0.51	19.18 26.48 35.63
DC6-48-60-18-8F Surge Suppression Unit	A	From Face	4.00 -20.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	0.92 1.46 1.64	0.92 1.46 1.64	18.90 36.62 56.82
DC6-48-60-18-8F Surge Suppression Unit	B	From Face	4.00 -20.00 3.00	49.0000	252.00	No Ice 1/2" Ice 1" Ice	0.92 1.46 1.64	0.92 1.46 1.64	18.90 36.62 56.82
DC6-48-60-18-8F Surge Suppression Unit	C	From Face	4.00 -20.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	0.92 1.46 1.64	0.92 1.46 1.64	18.90 36.62 56.82
GPS	A	From Face	2.00 0.00 2.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	0.11 0.21 0.28	0.11 0.21 0.28	0.87 3.85 7.85
SBNHH-1D65B w/ Mount Pipe	B	From Face	2.00 -2.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
SBNHH-1D65B w/ Mount Pipe	B	From Face	2.00 -8.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
4' Standoff	C	From Face	2.00 2.00 2.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	3.41 4.47 5.50	3.41 4.47 5.50	80.00 104.00 128.00
SBNHH-1D65B w/ Mount Pipe	C	From Face	4.00 2.00 0.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
4' Standoff	C	From Face	2.00 10.00 2.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	3.41 4.47 5.50	3.41 4.47 5.50	80.00 104.00 128.00
SBNHH-1D65B w/ Mount Pipe	C	From Face	4.00 10.00 2.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
SBNHH-1D65B w/ Mount Pipe	A	From Face	2.00 -10.00 2.00	-25.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
SBNHH-1D65B w/ Mount Pipe	A	From Face	2.00 0.00 2.00	-25.0000	252.00	No Ice 1/2" Ice 1" Ice	8.16 8.62 9.09	6.16 6.82 7.51	59.30 120.29 189.03
LPA-80063/6CF w/ Mount Pipe	B	From Face	2.00 10.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	9.83 10.40 10.93	10.22 11.38 12.27	52.22 144.64 245.54

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
LPA-80063/6CF w/ Mount Pipe	B	From Face	2.00 15.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	9.83 10.40 10.93	10.22 11.38 12.27	52.22 144.64 245.54
4' Standoff	D	From Face	2.00 -15.00 2.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	3.41 4.47 5.50	3.41 4.47 5.50	80.00 104.00 128.00
LPA-80063/6CF w/ Mount Pipe	D	From Face	4.00 -15.00 2.00	-55.0000	252.00	No Ice 1/2" Ice 1" Ice	9.83 10.40 10.93	10.22 11.38 12.27	52.22 144.64 245.54
4' Standoff	D	From Face	2.00 8.00 2.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice	3.41 4.47 5.50	3.41 4.47 5.50	80.00 104.00 128.00
LPA-80063/6CF w/ Mount Pipe	D	From Face	4.00 8.00 2.00	-55.0000	252.00	No Ice 1/2" Ice 1" Ice	9.83 10.40 10.93	10.22 11.38 12.27	52.22 144.64 245.54
LPA-80080/6CF w/ Mount Pipe	A	From Face	2.00 8.00 2.00	-25.0000	252.00	No Ice 1/2" Ice 1" Ice	4.35 4.79 5.25	10.04 11.00 11.83	42.90 107.03 178.83
LPA-80080/6CF w/ Mount Pipe	A	From Face	2.00 10.00 2.00	-25.0000	252.00	No Ice 1/2" Ice 1" Ice	4.35 4.79 5.25	10.04 11.00 11.83	42.90 107.03 178.83
RRH2X60-AWS	B	From Face	2.00 0.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	3.50 3.76 4.03	2.10 2.34 2.58	55.00 79.31 107.31
RRH2X60-AWS	C	From Face	2.00 0.00 2.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	3.50 3.76 4.03	2.10 2.34 2.58	55.00 79.31 107.31
RRH2X60-AWS	A	From Face	2.00 0.00 2.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	3.50 3.76 4.03	2.10 2.34 2.58	55.00 79.31 107.31
RRH2X60-PCS	B	From Face	2.00 0.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	2.20 2.39 2.59	1.36 1.52 1.68	55.00 72.91 93.69
RRH2X60-PCS	C	From Face	2.00 0.00 2.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	2.20 2.39 2.59	1.36 1.52 1.68	55.00 72.91 93.69
RRH2X60-PCS	A	From Face	2.00 0.00 2.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	2.20 2.39 2.59	1.36 1.52 1.68	55.00 72.91 93.69
RRH 2X60AWS LTE	B	From Face	2.00 0.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	1.87 2.04 2.23	1.26 1.41 1.57	44.00 60.13 78.96
RRH 2X60AWS LTE	C	From Face	2.00 0.00 2.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	1.87 2.04 2.23	1.26 1.41 1.57	44.00 60.13 78.96
RRH 2X60AWS LTE	A	From Face	2.00 0.00 2.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	1.87 2.04 2.23	1.26 1.41 1.57	44.00 60.13 78.96
DB-T1-6Z-8AB-0Z	B	From Face	2.00 0.00 2.00	15.0000	252.00	No Ice 1/2" Ice 1" Ice	4.80 5.07 5.35	2.00 2.19 2.39	44.00 80.13 120.22
DB-T1-6Z-8AB-0Z	C	From Face	2.00 0.00 2.00	35.0000	252.00	No Ice 1/2" Ice 1" Ice	4.80 5.07 5.35	2.00 2.19 2.39	44.00 80.13 120.22
DB-T1-6Z-8AB-0Z	A	From Face	2.00 0.00 2.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice	4.80 5.07 5.35	2.00 2.19 2.39	44.00 80.13 120.22

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
DB980H65E-M w/ 20' Mount Pipe	B	From Face	1.00 -15.00 0.00	0.0000	225.60	No Ice 1/2" Ice 1" Ice	8.11 10.01 11.94	7.94 10.34 12.76	124.30 199.77 291.06
(2) DB980H65E-M w/ 20' Mount Pipe	B	From Face	1.00 15.00 0.60	0.0000	225.60	No Ice 1/2" Ice 1" Ice	8.11 10.01 11.94	7.94 10.34 12.76	124.30 199.77 291.06
(2) DB980H65E-M w/ 20' Mount Pipe	C	From Face	1.00 -15.00 0.60	0.0000	225.60	No Ice 1/2" Ice 1" Ice	8.11 10.01 11.94	7.94 10.34 12.76	124.30 199.77 291.06
(2) DB980H65E-M w/ 10' Mount Pipe	D	From Face	1.00 10.00 0.60	0.0000	225.60	No Ice 1/2" Ice 1" Ice	5.24 6.13 7.04	5.07 6.46 7.88	66.40 114.34 172.79
10' x 2.5" Pipe	B	From Face	1.00 -10.00 0.00	0.0000	225.60	No Ice 1/2" Ice 1" Ice	2.50 3.53 4.58	2.50 3.53 4.58	50.00 68.64 93.79
10' x 2.5" Pipe	D	From Face	1.00 -15.00 0.00	0.0000	225.60	No Ice 1/2" Ice 1" Ice	2.50 3.53 4.58	2.50 3.53 4.58	50.00 68.64 93.79
(3) DB844H90E-XY w/Mount Pipe	A	From Leg	1.00 0.00 2.00	60.0000	210.00	No Ice 1/2" Ice 1" Ice	3.58 4.20 4.70	5.28 6.31 7.06	35.55 79.42 129.38
(3) DB844H90E-XY w/Mount Pipe	D	From Leg	1.00 0.00 2.00	15.0000	210.00	No Ice 1/2" Ice 1" Ice	3.58 4.20 4.70	5.28 6.31 7.06	35.55 79.42 129.38
14' T-Frame	A	From Leg	0.50 0.00 0.00	60.0000	210.00	No Ice 1/2" Ice 1" Ice	18.21 23.76 29.31	0.00 0.00 0.00	492.00 690.25 888.50
14' T-Frame	D	From Leg	0.50 0.00 0.00	15.0000	210.00	No Ice 1/2" Ice 1" Ice	18.21 23.76 29.31	0.00 0.00 0.00	492.00 690.25 888.50
AIR21 B4A/B2P w/ mount pipe	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 1/2" Ice 1" Ice	6.13 6.52 6.92	5.54 6.20 6.87	101.25 156.43 218.21
AIR21 B4A/B2P w/ mount pipe	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 1/2" Ice 1" Ice	6.13 6.52 6.92	5.54 6.20 6.87	101.25 156.43 218.21
KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 1/2" Ice 1" Ice	11.54 12.16 12.79	10.68 12.09 13.33	154.59 246.84 348.90
KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 1/2" Ice 1" Ice	11.54 12.16 12.79	10.68 12.09 13.33	154.59 246.84 348.90
RRUS 11 B12	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 1/2" Ice 1" Ice	2.83 3.04 3.26	1.18 1.33 1.48	50.70 71.57 95.49
RRUS 11 B12	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 1/2" Ice 1" Ice	2.83 3.04 3.26	1.18 1.33 1.48	50.70 71.57 95.49
RRUS 11 B2	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 1/2" Ice 1" Ice	2.83 3.04 3.26	1.18 1.33 1.48	50.70 71.57 95.49
RRUS 11 B2	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 1/2" Ice 1" Ice	2.83 3.04 3.26	1.18 1.33 1.48	50.70 71.57 95.49
14' T-Frame	B	From Leg	0.50 0.00 0.00	0.0000	210.00	No Ice 1/2" Ice 1" Ice	18.21 23.76 29.31	0.00 0.00 0.00	492.00 690.25 888.50

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
14' T-Frame	C	From Leg	0.50	-10.0000	210.00	No Ice	18.21	0.00	492.00
			0.00			1/2" Ice	23.76	0.00	690.25
			0.00			1" Ice	29.31	0.00	888.50
26"x 26" Flat Panel	C	From Leg	1.00	0.0000	210.00	No Ice	5.60	0.52	15.00
			0.00			1/2" Ice	5.92	0.67	38.43
			-3.00			1" Ice	6.24	0.83	65.30
(3) DB844H90E-XY w/Mount Pipe	C	From Leg	1.00	-15.0000	198.00	No Ice	3.58	5.28	35.55
			0.00			1/2" Ice	4.20	6.31	79.42
			2.00			1" Ice	4.70	7.06	129.38
14' T-Frame	C	From Leg	0.50	-15.0000	198.00	No Ice	18.21	0.00	492.00
			0.00			1/2" Ice	23.76	0.00	690.25
			0.00			1" Ice	29.31	0.00	888.50
PG1-NOF-0091	A	From Leg	3.50	-45.0000	190.00	No Ice	1.40	1.40	7.50
			-3.50			1/2" Ice	2.23	2.23	18.71
			6.00			1" Ice	3.07	3.07	35.15
5' Standoff	A	From Leg	1.75	-45.0000	190.00	No Ice	2.72	12.93	145.70
			-1.75			1/2" Ice	4.11	17.82	223.26
			0.00			1" Ice	5.50	22.71	300.83
PG1-NOF-0091	B	From Leg	3.50	45.0000	190.00	No Ice	1.40	1.40	7.50
			3.50			1/2" Ice	2.23	2.23	18.71
			6.00			1" Ice	3.07	3.07	35.15
5' Standoff	B	From Leg	1.75	45.0000	190.00	No Ice	2.72	12.93	145.70
			1.75			1/2" Ice	4.11	17.82	223.26
			0.00			1" Ice	5.50	22.71	300.83
PG1-DOF-0093	B	From Leg	3.50	45.0000	171.00	No Ice	1.40	1.40	7.50
			3.50			1/2" Ice	2.23	2.23	18.71
			0.00			1" Ice	3.07	3.07	35.15
5' Standoff	B	From Leg	1.75	45.0000	171.00	No Ice	2.72	12.93	145.70
			1.75			1/2" Ice	4.11	17.82	223.26
			0.00			1" Ice	5.50	22.71	300.83
WL14-69/S	B	From Leg	1.00	-28.0000	85.00	No Ice	2.88	2.88	5.00
			0.00			1/2" Ice	3.74	3.74	6.50
			-4.00			1" Ice	4.61	4.61	8.45
WL14-69/S	B	From Leg	1.00	-28.0000	85.00	No Ice	2.88	2.88	5.00
			0.00			1/2" Ice	3.74	3.74	6.50
			0.00			1" Ice	4.61	4.61	8.45
WL14-69/S	C	From Leg	1.00	-39.0000	85.00	No Ice	2.88	2.88	5.00
			0.00			1/2" Ice	3.74	3.74	6.50
			-2.00			1" Ice	4.61	4.61	8.45
WL14-69/S	D	From Leg	1.00	-32.0000	85.00	No Ice	2.88	2.88	5.00
			0.00			1/2" Ice	3.74	3.74	6.50
			-1.00			1" Ice	4.61	4.61	8.45
WL7-13	D	From Leg	1.00	-32.0000	85.00	No Ice	2.88	2.88	25.00
			0.00			1/2" Ice	3.73	3.73	32.50
			3.00			1" Ice	4.59	4.59	40.00
14" Omni	C	None		0.0000	41.00	No Ice	0.13	0.13	5.00
						1/2" Ice	0.22	0.22	6.76
						1" Ice	0.31	0.31	9.48
GPS	C	None		0.0000	42.00	No Ice	0.13	0.13	0.87
						1/2" Ice	0.21	0.21	3.85
						1" Ice	0.28	0.28	7.85
Camera	B	From Leg	1.50	0.0000	37.00	No Ice	0.11	0.05	2.00
			0.00			1/2" Ice	0.16	0.08	3.30
			0.00			1" Ice	0.21	0.12	5.42
2.5' Box Mount	B	From Leg	1.50	0.0000	37.00	No Ice	1.36	1.36	20.00
			0.00			1/2" Ice	2.45	2.45	40.00
			0.00			1" Ice	3.50	3.50	64.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
GPS	D	From Face	3.00 0.00 0.00	0.0000	36.50	No Ice 1/2" Ice 1" Ice	0.13 0.21 0.28	0.13 0.21 0.28	0.87 3.85 7.85
3' Side Arm	D	From Face	1.50 0.00 0.00	0.0000	36.50	No Ice 1/2" Ice 1" Ice	0.93 1.13 1.37	0.93 1.13 1.37	44.94 54.87 67.25
Platform	B	From Face	0.00 10.00 0.00	0.0000	21.00	No Ice 1/2" Ice 1" Ice	5.61 7.01 8.42	2.70 3.38 4.05	100.00 125.00 150.00
(2) Junction Box (40"x14"x9")	B	From Face	0.00 10.00 0.00	0.0000	21.00	No Ice 1/2" Ice 1" Ice	3.88 3.88 3.88	2.50 2.50 2.50	50.00 50.00 50.00
Platform	C	None		0.0000	239.50	No Ice 1/2" Ice 1" Ice	75.38 94.22 113.06	75.38 94.22 113.06	10500.00 13000.00 15500.00
Catwalk	B	From Face	0.00 0.00 0.00	0.0000	139.50	No Ice 1/2" Ice 1" Ice	75.38 94.22 113.06	4.08 5.09 6.11	1250.00 1600.00 1950.00

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36	29000	11200	.295	.65	.49	36	1.5	58	1.2

General Material Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E5 F)	Density[k/ft^3]
1	A36_Gen	29000	11153.846	.3	.65	.49
2	A36_Gen_1	29000	11153.846	.3	.65	.49
3	A36_Gen_2	29000	11153.846	.3	.65	.49

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	TWR_LEG_T1	L6x6x1/2	Column	Single Angle	A36	Typical	5.75	19.9	19.9	.501
2	TWR_LEG_OUTER...	2L2 1/2x2 1/2x1/4x3...	Column	Single Angle	A36	Typical	2.38	3.347	1.41	.049
3	TWR_TOP_GIRT_T1	2L3x4x5/16x3/8	Beam	Wide Flange	A36	Typical	4.18	15.508	3.29	.136
4	TWR_DIAG_T1	2L3x4x5/16x3/8	Column	None	A36	Typical	4.18	15.508	3.29	.136
5	TWR_DIAG_OUTER...	2L3 1/2x4x5/16x3/8	Column	None	A36	Typical	4.49	15.551	5.1	.146
6	TWR_RED_HORZ_T1	L2 1/2x2 1/2x3/16	Beam	None	A36	Typical	.902	.547	.547	.011
7	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
8	TWR_HORZ_OUTE...	W12x26	Beam	None	A36	Typical	7.65	17.3	204	.3
9	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
10	TWR_RED_HORZ_...	L2 1/2x2 1/2x3/16	Beam	None	A36	Typical	.902	.547	.547	.011
11	TWR_RED_DIAG_T1	L2 1/2x2 1/2x3/16	Column	Single Angle	A36	Typical	.902	.547	.547	.011
12	TWR_LEG_T2	W6x20	Column	Wide Flange	A36	Typical	5.87	13.3	41.4	.24
13	TWR_DIAG_T2	2L3x2 1/2x3/8x3/8	Column	None	A36	Typical	3.84	5.153	3.31	.18
14	TWR_RED_HORZ_T2	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
15	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
16	TWR_RED_DIAG_T2	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
17	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
18	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
19	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
20	TWR_RED_HIP_T2	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
21	TWR_RED_HIP_2_T2	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
22	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
23	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
24	TWR_INNER_SUPP...	W10x30	Beam	Wide Flange	A36	Typical	8.84	16.7	170	.622
25	TWR_INNER_SQ_T2	W8x13	Beam	Wide Flange	A36	Typical	3.84	2.73	39.6	.087
26	TWR_INNER_COR...	W8x13	Beam	Wide Flange	A36	Typical	3.84	2.73	39.6	.087
27	TWR_LEG_T3	W6x20	Column	Wide Flange	A36	Typical	5.87	13.3	41.4	.24
28	TWR_HORZ_T3	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
29	TWR_DIAG_T3	2L3x2 1/2x3/8x3/8	Column	None	A36	Typical	3.84	5.153	3.31	.18
30	TWR_RED_HORZ_T3	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
31	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
32	TWR_RED_DIAG_T3	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
33	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
34	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
35	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
36	TWR_RED_HIP_T3	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
37	TWR_RED_HIP_2_T3	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
38	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
39	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
40	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
41	TWR_INNER_SQ_T3	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
42	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
43	TWR_INNER_TRI_T3	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
44	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
45	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
46	TWR_LEG_T4	W6x25	Column	Wide Flange	A36	Typical	7.34	17.1	53.4	.461
47	TWR_HORZ_T4	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
48	TWR_DIAG_T4	2L3x2-1/2x1/2x3/8	Column	None	A36	Typical	5	6.999	4.167	.417
49	TWR_RED_HORZ_T4	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
50	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
51	TWR_RED_DIAG_T4	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
52	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
53	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
54	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
55	TWR_RED_HIP_T4	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
56	TWR_RED_HIP_2_T4	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
57	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
58	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
59	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
60	TWR_INNER_SQ_T4	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
61	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
62	TWR_INNER_TRI_T4	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
63	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
64	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
65	TWR_LEG_T5	W8x31	Column	Wide Flange	A36	Typical	9.13	37.1	110	.536
66	TWR_HORZ_T5	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
67	TWR_DIAG_T5	2L3x2-1/2x1/2x3/8	Column	None	A36	Typical	5	6.999	4.167	.417
68	TWR_RED_HORZ_T5	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
69	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
70	TWR_RED_DIAG_T5	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
71	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
72	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
73	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
74	TWR_RED_HIP_T5	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
75	TWR_RED_HIP_2_T5	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
76	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
77	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
78	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
79	TWR_INNER_SQ_T5	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
80	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
81	TWR_INNER_TRI_T5	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
82	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
83	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
84	TWR_LEG_T6	W8x40	Column	Wide Flange	A36	Typical	11.7	49.1	146	1.12
85	TWR_HORZ_T6	2L3x2 1/2x5/16x3/8	Beam	None	A36	Typical	3.242	4.255	2.845	.106
86	TWR_DIAG_T6	2L4x3x3/8x3/8	Column	None	A36	Typical	4.97	8.508	7.93	.233
87	TWR_RED_HORZ_T6	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
88	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
89	TWR_RED_DIAG_T6	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
90	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
91	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
92	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
93	TWR_RED_HIP_T6	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
94	TWR_RED_HIP_2_T6	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
95	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
96	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
97	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
98	TWR_INNER_SQ_T6	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
99	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
100	TWR_INNER_TRI_T6	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
101	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
102	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
103	TWR_LEG_T7	W10x54	Column	Wide Flange	A36	Typical	15.8	103	303	1.82
104	TWR_HORZ_T7	2L3x2 1/2x3/8x3/8	Beam	None	A36	Typical	3.84	5.153	3.31	.18
105	TWR_DIAG_T7	2L4x3x3/8x3/8	Column	None	A36	Typical	4.97	8.508	7.93	.233
106	TWR_RED_HORZ_T7	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
107	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
108	TWR_RED_DIAG_T7	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
109	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
110	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
111	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
112	TWR_RED_HIP_T7	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
113	TWR_RED_HIP_2_T7	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
114	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
115	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
116	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
117	TWR_INNER_SQ_T7	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
118	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
119	TWR_INNER_TRI_T7	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
120	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
121	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
122	TWR_LEG_T8	W10x60	Column	Wide Flange	A36	Typical	17.7	116	341	2.48
123	TWR_HORZ_T8	2L3x2 1/2x3/8x3/8	Beam	None	A36	Typical	3.84	5.153	3.31	.18
124	TWR_DIAG_T8	2L4x3x1/2x3/8	Column	None	A36	Typical	6.5	11.536	10.1	.542
125	TWR_RED_HORZ_T8	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
126	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
127	TWR_RED_DIAG_T8	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
128	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
129	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
130	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
131	TWR_RED_HIP_T8	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
132	TWR_RED_HIP_2_T8	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
133	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
134	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
135	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
136	TWR_INNER_SQ_T8	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
137	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
138	TWR_INNER_TRI_T8	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
139	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
140	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
141	TWR_LEG_T9	W10x68	Column	Wide Flange	A36	Typical	19.9	134	394	3.56
142	TWR_HORZ_T9	2L3x2 1/2x3/8x3/8	Beam	None	A36	Typical	3.84	5.153	3.31	.18
143	TWR_DIAG_T9	2L4x3x1/2x3/8	Column	None	A36	Typical	6.5	11.536	10.1	.542
144	TWR_RED_HORZ_T9	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
145	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
146	TWR_RED_DIAG_T9	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
147	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
148	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
149	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
150	TWR_RED_HIP_T9	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
151	TWR_RED_HIP_2_T9	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
152	TWR_RED_HIPDIA_...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
153	TWR_REDHIPDIA_2...	2L2 1/2x2 1/2x3/16x...	Column	None	A36	Typical	1.8	2.499	1.09	.021
154	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
155	TWR_INNER_SQ_T9	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
156	TWR_INNER_COR...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
157	TWR_INNER_TRI_T9	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
158	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
159	TWR_INNER_LADD...	2L3x2 1/2x1/4x3/8	Beam	None	A36	Typical	2.63	3.373	2.35	.055
160	TWR_LEG_T10	W12x79	Column	Wide Flange	A36	Typical	23.2	216	662	3.84
161	TWR_HORZ_T10	2L4x3x1/2x3/8	Beam	None	A36	Typical	6.5	11.536	10.1	.542
162	TWR_DIAG_T10	2L4x4x1/2x3/8	Column	None	A36	Typical	7.5	25.217	11.1	.625
163	TWR_RED_HORZ_...	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
164	TWR_RED_HORZ_...	2L2 1/2x2 1/2x3/16x...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
165	TWR_RED_DIAG_T...	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
166	TWR_RED_HORZ_...	2L2 1/2x2 1/2x1/4x3...	Beam	None	A36	Typical	2.38	3.347	1.41	.049
167	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x1/4x3...	Column	None	A36	Typical	2.38	3.347	1.41	.049
168	TWR_RED_HORZ_...	2L3x3x1/4x3/8	Beam	None	A36	Typical	2.88	5.535	2.49	.06
169	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x1/4x3...	Column	None	A36	Typical	2.38	3.347	1.41	.049
170	TWR_RED_DIAG_4...	2L2 1/2x2 1/2x1/4x3...	Column	None	A36	Typical	2.38	3.347	1.41	.049
171	TWR_RED_DIAG_0...	L2.5x2.5x8	Column	None	A36	Typical	2.26	1.22	1.22	.188
172	TWR_RED_HORZ_...	L2.5x2.5x3	Column	None	A36	Typical	.901	.535	.535	.011
173	TWR_RED_HIP_1_...	LL4x4x8x3	Column	None	A36	Typical	7.5	25.1	11	.644
174	TWR_RED_HIP_3_...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
175	TWR_RED_HIPDIA_...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
176	TWR_RED_HIPDIA_...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
177	TWR_INNER_GIRT...	C4x7.2	Column	None	A36	Typical	2.13	.425	4.58	.082

General Section Sets

	Label	Shape	Type	Material	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	TWR_INNER_SUPP_T1	2C12x20.7x0.375_GMA	Beam	A36_Gen	12.18	17.311	258	.74
2	TWR_HORZ_T2	2C10x20x0.375_GMA	Beam	A36_Gen	11.76	13.025	157.8	.74
3	TWR_INNER_SUPP_T2	2C12x20.7x0.375_GMA	Beam	A36_Gen	12.18	17.311	258	.74
4	TWR_INNER_SUPP_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
5	TWR_INNER_SQ_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
6	TWR_INNER_CORNER_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
7	TWR_INNER_LADDER_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
8	TWR_INNER_TRI_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
9	TWR_INNER_BRACE_T10	2C4x7.25x0.375_GMA	Beam	A36_Gen	4.26	2.647	9.18	.16

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1	M1274	N68	N843			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
2	M1275	N843	N72			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
3	M1276	N61	N841			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
4	M1277	N841	N57			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
5	M1278	N50	N840			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
6	M1279	N840	N46			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
7	M1280	N39	N842			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
8	M1281	N842	N76			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
9	M1282	N76	N844			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
10	M1283	N844	N72			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
11	M1284	N68	N845			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
12	M1285	N845	N61			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
13	M1286	N57	N846			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
14	M1287	N846	N50			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
15	M1288	N46	N847			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
16	M1289	N847	N39			TWR_DIAG_OUTER_T1	Column	None	A36	Typical
17	M15	N13	N1			TWR_DIAG_T1	Column	None	A36	Typical
18	M18	N13	N3			TWR_DIAG_T1	Column	None	A36	Typical
19	M22	N18	N3			TWR_DIAG_T1	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
20	M25	N18	N5			TWR_DIAG_T1	Column	None	A36	Typical
21	M29	N22	N5			TWR_DIAG_T1	Column	None	A36	Typical
22	M32	N22	N7			TWR_DIAG_T1	Column	None	A36	Typical
23	M36	N26	N7			TWR_DIAG_T1	Column	None	A36	Typical
24	M39	N26	N1			TWR_DIAG_T1	Column	None	A36	Typical
25	M51	N29	N13			TWR_DIAG_T2	Column	None	A36	Typical
26	M59	N30	N13			TWR_DIAG_T2	Column	None	A36	Typical
27	M67	N30	N18			TWR_DIAG_T2	Column	None	A36	Typical
28	M75	N31	N18			TWR_DIAG_T2	Column	None	A36	Typical
29	M83	N31	N22			TWR_DIAG_T2	Column	None	A36	Typical
30	M91	N32	N22			TWR_DIAG_T2	Column	None	A36	Typical
31	M99	N32	N26			TWR_DIAG_T2	Column	None	A36	Typical
32	M107	N29	N26			TWR_DIAG_T2	Column	None	A36	Typical
33	M124	N77	N81			TWR_DIAG_T3	Column	None	A36	Typical
34	M132	N78	N81			TWR_DIAG_T3	Column	None	A36	Typical
35	M141	N78	N96			TWR_DIAG_T3	Column	None	A36	Typical
36	M149	N79	N96			TWR_DIAG_T3	Column	None	A36	Typical
37	M158	N79	N108			TWR_DIAG_T3	Column	None	A36	Typical
38	M166	N80	N108			TWR_DIAG_T3	Column	None	A36	Typical
39	M175	N80	N120			TWR_DIAG_T3	Column	None	A36	Typical
40	M183	N77	N120			TWR_DIAG_T3	Column	None	A36	Typical
41	M205	N129	N133			TWR_DIAG_T4	Column	None	A36	Typical
42	M213	N130	N133			TWR_DIAG_T4	Column	None	A36	Typical
43	M222	N130	N148			TWR_DIAG_T4	Column	None	A36	Typical
44	M230	N131	N148			TWR_DIAG_T4	Column	None	A36	Typical
45	M239	N131	N160			TWR_DIAG_T4	Column	None	A36	Typical
46	M247	N132	N160			TWR_DIAG_T4	Column	None	A36	Typical
47	M256	N132	N172			TWR_DIAG_T4	Column	None	A36	Typical
48	M264	N129	N172			TWR_DIAG_T4	Column	None	A36	Typical
49	M286	N181	N185			TWR_DIAG_T5	Column	None	A36	Typical
50	M294	N182	N185			TWR_DIAG_T5	Column	None	A36	Typical
51	M303	N182	N200			TWR_DIAG_T5	Column	None	A36	Typical
52	M311	N183	N200			TWR_DIAG_T5	Column	None	A36	Typical
53	M320	N183	N212			TWR_DIAG_T5	Column	None	A36	Typical
54	M328	N184	N212			TWR_DIAG_T5	Column	None	A36	Typical
55	M337	N184	N224			TWR_DIAG_T5	Column	None	A36	Typical
56	M345	N181	N224			TWR_DIAG_T5	Column	None	A36	Typical
57	M367	N233	N237			TWR_DIAG_T6	Column	None	A36	Typical
58	M375	N234	N237			TWR_DIAG_T6	Column	None	A36	Typical
59	M384	N234	N252			TWR_DIAG_T6	Column	None	A36	Typical
60	M392	N235	N252			TWR_DIAG_T6	Column	None	A36	Typical
61	M401	N235	N264			TWR_DIAG_T6	Column	None	A36	Typical
62	M409	N236	N264			TWR_DIAG_T6	Column	None	A36	Typical
63	M418	N236	N276			TWR_DIAG_T6	Column	None	A36	Typical
64	M426	N233	N276			TWR_DIAG_T6	Column	None	A36	Typical
65	M448	N285	N289			TWR_DIAG_T7	Column	None	A36	Typical
66	M456	N286	N289			TWR_DIAG_T7	Column	None	A36	Typical
67	M465	N286	N304			TWR_DIAG_T7	Column	None	A36	Typical
68	M473	N287	N304			TWR_DIAG_T7	Column	None	A36	Typical
69	M482	N287	N316			TWR_DIAG_T7	Column	None	A36	Typical
70	M490	N288	N316			TWR_DIAG_T7	Column	None	A36	Typical
71	M499	N288	N328			TWR_DIAG_T7	Column	None	A36	Typical
72	M507	N285	N328			TWR_DIAG_T7	Column	None	A36	Typical
73	M529	N337	N341			TWR_DIAG_T8	Column	None	A36	Typical
74	M537	N338	N341			TWR_DIAG_T8	Column	None	A36	Typical
75	M546	N338	N356			TWR_DIAG_T8	Column	None	A36	Typical
76	M554	N339	N356			TWR_DIAG_T8	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
77	M563	N339	N368			TWR_DIAG_T8	Column	None	A36	Typical
78	M571	N340	N368			TWR_DIAG_T8	Column	None	A36	Typical
79	M580	N340	N380			TWR_DIAG_T8	Column	None	A36	Typical
80	M588	N337	N380			TWR_DIAG_T8	Column	None	A36	Typical
81	M610	N389	N393			TWR_DIAG_T9	Column	None	A36	Typical
82	M618	N390	N393			TWR_DIAG_T9	Column	None	A36	Typical
83	M627	N390	N408			TWR_DIAG_T9	Column	None	A36	Typical
84	M635	N391	N408			TWR_DIAG_T9	Column	None	A36	Typical
85	M644	N391	N420			TWR_DIAG_T9	Column	None	A36	Typical
86	M652	N392	N420			TWR_DIAG_T9	Column	None	A36	Typical
87	M661	N392	N432			TWR_DIAG_T9	Column	None	A36	Typical
88	M669	N389	N432			TWR_DIAG_T9	Column	None	A36	Typical
89	M691	N441	N445		353.974	TWR_DIAG_T10	Column	None	A36	Typical
90	M701	N442	N445		6.026	TWR_DIAG_T10	Column	None	A36	Typical
91	M712	N442	N464		353.974	TWR_DIAG_T10	Column	None	A36	Typical
92	M722	N443	N464		6.026	TWR_DIAG_T10	Column	None	A36	Typical
93	M733	N443	N479		353.974	TWR_DIAG_T10	Column	None	A36	Typical
94	M743	N444	N479		6.026	TWR_DIAG_T10	Column	None	A36	Typical
95	M754	N444	N494		353.974	TWR_DIAG_T10	Column	None	A36	Typical
96	M764	N441	N494		6.026	TWR_DIAG_T10	Column	None	A36	Typical
97	M1270	N842	N843			TWR_HORZ_OUTER_T1	Beam	None	A36	Typical
98	M1271	N843	N841			TWR_HORZ_OUTER_T1	Beam	None	A36	Typical
99	M1272	N841	N840			TWR_HORZ_OUTER_T1	Beam	None	A36	Typical
100	M1273	N840	N842			TWR_HORZ_OUTER_T1	Beam	None	A36	Typical
101	M14	N2	N4			TWR_HORZ_T2	Beam	None	A36_Gen	Typical
102	M21	N4	N6			TWR_HORZ_T2	Beam	None	A36_Gen	Typical
103	M28	N6	N8			TWR_HORZ_T2	Beam	None	A36_Gen	Typical
104	M35	N8	N2			TWR_HORZ_T2	Beam	None	A36_Gen	Typical
105	M123	N29	N30			TWR_HORZ_T3	Beam	None	A36	Typical
106	M140	N30	N31			TWR_HORZ_T3	Beam	None	A36	Typical
107	M157	N31	N32			TWR_HORZ_T3	Beam	None	A36	Typical
108	M174	N32	N29			TWR_HORZ_T3	Beam	None	A36	Typical
109	M204	N77	N78			TWR_HORZ_T4	Beam	None	A36	Typical
110	M221	N78	N79			TWR_HORZ_T4	Beam	None	A36	Typical
111	M238	N79	N80			TWR_HORZ_T4	Beam	None	A36	Typical
112	M255	N80	N77			TWR_HORZ_T4	Beam	None	A36	Typical
113	M285	N129	N130			TWR_HORZ_T5	Beam	None	A36	Typical
114	M302	N130	N131			TWR_HORZ_T5	Beam	None	A36	Typical
115	M319	N131	N132			TWR_HORZ_T5	Beam	None	A36	Typical
116	M336	N132	N129			TWR_HORZ_T5	Beam	None	A36	Typical
117	M366	N181	N182			TWR_HORZ_T6	Beam	None	A36	Typical
118	M383	N182	N183			TWR_HORZ_T6	Beam	None	A36	Typical
119	M400	N183	N184			TWR_HORZ_T6	Beam	None	A36	Typical
120	M417	N184	N181			TWR_HORZ_T6	Beam	None	A36	Typical
121	M447	N233	N234			TWR_HORZ_T7	Beam	None	A36	Typical
122	M464	N234	N235			TWR_HORZ_T7	Beam	None	A36	Typical
123	M481	N235	N236			TWR_HORZ_T7	Beam	None	A36	Typical
124	M498	N236	N233			TWR_HORZ_T7	Beam	None	A36	Typical
125	M528	N285	N286			TWR_HORZ_T8	Beam	None	A36	Typical
126	M545	N286	N287			TWR_HORZ_T8	Beam	None	A36	Typical
127	M562	N287	N288			TWR_HORZ_T8	Beam	None	A36	Typical
128	M579	N288	N285			TWR_HORZ_T8	Beam	None	A36	Typical
129	M609	N337	N338			TWR_HORZ_T9	Beam	None	A36	Typical
130	M626	N338	N339			TWR_HORZ_T9	Beam	None	A36	Typical
131	M643	N339	N340			TWR_HORZ_T9	Beam	None	A36	Typical
132	M660	N340	N337			TWR_HORZ_T9	Beam	None	A36	Typical
133	M690	N389	N390		357.328	TWR_HORZ_T10	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
134	M711	N390	N391		357.328	TWR_HORZ_T10	Beam	None	A36	Typical
135	M732	N391	N392		357.328	TWR_HORZ_T10	Beam	None	A36	Typical
136	M753	N392	N389		357.328	TWR_HORZ_T10	Beam	None	A36	Typical
137	M1221	N88	N798			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
138	M1222	N798	N128			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
139	M1223	N124	N801			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
140	M1224	N801	N119			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
141	M1225	N112	N800			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
142	M1226	N800	N107			TWR_INNER_BRACE_T3	Beam	None	A36	Typical
143	M1169	N140	N760			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
144	M1170	N760	N180			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
145	M1171	N176	N761			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
146	M1172	N761	N171			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
147	M1173	N159	N762			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
148	M1174	N762	N164			TWR_INNER_BRACE_T4	Beam	None	A36	Typical
149	M1117	N192	N722			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
150	M1118	N722	N232			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
151	M1119	N228	N724			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
152	M1120	N724	N223			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
153	M1121	N216	N725			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
154	M1122	N725	N211			TWR_INNER_BRACE_T5	Beam	None	A36	Typical
155	M1065	N244	N687			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
156	M1066	N687	N284			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
157	M1067	N280	N686			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
158	M1068	N686	N275			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
159	M1069	N268	N685			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
160	M1070	N685	N263			TWR_INNER_BRACE_T6	Beam	None	A36	Typical
161	M1013	N296	N646			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
162	M1014	N646	N336			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
163	M1015	N332	N649			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
164	M1016	N649	N327			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
165	M1017	N320	N648			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
166	M1018	N648	N315			TWR_INNER_BRACE_T7	Beam	None	A36	Typical
167	M961	N348	N608			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
168	M962	N608	N388			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
169	M963	N384	N611			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
170	M964	N611	N379			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
171	M965	N372	N610			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
172	M966	N610	N367			TWR_INNER_BRACE_T8	Beam	None	A36	Typical
173	M909	N400	N570			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
174	M910	N570	N440			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
175	M911	N436	N571			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
176	M912	N571	N431			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
177	M913	N424	N572			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
178	M914	N572	N419			TWR_INNER_BRACE_T9	Beam	None	A36	Typical
179	M853	N454	N522			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
180	M854	N522	N504			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
181	M855	N499	N523			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
182	M856	N523	N493			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
183	M857	N484	N524			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
184	M858	N524	N478			TWR_INNER_BRACE_T10	Beam	None	A36_Gen	DR1
185	M1258	N2	N836			TWR_INNER_CORNER_T2	Beam	Wide Flange	A36	Typical
186	M1259	N839	N8			TWR_INNER_CORNER_T2	Beam	Wide Flange	A36	Typical
187	M1260	N838	N6			TWR_INNER_CORNER_T2	Beam	Wide Flange	A36	Typical
188	M1261	N4	N837			TWR_INNER_CORNER_T2	Beam	Wide Flange	A36	Typical
189	M1206	N29	N798			TWR_INNER_CORNER_T3	Beam	None	A36	Typical
190	M1207	N801	N32			TWR_INNER_CORNER_T3	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
191	M1208	N800	N31			TWR_INNER_CORNER_T3	Beam	None	A36	Typical
192	M1154	N760	N77			TWR_INNER_CORNER_T4	Beam	None	A36	Typical
193	M1155	N761	N80			TWR_INNER_CORNER_T4	Beam	None	A36	Typical
194	M1156	N762	N79			TWR_INNER_CORNER_T4	Beam	None	A36	Typical
195	M1102	N129	N722			TWR_INNER_CORNER_T5	Beam	None	A36	Typical
196	M1103	N724	N132			TWR_INNER_CORNER_T5	Beam	None	A36	Typical
197	M1104	N725	N131			TWR_INNER_CORNER_T5	Beam	None	A36	Typical
198	M1050	N181	N687			TWR_INNER_CORNER_T6	Beam	None	A36	Typical
199	M1051	N686	N184			TWR_INNER_CORNER_T6	Beam	None	A36	Typical
200	M1052	N685	N183			TWR_INNER_CORNER_T6	Beam	None	A36	Typical
201	M998	N646	N233			TWR_INNER_CORNER_T7	Beam	None	A36	Typical
202	M999	N649	N236			TWR_INNER_CORNER_T7	Beam	None	A36	Typical
203	M1000	N648	N235			TWR_INNER_CORNER_T7	Beam	None	A36	Typical
204	M946	N285	N608			TWR_INNER_CORNER_T8	Beam	None	A36	Typical
205	M947	N611	N288			TWR_INNER_CORNER_T8	Beam	None	A36	Typical
206	M948	N610	N287			TWR_INNER_CORNER_T8	Beam	None	A36	Typical
207	M894	N572	N339			TWR_INNER_CORNER_T9	Beam	None	A36	Typical
208	M895	N571	N340			TWR_INNER_CORNER_T9	Beam	None	A36	Typical
209	M896	N570	N337			TWR_INNER_CORNER_T9	Beam	None	A36	Typical
210	M827	N522	N389			TWR_INNER_CORNER_T10	Beam	None	A36_Gen	DR1
211	M828	N523	N392			TWR_INNER_CORNER_T10	Beam	None	A36_Gen	DR1
212	M829	N524	N391			TWR_INNER_CORNER_T10	Beam	None	A36_Gen	DR1
213	M845	N528	N549			TWR_INNER_GIRT_T10	Column	None	A36	Typical
214	M846	N539	N548			TWR_INNER_GIRT_T10	Column	None	A36	Typical
215	M847	N530	N546			TWR_INNER_GIRT_T10	Column	None	A36	Typical
216	M848	N540	N545			TWR_INNER_GIRT_T10	Column	None	A36	Typical
217	M849	N532	N544			TWR_INNER_GIRT_T10	Column	None	A36	Typical
218	M850	N541	N547			TWR_INNER_GIRT_T10	Column	None	A36	Typical
219	M851	N534	N542			TWR_INNER_GIRT_T10	Column	None	A36	Typical
220	M852	N543	N527			TWR_INNER_GIRT_T10	Column	None	A36	Typical
221	M859	N544	N541			TWR_INNER_GIRT_T10	Column	None	A36	Typical
222	M860	N545	N531			TWR_INNER_GIRT_T10	Column	None	A36	Typical
223	M861	N546	N540			TWR_INNER_GIRT_T10	Column	None	A36	Typical
224	M862	N547	N533			TWR_INNER_GIRT_T10	Column	None	A36	Typical
225	M863	N548	N529			TWR_INNER_GIRT_T10	Column	None	A36	Typical
226	M864	N549	N539			TWR_INNER_GIRT_T10	Column	None	A36	Typical
227	M865	N542	N543			TWR_INNER_GIRT_T10	Column	None	A36	Typical
228	M1227	N814	N815			TWR_INNER_LADDER_T3	Beam	None	A36	Typical
229	M1228	N815	N799			TWR_INNER_LADDER_T3	Beam	None	A36	Typical
230	M1229	N799	N814			TWR_INNER_LADDER_T3	Beam	None	A36	Typical
231	M1175	N776	N763			TWR_INNER_LADDER_T4	Beam	None	A36	Typical
232	M1176	N763	N777			TWR_INNER_LADDER_T4	Beam	None	A36	Typical
233	M1177	N777	N776			TWR_INNER_LADDER_T4	Beam	None	A36	Typical
234	M1123	N738	N739			TWR_INNER_LADDER_T5	Beam	None	A36	Typical
235	M1124	N739	N723			TWR_INNER_LADDER_T5	Beam	None	A36	Typical
236	M1125	N723	N738			TWR_INNER_LADDER_T5	Beam	None	A36	Typical
237	M1071	N700	N684			TWR_INNER_LADDER_T6	Beam	None	A36	Typical
238	M1072	N684	N701			TWR_INNER_LADDER_T6	Beam	None	A36	Typical
239	M1073	N701	N700			TWR_INNER_LADDER_T6	Beam	None	A36	Typical
240	M1019	N662	N663			TWR_INNER_LADDER_T7	Beam	None	A36	Typical
241	M1020	N663	N647			TWR_INNER_LADDER_T7	Beam	None	A36	Typical
242	M1021	N647	N662			TWR_INNER_LADDER_T7	Beam	None	A36	Typical
243	M967	N624	N625			TWR_INNER_LADDER_T8	Beam	None	A36	Typical
244	M968	N625	N609			TWR_INNER_LADDER_T8	Beam	None	A36	Typical
245	M969	N609	N624			TWR_INNER_LADDER_T8	Beam	None	A36	Typical
246	M915	N586	N587			TWR_INNER_LADDER_T9	Beam	None	A36	Typical
247	M916	N587	N573			TWR_INNER_LADDER_T9	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
248	M917	N573	N586			TWR_INNER_LADDER_T9	Beam	None	A36	Typical
249	M830	N525	N521			TWR_INNER_LADDER_T10	Beam	None	A36_Gen	DR1
250	M831	N521	N526			TWR_INNER_LADDER_T10	Beam	None	A36_Gen	DR1
251	M832	N526	N525			TWR_INNER_LADDER_T10	Beam	None	A36_Gen	DR1
252	M1254	N837	N836			TWR_INNER_SQ_T2	Beam	Wide Flange	A36	Typical
253	M1255	N836	N839			TWR_INNER_SQ_T2	Beam	Wide Flange	A36	Typical
254	M1256	N839	N838			TWR_INNER_SQ_T2	Beam	Wide Flange	A36	Typical
255	M1257	N838	N837			TWR_INNER_SQ_T2	Beam	Wide Flange	A36	Typical
256	M1202	N798	N799			TWR_INNER_SQ_T3	Beam	None	A36	Typical
257	M1203	N799	N800			TWR_INNER_SQ_T3	Beam	None	A36	Typical
258	M1204	N800	N801			TWR_INNER_SQ_T3	Beam	None	A36	Typical
259	M1205	N801	N798			TWR_INNER_SQ_T3	Beam	None	A36	Typical
260	M1150	N760	N761			TWR_INNER_SQ_T4	Beam	None	A36	Typical
261	M1151	N761	N762			TWR_INNER_SQ_T4	Beam	None	A36	Typical
262	M1152	N762	N763			TWR_INNER_SQ_T4	Beam	None	A36	Typical
263	M1153	N763	N760			TWR_INNER_SQ_T4	Beam	None	A36	Typical
264	M1098	N723	N722			TWR_INNER_SQ_T5	Beam	None	A36	Typical
265	M1099	N722	N724			TWR_INNER_SQ_T5	Beam	None	A36	Typical
266	M1100	N724	N725			TWR_INNER_SQ_T5	Beam	None	A36	Typical
267	M1101	N725	N723			TWR_INNER_SQ_T5	Beam	None	A36	Typical
268	M1046	N687	N686			TWR_INNER_SQ_T6	Beam	None	A36	Typical
269	M1047	N686	N685			TWR_INNER_SQ_T6	Beam	None	A36	Typical
270	M1048	N685	N684			TWR_INNER_SQ_T6	Beam	None	A36	Typical
271	M1049	N684	N687			TWR_INNER_SQ_T6	Beam	None	A36	Typical
272	M994	N647	N646			TWR_INNER_SQ_T7	Beam	None	A36	Typical
273	M995	N646	N649			TWR_INNER_SQ_T7	Beam	None	A36	Typical
274	M996	N649	N648			TWR_INNER_SQ_T7	Beam	None	A36	Typical
275	M997	N648	N647			TWR_INNER_SQ_T7	Beam	None	A36	Typical
276	M942	N608	N611			TWR_INNER_SQ_T8	Beam	None	A36	Typical
277	M943	N611	N610			TWR_INNER_SQ_T8	Beam	None	A36	Typical
278	M944	N610	N609			TWR_INNER_SQ_T8	Beam	None	A36	Typical
279	M945	N609	N608			TWR_INNER_SQ_T8	Beam	None	A36	Typical
280	M890	N573	N572			TWR_INNER_SQ_T9	Beam	None	A36	Typical
281	M891	N572	N571			TWR_INNER_SQ_T9	Beam	None	A36	Typical
282	M892	N571	N570			TWR_INNER_SQ_T9	Beam	None	A36	Typical
283	M893	N570	N573			TWR_INNER_SQ_T9	Beam	None	A36	Typical
284	M823	N522	N523			TWR_INNER_SQ_T10	Beam	None	A36_Gen	DR1
285	M824	N523	N524			TWR_INNER_SQ_T10	Beam	None	A36_Gen	DR1
286	M825	N524	N521			TWR_INNER_SQ_T10	Beam	None	A36_Gen	DR1
287	M826	N521	N522			TWR_INNER_SQ_T10	Beam	None	A36_Gen	DR1
288	M9	N843	N840			TWR_INNER_SUPP_T1	Beam	None	A36_Gen	Typical
289	M11	N841	N842			TWR_INNER_SUPP_T1	Beam	None	A36_Gen	Typical
290	M42	N13	N18			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
291	M43	N18	N22			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
292	M44	N22	N26			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
293	M45	N26	N13			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
294	M191	N81	N96			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
295	M192	N96	N108			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
296	M193	N108	N120			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
297	M194	N120	N81			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
298	M272	N133	N148			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
299	M273	N148	N160			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
300	M274	N160	N172			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
301	M275	N172	N133			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
302	M353	N185	N200			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
303	M354	N200	N212			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
304	M355	N212	N224			TWR_INNER_SUPP_T5	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
305	M356	N224	N185			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
306	M434	N237	N252			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
307	M435	N252	N264			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
308	M436	N264	N276			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
309	M437	N276	N237			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
310	M515	N289	N304			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
311	M516	N304	N316			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
312	M517	N316	N328			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
313	M518	N328	N289			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
314	M596	N341	N356			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
315	M597	N356	N368			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
316	M598	N368	N380			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
317	M599	N380	N341			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
318	M677	N393	N408			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
319	M678	N408	N420			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
320	M679	N420	N432			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
321	M680	N432	N393			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
322	M774	N445	N464			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
323	M775	N464	N479			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
324	M776	N479	N494			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
325	M777	N494	N445			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
326	M1209	N802	N803			TWR_INNER_TRI_T3	Beam	None	A36	Typical
327	M1210	N804	N805			TWR_INNER_TRI_T3	Beam	None	A36	Typical
328	M1211	N806	N807			TWR_INNER_TRI_T3	Beam	None	A36	Typical
329	M1212	N808	N809			TWR_INNER_TRI_T3	Beam	None	A36	Typical
330	M1213	N809	N810			TWR_INNER_TRI_T3	Beam	None	A36	Typical
331	M1214	N810	N808			TWR_INNER_TRI_T3	Beam	None	A36	Typical
332	M1215	N802	N811			TWR_INNER_TRI_T3	Beam	None	A36	Typical
333	M1216	N811	N803			TWR_INNER_TRI_T3	Beam	None	A36	Typical
334	M1217	N804	N812			TWR_INNER_TRI_T3	Beam	None	A36	Typical
335	M1218	N812	N805			TWR_INNER_TRI_T3	Beam	None	A36	Typical
336	M1219	N806	N813			TWR_INNER_TRI_T3	Beam	None	A36	Typical
337	M1220	N813	N807			TWR_INNER_TRI_T3	Beam	None	A36	Typical
338	M1157	N764	N765			TWR_INNER_TRI_T4	Beam	None	A36	Typical
339	M1158	N766	N767			TWR_INNER_TRI_T4	Beam	None	A36	Typical
340	M1159	N768	N769			TWR_INNER_TRI_T4	Beam	None	A36	Typical
341	M1160	N770	N771			TWR_INNER_TRI_T4	Beam	None	A36	Typical
342	M1161	N771	N772			TWR_INNER_TRI_T4	Beam	None	A36	Typical
343	M1162	N772	N770			TWR_INNER_TRI_T4	Beam	None	A36	Typical
344	M1163	N764	N773			TWR_INNER_TRI_T4	Beam	None	A36	Typical
345	M1164	N773	N765			TWR_INNER_TRI_T4	Beam	None	A36	Typical
346	M1165	N766	N774			TWR_INNER_TRI_T4	Beam	None	A36	Typical
347	M1166	N774	N767			TWR_INNER_TRI_T4	Beam	None	A36	Typical
348	M1167	N768	N775			TWR_INNER_TRI_T4	Beam	None	A36	Typical
349	M1168	N775	N769			TWR_INNER_TRI_T4	Beam	None	A36	Typical
350	M1105	N726	N727			TWR_INNER_TRI_T5	Beam	None	A36	Typical
351	M1106	N728	N729			TWR_INNER_TRI_T5	Beam	None	A36	Typical
352	M1107	N730	N731			TWR_INNER_TRI_T5	Beam	None	A36	Typical
353	M1108	N732	N733			TWR_INNER_TRI_T5	Beam	None	A36	Typical
354	M1109	N733	N734			TWR_INNER_TRI_T5	Beam	None	A36	Typical
355	M1110	N734	N732			TWR_INNER_TRI_T5	Beam	None	A36	Typical
356	M1111	N731	N735			TWR_INNER_TRI_T5	Beam	None	A36	Typical
357	M1112	N735	N730			TWR_INNER_TRI_T5	Beam	None	A36	Typical
358	M1113	N729	N736			TWR_INNER_TRI_T5	Beam	None	A36	Typical
359	M1114	N736	N728			TWR_INNER_TRI_T5	Beam	None	A36	Typical
360	M1115	N727	N737			TWR_INNER_TRI_T5	Beam	None	A36	Typical
361	M1116	N737	N726			TWR_INNER_TRI_T5	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
362	M1053	N688	N689			TWR_INNER_TRI_T6	Beam	None	A36	Typical
363	M1054	N690	N691			TWR_INNER_TRI_T6	Beam	None	A36	Typical
364	M1055	N692	N693			TWR_INNER_TRI_T6	Beam	None	A36	Typical
365	M1056	N694	N695			TWR_INNER_TRI_T6	Beam	None	A36	Typical
366	M1057	N695	N696			TWR_INNER_TRI_T6	Beam	None	A36	Typical
367	M1058	N696	N694			TWR_INNER_TRI_T6	Beam	None	A36	Typical
368	M1059	N688	N697			TWR_INNER_TRI_T6	Beam	None	A36	Typical
369	M1060	N697	N689			TWR_INNER_TRI_T6	Beam	None	A36	Typical
370	M1061	N690	N698			TWR_INNER_TRI_T6	Beam	None	A36	Typical
371	M1062	N698	N691			TWR_INNER_TRI_T6	Beam	None	A36	Typical
372	M1063	N692	N699			TWR_INNER_TRI_T6	Beam	None	A36	Typical
373	M1064	N699	N693			TWR_INNER_TRI_T6	Beam	None	A36	Typical
374	M1001	N650	N651			TWR_INNER_TRI_T7	Beam	None	A36	Typical
375	M1002	N652	N653			TWR_INNER_TRI_T7	Beam	None	A36	Typical
376	M1003	N654	N655			TWR_INNER_TRI_T7	Beam	None	A36	Typical
377	M1004	N656	N657			TWR_INNER_TRI_T7	Beam	None	A36	Typical
378	M1005	N657	N658			TWR_INNER_TRI_T7	Beam	None	A36	Typical
379	M1006	N658	N656			TWR_INNER_TRI_T7	Beam	None	A36	Typical
380	M1007	N650	N659			TWR_INNER_TRI_T7	Beam	None	A36	Typical
381	M1008	N659	N651			TWR_INNER_TRI_T7	Beam	None	A36	Typical
382	M1009	N652	N660			TWR_INNER_TRI_T7	Beam	None	A36	Typical
383	M1010	N660	N653			TWR_INNER_TRI_T7	Beam	None	A36	Typical
384	M1011	N654	N661			TWR_INNER_TRI_T7	Beam	None	A36	Typical
385	M1012	N661	N655			TWR_INNER_TRI_T7	Beam	None	A36	Typical
386	M949	N612	N613			TWR_INNER_TRI_T8	Beam	None	A36	Typical
387	M950	N614	N615			TWR_INNER_TRI_T8	Beam	None	A36	Typical
388	M951	N616	N617			TWR_INNER_TRI_T8	Beam	None	A36	Typical
389	M952	N618	N619			TWR_INNER_TRI_T8	Beam	None	A36	Typical
390	M953	N619	N620			TWR_INNER_TRI_T8	Beam	None	A36	Typical
391	M954	N620	N618			TWR_INNER_TRI_T8	Beam	None	A36	Typical
392	M955	N612	N621			TWR_INNER_TRI_T8	Beam	None	A36	Typical
393	M956	N621	N613			TWR_INNER_TRI_T8	Beam	None	A36	Typical
394	M957	N614	N622			TWR_INNER_TRI_T8	Beam	None	A36	Typical
395	M958	N622	N615			TWR_INNER_TRI_T8	Beam	None	A36	Typical
396	M959	N616	N623			TWR_INNER_TRI_T8	Beam	None	A36	Typical
397	M960	N623	N617			TWR_INNER_TRI_T8	Beam	None	A36	Typical
398	M897	N574	N575			TWR_INNER_TRI_T9	Beam	None	A36	Typical
399	M898	N576	N577			TWR_INNER_TRI_T9	Beam	None	A36	Typical
400	M899	N578	N579			TWR_INNER_TRI_T9	Beam	None	A36	Typical
401	M900	N580	N581			TWR_INNER_TRI_T9	Beam	None	A36	Typical
402	M901	N581	N582			TWR_INNER_TRI_T9	Beam	None	A36	Typical
403	M902	N582	N580			TWR_INNER_TRI_T9	Beam	None	A36	Typical
404	M903	N579	N583			TWR_INNER_TRI_T9	Beam	None	A36	Typical
405	M904	N583	N578			TWR_INNER_TRI_T9	Beam	None	A36	Typical
406	M905	N577	N584			TWR_INNER_TRI_T9	Beam	None	A36	Typical
407	M906	N584	N576			TWR_INNER_TRI_T9	Beam	None	A36	Typical
408	M907	N575	N585			TWR_INNER_TRI_T9	Beam	None	A36	Typical
409	M908	N585	N574			TWR_INNER_TRI_T9	Beam	None	A36	Typical
410	M833	N527	N528			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
411	M834	N529	N530			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
412	M835	N531	N532			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
413	M836	N533	N534			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
414	M837	N534	N535			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
415	M838	N535	N533			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
416	M839	N527	N536			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
417	M840	N536	N528			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
418	M841	N529	N537			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
419	M842	N537	N530			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
420	M843	N531	N538			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
421	M844	N538	N532			TWR_INNER_TRI_T10	Beam	None	A36_Gen	DR1
422	M1266	N2	N842			TWR_LEG_OUTER_T1	Column	Single Angle	A36	Typical
423	M1267	N4	N840			TWR_LEG_OUTER_T1	Column	Single Angle	A36	Typical
424	M1268	N6	N841			TWR_LEG_OUTER_T1	Column	Single Angle	A36	Typical
425	M1269	N8	N843			TWR_LEG_OUTER_T1	Column	Single Angle	A36	Typical
426	M1	N2	N1		180	TWR_LEG_T1	Column	Single Angle	A36	Typical
427	M2	N4	N3		270	TWR_LEG_T1	Column	Single Angle	A36	Typical
428	M3	N6	N5			TWR_LEG_T1	Column	Single Angle	A36	Typical
429	M4	N8	N7		90	TWR_LEG_T1	Column	Single Angle	A36	Typical
430	M47	N29	N2		45	TWR_LEG_T2	Column	Wide Flange	A36	Typical
431	M48	N30	N4		135	TWR_LEG_T2	Column	Wide Flange	A36	Typical
432	M49	N31	N6		225	TWR_LEG_T2	Column	Wide Flange	A36	Typical
433	M50	N32	N8		315	TWR_LEG_T2	Column	Wide Flange	A36	Typical
434	M119	N77	N29		45	TWR_LEG_T3	Column	Wide Flange	A36	Typical
435	M120	N78	N30		135	TWR_LEG_T3	Column	Wide Flange	A36	Typical
436	M121	N79	N31		225	TWR_LEG_T3	Column	Wide Flange	A36	Typical
437	M122	N80	N32		315	TWR_LEG_T3	Column	Wide Flange	A36	Typical
438	M200	N129	N77		45	TWR_LEG_T4	Column	Wide Flange	A36	Typical
439	M201	N130	N78		135	TWR_LEG_T4	Column	Wide Flange	A36	Typical
440	M202	N131	N79		225	TWR_LEG_T4	Column	Wide Flange	A36	Typical
441	M203	N132	N80		315	TWR_LEG_T4	Column	Wide Flange	A36	Typical
442	M281	N181	N129		45	TWR_LEG_T5	Column	Wide Flange	A36	Typical
443	M282	N182	N130		135	TWR_LEG_T5	Column	Wide Flange	A36	Typical
444	M283	N183	N131		225	TWR_LEG_T5	Column	Wide Flange	A36	Typical
445	M284	N184	N132		315	TWR_LEG_T5	Column	Wide Flange	A36	Typical
446	M362	N233	N181		45	TWR_LEG_T6	Column	Wide Flange	A36	Typical
447	M363	N234	N182		135	TWR_LEG_T6	Column	Wide Flange	A36	Typical
448	M364	N235	N183		225	TWR_LEG_T6	Column	Wide Flange	A36	Typical
449	M365	N236	N184		315	TWR_LEG_T6	Column	Wide Flange	A36	Typical
450	M443	N285	N233		45	TWR_LEG_T7	Column	Wide Flange	A36	Typical
451	M444	N286	N234		135	TWR_LEG_T7	Column	Wide Flange	A36	Typical
452	M445	N287	N235		225	TWR_LEG_T7	Column	Wide Flange	A36	Typical
453	M446	N288	N236		315	TWR_LEG_T7	Column	Wide Flange	A36	Typical
454	M524	N337	N285		45	TWR_LEG_T8	Column	Wide Flange	A36	Typical
455	M525	N338	N286		135	TWR_LEG_T8	Column	Wide Flange	A36	Typical
456	M526	N339	N287		225	TWR_LEG_T8	Column	Wide Flange	A36	Typical
457	M527	N340	N288		315	TWR_LEG_T8	Column	Wide Flange	A36	Typical
458	M605	N389	N337		45	TWR_LEG_T9	Column	Wide Flange	A36	Typical
459	M606	N390	N338		135	TWR_LEG_T9	Column	Wide Flange	A36	Typical
460	M607	N391	N339		225	TWR_LEG_T9	Column	Wide Flange	A36	Typical
461	M608	N392	N340		315	TWR_LEG_T9	Column	Wide Flange	A36	Typical
462	M686	N441	N389			TWR_LEG_T10	Column	Wide Flange	A36	Typical
463	M687	N442	N390			TWR_LEG_T10	Column	Wide Flange	A36	Typical
464	M688	N443	N391			TWR_LEG_T10	Column	Wide Flange	A36	Typical
465	M689	N444	N392			TWR_LEG_T10	Column	Wide Flange	A36	Typical
466	M882	N561	N570			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
467	M883	N570	N560			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
468	M884	N565	N571			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
469	M885	N571	N564			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
470	M886	N563	N572			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
471	M887	N572	N562			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
472	M888	N559	N573			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
473	M889	N573	N558			TWR_REDHIPDIA_2_T9	Column	None	A36	Typical
474	M791	N505	N456			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
475	M792	N456	N509			TWR_RED_DIAG_0_T10	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
476	M793	N506	N471			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
477	M794	N471	N510			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
478	M795	N512	N486			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
479	M796	N486	N508			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
480	M797	N507	N446			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
481	M798	N446	N511			TWR_RED_DIAG_0_T10	Column	None	A36	Typical
482	M56	N36	N37			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
483	M64	N42	N45			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
484	M72	N48	N45			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
485	M80	N53	N56			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
486	M88	N59	N56			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
487	M96	N64	N67			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
488	M104	N70	N67			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
489	M112	N74	N37			TWR_RED_DIAG_2_T2	Column	None	A36	Typical
490	M129	N85	N86			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
491	M137	N91	N94			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
492	M146	N98	N94			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
493	M154	N103	N106			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
494	M163	N110	N106			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
495	M171	N115	N118			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
496	M180	N122	N118			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
497	M188	N126	N86			TWR_RED_DIAG_2_T3	Column	None	A36	Typical
498	M210	N137	N138			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
499	M218	N143	N146			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
500	M227	N150	N146			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
501	M235	N155	N158			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
502	M244	N162	N158			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
503	M252	N167	N170			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
504	M261	N174	N170			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
505	M269	N178	N138			TWR_RED_DIAG_2_T4	Column	None	A36	Typical
506	M291	N189	N190			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
507	M299	N195	N198			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
508	M308	N202	N198			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
509	M316	N207	N210			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
510	M325	N214	N210			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
511	M333	N219	N222			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
512	M342	N226	N222			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
513	M350	N230	N190			TWR_RED_DIAG_2_T5	Column	None	A36	Typical
514	M372	N241	N242			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
515	M380	N247	N250			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
516	M389	N254	N250			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
517	M397	N259	N262			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
518	M406	N266	N262			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
519	M414	N271	N274			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
520	M423	N278	N274			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
521	M431	N282	N242			TWR_RED_DIAG_2_T6	Column	None	A36	Typical
522	M453	N293	N294			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
523	M461	N299	N302			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
524	M470	N306	N302			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
525	M478	N311	N314			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
526	M487	N318	N314			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
527	M495	N323	N326			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
528	M504	N330	N326			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
529	M512	N334	N294			TWR_RED_DIAG_2_T7	Column	None	A36	Typical
530	M534	N345	N346			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
531	M542	N351	N354			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
532	M551	N358	N354			TWR_RED_DIAG_2_T8	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
533	M559	N363	N366			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
534	M568	N370	N366			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
535	M576	N375	N378			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
536	M585	N382	N378			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
537	M593	N386	N346			TWR_RED_DIAG_2_T8	Column	None	A36	Typical
538	M615	N397	N398			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
539	M623	N403	N406			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
540	M632	N410	N406			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
541	M640	N415	N418			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
542	M649	N422	N418			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
543	M657	N427	N430			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
544	M666	N434	N430			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
545	M674	N438	N398			TWR_RED_DIAG_2_T9	Column	None	A36	Typical
546	M696	N449	N450		4.133	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
547	M706	N457	N460		355.867	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
548	M717	N466	N460		4.133	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
549	M727	N472	N475		355.867	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
550	M738	N481	N475		4.133	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
551	M748	N487	N490		355.867	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
552	M759	N496	N490		4.133	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
553	M769	N501	N450		355.867	TWR_RED_DIAG_2_T10	Column	None	A36	Typical
554	M57	N37	N39			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
555	M58	N38	N39			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
556	M65	N45	N46			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
557	M66	N44	N46			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
558	M73	N45	N50			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
559	M74	N49	N50			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
560	M81	N56	N57			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
561	M82	N55	N57			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
562	M89	N56	N61			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
563	M90	N60	N61			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
564	M97	N67	N68			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
565	M98	N66	N68			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
566	M105	N67	N72			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
567	M106	N71	N72			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
568	M113	N37	N76			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
569	M114	N75	N76			TWR_RED_DIAG_3_T2	Column	None	A36	Typical
570	M130	N86	N88			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
571	M131	N87	N88			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
572	M138	N94	N95			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
573	M139	N93	N95			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
574	M147	N94	N100			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
575	M148	N99	N100			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
576	M155	N106	N107			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
577	M156	N105	N107			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
578	M164	N106	N112			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
579	M165	N111	N112			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
580	M172	N118	N119			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
581	M173	N117	N119			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
582	M181	N118	N124			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
583	M182	N123	N124			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
584	M189	N86	N128			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
585	M190	N127	N128			TWR_RED_DIAG_3_T3	Column	None	A36	Typical
586	M211	N138	N140			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
587	M212	N139	N140			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
588	M219	N146	N147			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
589	M220	N145	N147			TWR_RED_DIAG_3_T4	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
590	M228	N146	N152			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
591	M229	N151	N152			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
592	M236	N158	N159			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
593	M237	N157	N159			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
594	M245	N158	N164			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
595	M246	N163	N164			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
596	M253	N170	N171			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
597	M254	N169	N171			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
598	M262	N170	N176			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
599	M263	N175	N176			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
600	M270	N138	N180			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
601	M271	N179	N180			TWR_RED_DIAG_3_T4	Column	None	A36	Typical
602	M292	N190	N192			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
603	M293	N191	N192			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
604	M300	N198	N199			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
605	M301	N197	N199			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
606	M309	N198	N204			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
607	M310	N203	N204			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
608	M317	N210	N211			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
609	M318	N209	N211			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
610	M326	N210	N216			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
611	M327	N215	N216			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
612	M334	N222	N223			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
613	M335	N221	N223			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
614	M343	N222	N228			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
615	M344	N227	N228			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
616	M351	N190	N232			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
617	M352	N231	N232			TWR_RED_DIAG_3_T5	Column	None	A36	Typical
618	M373	N242	N244			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
619	M374	N243	N244			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
620	M381	N250	N251			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
621	M382	N249	N251			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
622	M390	N250	N256			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
623	M391	N255	N256			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
624	M398	N262	N263			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
625	M399	N261	N263			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
626	M407	N262	N268			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
627	M408	N267	N268			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
628	M415	N274	N275			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
629	M416	N273	N275			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
630	M424	N274	N280			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
631	M425	N279	N280			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
632	M432	N242	N284			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
633	M433	N283	N284			TWR_RED_DIAG_3_T6	Column	None	A36	Typical
634	M454	N294	N296			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
635	M455	N295	N296			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
636	M462	N302	N303			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
637	M463	N301	N303			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
638	M471	N302	N308			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
639	M472	N307	N308			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
640	M479	N314	N315			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
641	M480	N313	N315			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
642	M488	N314	N320			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
643	M489	N319	N320			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
644	M496	N326	N327			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
645	M497	N325	N327			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
646	M505	N326	N332			TWR_RED_DIAG_3_T7	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
647	M506	N331	N332			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
648	M513	N294	N336			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
649	M514	N335	N336			TWR_RED_DIAG_3_T7	Column	None	A36	Typical
650	M535	N346	N348			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
651	M536	N347	N348			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
652	M543	N354	N355			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
653	M544	N353	N355			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
654	M552	N354	N360			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
655	M553	N359	N360			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
656	M560	N366	N367			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
657	M561	N365	N367			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
658	M569	N366	N372			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
659	M570	N371	N372			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
660	M577	N378	N379			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
661	M578	N377	N379			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
662	M586	N378	N384			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
663	M587	N383	N384			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
664	M594	N346	N388			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
665	M595	N387	N388			TWR_RED_DIAG_3_T8	Column	None	A36	Typical
666	M616	N398	N400			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
667	M617	N399	N400			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
668	M624	N406	N407			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
669	M625	N405	N407			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
670	M633	N406	N412			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
671	M634	N411	N412			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
672	M641	N418	N419			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
673	M642	N417	N419			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
674	M650	N418	N424			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
675	M651	N423	N424			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
676	M658	N430	N431			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
677	M659	N429	N431			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
678	M667	N430	N436			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
679	M668	N435	N436			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
680	M675	N398	N440			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
681	M676	N439	N440			TWR_RED_DIAG_3_T9	Column	None	A36	Typical
682	M698	N451	N452		3.377	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
683	M708	N459	N462		356.623	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
684	M719	N467	N462		3.377	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
685	M729	N474	N477		356.623	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
686	M740	N482	N477		3.377	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
687	M750	N489	N492		356.623	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
688	M761	N497	N492		3.377	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
689	M771	N502	N452		356.623	TWR_RED_DIAG_3_T10	Column	None	A36	Typical
690	M699	N452	N454		356.477	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
691	M700	N453	N454		5.046	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
692	M709	N462	N463		3.523	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
693	M710	N461	N463		354.954	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
694	M720	N462	N469		356.477	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
695	M721	N468	N469		5.046	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
696	M730	N477	N478		3.523	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
697	M731	N476	N478		354.954	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
698	M741	N477	N484		356.477	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
699	M742	N483	N484		5.046	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
700	M751	N492	N493		3.523	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
701	M752	N491	N493		354.954	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
702	M762	N492	N499		356.477	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
703	M763	N498	N499		5.046	TWR_RED_DIAG_4_T10	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
704	M772	N452	N504		3.523	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
705	M773	N503	N504		354.954	TWR_RED_DIAG_4_T10	Column	None	A36	Typical
706	M17	N9	N15		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
707	M20	N9	N16		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
708	M24	N10	N19		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
709	M27	N10	N20		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
710	M31	N11	N23		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
711	M34	N11	N24		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
712	M38	N12	N27		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
713	M41	N12	N28		90	TWR_RED_DIAG_T1	Column	Single Angle	A36	Typical
714	M54	N34	N35			TWR_RED_DIAG_T2	Column	None	A36	Typical
715	M62	N40	N43			TWR_RED_DIAG_T2	Column	None	A36	Typical
716	M70	N47	N43			TWR_RED_DIAG_T2	Column	None	A36	Typical
717	M78	N51	N54			TWR_RED_DIAG_T2	Column	None	A36	Typical
718	M86	N58	N54			TWR_RED_DIAG_T2	Column	None	A36	Typical
719	M94	N62	N65			TWR_RED_DIAG_T2	Column	None	A36	Typical
720	M102	N69	N65			TWR_RED_DIAG_T2	Column	None	A36	Typical
721	M110	N73	N35			TWR_RED_DIAG_T2	Column	None	A36	Typical
722	M127	N83	N84			TWR_RED_DIAG_T3	Column	None	A36	Typical
723	M135	N89	N92			TWR_RED_DIAG_T3	Column	None	A36	Typical
724	M144	N97	N92			TWR_RED_DIAG_T3	Column	None	A36	Typical
725	M152	N101	N104			TWR_RED_DIAG_T3	Column	None	A36	Typical
726	M161	N109	N104			TWR_RED_DIAG_T3	Column	None	A36	Typical
727	M169	N113	N116			TWR_RED_DIAG_T3	Column	None	A36	Typical
728	M178	N121	N116			TWR_RED_DIAG_T3	Column	None	A36	Typical
729	M186	N125	N84			TWR_RED_DIAG_T3	Column	None	A36	Typical
730	M208	N135	N136			TWR_RED_DIAG_T4	Column	None	A36	Typical
731	M216	N141	N144			TWR_RED_DIAG_T4	Column	None	A36	Typical
732	M225	N149	N144			TWR_RED_DIAG_T4	Column	None	A36	Typical
733	M233	N153	N156			TWR_RED_DIAG_T4	Column	None	A36	Typical
734	M242	N161	N156			TWR_RED_DIAG_T4	Column	None	A36	Typical
735	M250	N165	N168			TWR_RED_DIAG_T4	Column	None	A36	Typical
736	M259	N173	N168			TWR_RED_DIAG_T4	Column	None	A36	Typical
737	M267	N177	N136			TWR_RED_DIAG_T4	Column	None	A36	Typical
738	M289	N187	N188			TWR_RED_DIAG_T5	Column	None	A36	Typical
739	M297	N193	N196			TWR_RED_DIAG_T5	Column	None	A36	Typical
740	M306	N201	N196			TWR_RED_DIAG_T5	Column	None	A36	Typical
741	M314	N205	N208			TWR_RED_DIAG_T5	Column	None	A36	Typical
742	M323	N213	N208			TWR_RED_DIAG_T5	Column	None	A36	Typical
743	M331	N217	N220			TWR_RED_DIAG_T5	Column	None	A36	Typical
744	M340	N225	N220			TWR_RED_DIAG_T5	Column	None	A36	Typical
745	M348	N229	N188			TWR_RED_DIAG_T5	Column	None	A36	Typical
746	M370	N239	N240			TWR_RED_DIAG_T6	Column	None	A36	Typical
747	M378	N245	N248			TWR_RED_DIAG_T6	Column	None	A36	Typical
748	M387	N253	N248			TWR_RED_DIAG_T6	Column	None	A36	Typical
749	M395	N257	N260			TWR_RED_DIAG_T6	Column	None	A36	Typical
750	M404	N265	N260			TWR_RED_DIAG_T6	Column	None	A36	Typical
751	M412	N269	N272			TWR_RED_DIAG_T6	Column	None	A36	Typical
752	M421	N277	N272			TWR_RED_DIAG_T6	Column	None	A36	Typical
753	M429	N281	N240			TWR_RED_DIAG_T6	Column	None	A36	Typical
754	M451	N291	N292			TWR_RED_DIAG_T7	Column	None	A36	Typical
755	M459	N297	N300			TWR_RED_DIAG_T7	Column	None	A36	Typical
756	M468	N305	N300			TWR_RED_DIAG_T7	Column	None	A36	Typical
757	M476	N309	N312			TWR_RED_DIAG_T7	Column	None	A36	Typical
758	M485	N317	N312			TWR_RED_DIAG_T7	Column	None	A36	Typical
759	M493	N321	N324			TWR_RED_DIAG_T7	Column	None	A36	Typical
760	M502	N329	N324			TWR_RED_DIAG_T7	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
761	M510	N333	N292			TWR_RED_DIAG_T7	Column	None	A36	Typical
762	M532	N343	N344			TWR_RED_DIAG_T8	Column	None	A36	Typical
763	M540	N349	N352			TWR_RED_DIAG_T8	Column	None	A36	Typical
764	M549	N357	N352			TWR_RED_DIAG_T8	Column	None	A36	Typical
765	M557	N361	N364			TWR_RED_DIAG_T8	Column	None	A36	Typical
766	M566	N369	N364			TWR_RED_DIAG_T8	Column	None	A36	Typical
767	M574	N373	N376			TWR_RED_DIAG_T8	Column	None	A36	Typical
768	M583	N381	N376			TWR_RED_DIAG_T8	Column	None	A36	Typical
769	M591	N385	N344			TWR_RED_DIAG_T8	Column	None	A36	Typical
770	M613	N395	N396			TWR_RED_DIAG_T9	Column	None	A36	Typical
771	M621	N401	N404			TWR_RED_DIAG_T9	Column	None	A36	Typical
772	M630	N409	N404			TWR_RED_DIAG_T9	Column	None	A36	Typical
773	M638	N413	N416			TWR_RED_DIAG_T9	Column	None	A36	Typical
774	M647	N421	N416			TWR_RED_DIAG_T9	Column	None	A36	Typical
775	M655	N425	N428			TWR_RED_DIAG_T9	Column	None	A36	Typical
776	M664	N433	N428			TWR_RED_DIAG_T9	Column	None	A36	Typical
777	M672	N437	N396			TWR_RED_DIAG_T9	Column	None	A36	Typical
778	M694	N447	N448		7.169	TWR_RED_DIAG_T10	Column	None	A36	Typical
779	M704	N455	N458		352.831	TWR_RED_DIAG_T10	Column	None	A36	Typical
780	M715	N465	N458		7.169	TWR_RED_DIAG_T10	Column	None	A36	Typical
781	M725	N470	N473		352.831	TWR_RED_DIAG_T10	Column	None	A36	Typical
782	M736	N480	N473		7.169	TWR_RED_DIAG_T10	Column	None	A36	Typical
783	M746	N485	N488		352.831	TWR_RED_DIAG_T10	Column	None	A36	Typical
784	M757	N495	N488		7.169	TWR_RED_DIAG_T10	Column	None	A36	Typical
785	M767	N500	N448		352.831	TWR_RED_DIAG_T10	Column	None	A36	Typical
786	M807	N465	N517			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
787	M808	N517	N455			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
788	M809	N447	N518			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
789	M810	N518	N500			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
790	M811	N495	N519			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
791	M812	N519	N485			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
792	M813	N480	N520			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
793	M814	N520	N470			TWR_RED_HIPDIA_1_T10	Column	None	A36	Typical
794	M1246	N824	N836			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
795	M1247	N836	N825			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
796	M1248	N826	N837			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
797	M1249	N837	N827			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
798	M1250	N828	N838			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
799	M1251	N838	N829			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
800	M1252	N831	N839			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
801	M1253	N839	N830			TWR_RED_HIPDIA_2_T2	Column	None	A36	Typical
802	M1194	N786	N798			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
803	M1195	N798	N787			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
804	M1196	N788	N799			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
805	M1197	N799	N789			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
806	M1198	N792	N800			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
807	M1199	N800	N793			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
808	M1200	N791	N801			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
809	M1201	N801	N790			TWR_RED_HIPDIA_2_T3	Column	None	A36	Typical
810	M1142	N748	N760			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
811	M1143	N760	N749			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
812	M1144	N750	N761			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
813	M1145	N761	N751			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
814	M1146	N754	N762			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
815	M1147	N762	N755			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
816	M1148	N753	N763			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical
817	M1149	N763	N752			TWR_RED_HIPDIA_2_T4	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
818	M1090	N710	N722			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
819	M1091	N722	N711			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
820	M1092	N712	N723			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
821	M1093	N723	N713			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
822	M1094	N717	N724			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
823	M1095	N724	N716			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
824	M1096	N714	N725			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
825	M1097	N725	N715			TWR_RED_HIPDIA_2_T5	Column	None	A36	Typical
826	M1038	N672	N684			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
827	M1039	N684	N673			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
828	M1040	N676	N685			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
829	M1041	N685	N677			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
830	M1042	N678	N686			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
831	M1043	N686	N679			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
832	M1044	N674	N687			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
833	M1045	N687	N675			TWR_RED_HIPDIA_2_T6	Column	None	A36	Typical
834	M986	N634	N646			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
835	M987	N646	N635			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
836	M988	N636	N647			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
837	M989	N647	N637			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
838	M990	N638	N648			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
839	M991	N648	N639			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
840	M992	N640	N649			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
841	M993	N649	N641			TWR_RED_HIPDIA_2_T7	Column	None	A36	Typical
842	M934	N596	N608			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
843	M935	N608	N597			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
844	M936	N603	N609			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
845	M937	N609	N602			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
846	M938	N600	N610			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
847	M939	N610	N601			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
848	M940	N599	N611			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
849	M941	N611	N598			TWR_RED_HIPDIA_2_T8	Column	None	A36	Typical
850	M815	N467	N521			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
851	M816	N521	N459			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
852	M817	N451	N522			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
853	M818	N522	N502			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
854	M819	N497	N523			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
855	M820	N523	N489			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
856	M821	N482	N524			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
857	M822	N524	N474			TWR_RED_HIPDIA_3_T10	Column	None	A36	Typical
858	M1238	N816	N832			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
859	M1239	N832	N817			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
860	M1240	N818	N833			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
861	M1241	N833	N819			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
862	M1242	N820	N834			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
863	M1243	N834	N821			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
864	M1244	N823	N835			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
865	M1245	N835	N822			TWR_RED_HIPDIA_T2	Column	None	A36	Typical
866	M1186	N780	N794			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
867	M1187	N794	N781			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
868	M1188	N782	N795			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
869	M1189	N795	N783			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
870	M1190	N778	N796			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
871	M1191	N796	N779			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
872	M1192	N784	N797			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
873	M1193	N797	N785			TWR_RED_HIPDIA_T3	Column	None	A36	Typical
874	M1134	N742	N756			TWR_RED_HIPDIA_T4	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
875	M1135	N756	N743			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
876	M1136	N740	N757			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
877	M1137	N757	N741			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
878	M1138	N746	N758			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
879	M1139	N758	N747			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
880	M1140	N744	N759			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
881	M1141	N759	N745			TWR_RED_HIPDIA_T4	Column	None	A36	Typical
882	M1082	N702	N718			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
883	M1083	N718	N703			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
884	M1084	N704	N719			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
885	M1085	N719	N705			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
886	M1086	N706	N720			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
887	M1087	N720	N707			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
888	M1088	N708	N721			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
889	M1089	N721	N709			TWR_RED_HIPDIA_T5	Column	None	A36	Typical
890	M1030	N664	N680			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
891	M1031	N680	N665			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
892	M1032	N666	N681			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
893	M1033	N681	N667			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
894	M1034	N668	N682			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
895	M1035	N682	N669			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
896	M1036	N671	N683			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
897	M1037	N683	N670			TWR_RED_HIPDIA_T6	Column	None	A36	Typical
898	M978	N626	N642			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
899	M979	N642	N627			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
900	M980	N628	N643			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
901	M981	N643	N629			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
902	M982	N632	N644			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
903	M983	N644	N633			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
904	M984	N630	N645			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
905	M985	N645	N631			TWR_RED_HIPDIA_T7	Column	None	A36	Typical
906	M926	N588	N604			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
907	M927	N604	N589			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
908	M928	N590	N605			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
909	M929	N605	N591			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
910	M930	N592	N606			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
911	M931	N606	N593			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
912	M932	N594	N607			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
913	M933	N607	N595			TWR_RED_HIPDIA_T8	Column	None	A36	Typical
914	M874	N550	N566			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
915	M875	N566	N551			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
916	M876	N557	N567			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
917	M877	N567	N556			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
918	M878	N554	N568			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
919	M879	N568	N555			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
920	M880	N552	N569			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
921	M881	N569	N553			TWR_RED_HIPDIA_T9	Column	None	A36	Typical
922	M799	N480	N470			TWR_RED_HIP_1_T10	Column	None	A36	Typical
923	M800	N465	N455			TWR_RED_HIP_1_T10	Column	None	A36	Typical
924	M801	N485	N495			TWR_RED_HIP_1_T10	Column	None	A36	Typical
925	M806	N447	N500			TWR_RED_HIP_1_T10	Column	None	A36	Typical
926	M1234	N824	N825			TWR_RED_HIP_2_T2	Column	None	A36	Typical
927	M1235	N826	N827			TWR_RED_HIP_2_T2	Column	None	A36	Typical
928	M1236	N828	N829			TWR_RED_HIP_2_T2	Column	None	A36	Typical
929	M1237	N830	N831			TWR_RED_HIP_2_T2	Column	None	A36	Typical
930	M1182	N786	N787			TWR_RED_HIP_2_T3	Column	None	A36	Typical
931	M1183	N788	N789			TWR_RED_HIP_2_T3	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
932	M1184	N790	N791			TWR_RED_HIP_2_T3	Column	None	A36	Typical
933	M1185	N792	N793			TWR_RED_HIP_2_T3	Column	None	A36	Typical
934	M1130	N748	N749			TWR_RED_HIP_2_T4	Column	None	A36	Typical
935	M1131	N750	N751			TWR_RED_HIP_2_T4	Column	None	A36	Typical
936	M1132	N752	N753			TWR_RED_HIP_2_T4	Column	None	A36	Typical
937	M1133	N754	N755			TWR_RED_HIP_2_T4	Column	None	A36	Typical
938	M1078	N710	N711			TWR_RED_HIP_2_T5	Column	None	A36	Typical
939	M1079	N712	N713			TWR_RED_HIP_2_T5	Column	None	A36	Typical
940	M1080	N714	N715			TWR_RED_HIP_2_T5	Column	None	A36	Typical
941	M1081	N716	N717			TWR_RED_HIP_2_T5	Column	None	A36	Typical
942	M1026	N672	N673			TWR_RED_HIP_2_T6	Column	None	A36	Typical
943	M1027	N674	N675			TWR_RED_HIP_2_T6	Column	None	A36	Typical
944	M1028	N676	N677			TWR_RED_HIP_2_T6	Column	None	A36	Typical
945	M1029	N678	N679			TWR_RED_HIP_2_T6	Column	None	A36	Typical
946	M974	N634	N635			TWR_RED_HIP_2_T7	Column	None	A36	Typical
947	M975	N636	N637			TWR_RED_HIP_2_T7	Column	None	A36	Typical
948	M976	N638	N639			TWR_RED_HIP_2_T7	Column	None	A36	Typical
949	M977	N640	N641			TWR_RED_HIP_2_T7	Column	None	A36	Typical
950	M922	N596	N597			TWR_RED_HIP_2_T8	Column	None	A36	Typical
951	M923	N598	N599			TWR_RED_HIP_2_T8	Column	None	A36	Typical
952	M924	N600	N601			TWR_RED_HIP_2_T8	Column	None	A36	Typical
953	M925	N602	N603			TWR_RED_HIP_2_T8	Column	None	A36	Typical
954	M870	N558	N559			TWR_RED_HIP_2_T9	Column	None	A36	Typical
955	M871	N560	N561			TWR_RED_HIP_2_T9	Column	None	A36	Typical
956	M872	N562	N563			TWR_RED_HIP_2_T9	Column	None	A36	Typical
957	M873	N564	N565			TWR_RED_HIP_2_T9	Column	None	A36	Typical
958	M802	N482	N474			TWR_RED_HIP_3_T10	Column	None	A36	Typical
959	M803	N467	N459			TWR_RED_HIP_3_T10	Column	None	A36	Typical
960	M804	N489	N497			TWR_RED_HIP_3_T10	Column	None	A36	Typical
961	M805	N502	N451			TWR_RED_HIP_3_T10	Column	None	A36	Typical
962	M1230	N816	N817			TWR_RED_HIP_T2	Column	None	A36	Typical
963	M1231	N818	N819			TWR_RED_HIP_T2	Column	None	A36	Typical
964	M1232	N820	N821			TWR_RED_HIP_T2	Column	None	A36	Typical
965	M1233	N822	N823			TWR_RED_HIP_T2	Column	None	A36	Typical
966	M1178	N778	N779			TWR_RED_HIP_T3	Column	None	A36	Typical
967	M1179	N780	N781			TWR_RED_HIP_T3	Column	None	A36	Typical
968	M1180	N782	N783			TWR_RED_HIP_T3	Column	None	A36	Typical
969	M1181	N784	N785			TWR_RED_HIP_T3	Column	None	A36	Typical
970	M1126	N740	N741			TWR_RED_HIP_T4	Column	None	A36	Typical
971	M1127	N742	N743			TWR_RED_HIP_T4	Column	None	A36	Typical
972	M1128	N744	N745			TWR_RED_HIP_T4	Column	None	A36	Typical
973	M1129	N746	N747			TWR_RED_HIP_T4	Column	None	A36	Typical
974	M1074	N702	N703			TWR_RED_HIP_T5	Column	None	A36	Typical
975	M1075	N704	N705			TWR_RED_HIP_T5	Column	None	A36	Typical
976	M1076	N706	N707			TWR_RED_HIP_T5	Column	None	A36	Typical
977	M1077	N708	N709			TWR_RED_HIP_T5	Column	None	A36	Typical
978	M1022	N664	N665			TWR_RED_HIP_T6	Column	None	A36	Typical
979	M1023	N666	N667			TWR_RED_HIP_T6	Column	None	A36	Typical
980	M1024	N668	N669			TWR_RED_HIP_T6	Column	None	A36	Typical
981	M1025	N670	N671			TWR_RED_HIP_T6	Column	None	A36	Typical
982	M970	N626	N627			TWR_RED_HIP_T7	Column	None	A36	Typical
983	M971	N628	N629			TWR_RED_HIP_T7	Column	None	A36	Typical
984	M972	N630	N631			TWR_RED_HIP_T7	Column	None	A36	Typical
985	M973	N632	N633			TWR_RED_HIP_T7	Column	None	A36	Typical
986	M918	N588	N589			TWR_RED_HIP_T8	Column	None	A36	Typical
987	M919	N590	N591			TWR_RED_HIP_T8	Column	None	A36	Typical
988	M920	N592	N593			TWR_RED_HIP_T8	Column	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
989	M921	N594	N595			TWR_RED_HIP_T8	Column	None	A36	Typical
990	M866	N550	N551			TWR_RED_HIP_T9	Column	None	A36	Typical
991	M867	N552	N553			TWR_RED_HIP_T9	Column	None	A36	Typical
992	M868	N554	N555			TWR_RED_HIP_T9	Column	None	A36	Typical
993	M869	N556	N557			TWR_RED_HIP_T9	Column	None	A36	Typical
994	M783	N510	N514			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
995	M784	N514	N506			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
996	M785	N512	N516			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
997	M786	N516	N508			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
998	M787	N507	N515			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
999	M788	N515	N511			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
1000	M789	N505	N513			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
1001	M790	N513	N509			TWR_RED_HORZ_0_T10	Column	None	A36	Typical
1002	M1262	N23	N24			TWR_RED_HORZ_2_T1	Beam	None	A36	Typical
1003	M1263	N19	N20			TWR_RED_HORZ_2_T1	Beam	None	A36	Typical
1004	M1264	N15	N16			TWR_RED_HORZ_2_T1	Beam	None	A36	Typical
1005	M1265	N27	N28			TWR_RED_HORZ_2_T1	Beam	None	A36	Typical
1006	M53	N35	N36			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1007	M61	N42	N43			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1008	M69	N43	N48			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1009	M77	N53	N54			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1010	M85	N54	N59			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1011	M93	N64	N65			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1012	M101	N65	N70			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1013	M109	N74	N35			TWR_RED_HORZ_2_T2	Beam	None	A36	Typical
1014	M126	N84	N85			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1015	M134	N91	N92			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1016	M143	N92	N98			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1017	M151	N103	N104			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1018	M160	N104	N110			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1019	M168	N115	N116			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1020	M177	N116	N122			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1021	M185	N126	N84			TWR_RED_HORZ_2_T3	Beam	None	A36	Typical
1022	M207	N136	N137			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1023	M215	N143	N144			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1024	M224	N144	N150			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1025	M232	N155	N156			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1026	M241	N156	N162			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1027	M249	N167	N168			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1028	M258	N168	N174			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1029	M266	N178	N136			TWR_RED_HORZ_2_T4	Beam	None	A36	Typical
1030	M288	N188	N189			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1031	M296	N195	N196			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1032	M305	N196	N202			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1033	M313	N207	N208			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1034	M322	N208	N214			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1035	M330	N219	N220			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1036	M339	N220	N226			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1037	M347	N230	N188			TWR_RED_HORZ_2_T5	Beam	None	A36	Typical
1038	M369	N240	N241			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1039	M377	N247	N248			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1040	M386	N248	N254			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1041	M394	N259	N260			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1042	M403	N260	N266			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1043	M411	N271	N272			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1044	M420	N272	N278			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical
1045	M428	N282	N240			TWR_RED_HORZ_2_T6	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1046	M450	N292	N293			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1047	M458	N299	N300			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1048	M467	N300	N306			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1049	M475	N311	N312			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1050	M484	N312	N318			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1051	M492	N323	N324			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1052	M501	N324	N330			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1053	M509	N334	N292			TWR_RED_HORZ_2_T7	Beam	None	A36	Typical
1054	M531	N344	N345			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1055	M539	N351	N352			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1056	M548	N352	N358			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1057	M556	N363	N364			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1058	M565	N364	N370			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1059	M573	N375	N376			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1060	M582	N376	N382			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1061	M590	N386	N344			TWR_RED_HORZ_2_T8	Beam	None	A36	Typical
1062	M612	N396	N397			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1063	M620	N403	N404			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1064	M629	N404	N410			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1065	M637	N415	N416			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1066	M646	N416	N422			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1067	M654	N427	N428			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1068	M663	N428	N434			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1069	M671	N438	N396			TWR_RED_HORZ_2_T9	Beam	None	A36	Typical
1070	M693	N448	N449		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1071	M703	N457	N458		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1072	M714	N458	N466		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1073	M724	N472	N473		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1074	M735	N473	N481		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1075	M745	N487	N488		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1076	M756	N488	N496		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1077	M766	N501	N448		357.328	TWR_RED_HORZ_2_T10	Beam	None	A36	Typical
1078	M1290	N848	N849			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1079	M1291	N850	N851			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1080	M1292	N852	N853			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1081	M1293	N854	N855			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1082	M1294	N856	N857			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1083	M1295	N858	N859			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1084	M1296	N860	N861			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1085	M1297	N862	N863			TWR_RED_HORZ_3_T1	Beam	None	A36	Typical
1086	M55	N37	N38			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1087	M63	N44	N45			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1088	M71	N45	N49			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1089	M79	N55	N56			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1090	M87	N56	N60			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1091	M95	N66	N67			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1092	M103	N67	N71			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1093	M111	N75	N37			TWR_RED_HORZ_3_T2	Beam	None	A36	Typical
1094	M128	N86	N87			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1095	M136	N93	N94			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1096	M145	N94	N99			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1097	M153	N105	N106			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1098	M162	N106	N111			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1099	M170	N117	N118			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1100	M179	N118	N123			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1101	M187	N127	N86			TWR_RED_HORZ_3_T3	Beam	None	A36	Typical
1102	M209	N138	N139			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1103	M217	N145	N146			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1104	M226	N146	N151			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1105	M234	N157	N158			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1106	M243	N158	N163			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1107	M251	N169	N170			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1108	M260	N170	N175			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1109	M268	N179	N138			TWR_RED_HORZ_3_T4	Beam	None	A36	Typical
1110	M290	N190	N191			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1111	M298	N197	N198			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1112	M307	N198	N203			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1113	M315	N209	N210			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1114	M324	N210	N215			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1115	M332	N221	N222			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1116	M341	N222	N227			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1117	M349	N231	N190			TWR_RED_HORZ_3_T5	Beam	None	A36	Typical
1118	M371	N242	N243			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1119	M379	N249	N250			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1120	M388	N250	N255			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1121	M396	N261	N262			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1122	M405	N262	N267			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1123	M413	N273	N274			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1124	M422	N274	N279			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1125	M430	N283	N242			TWR_RED_HORZ_3_T6	Beam	None	A36	Typical
1126	M452	N294	N295			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1127	M460	N301	N302			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1128	M469	N302	N307			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1129	M477	N313	N314			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1130	M486	N314	N319			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1131	M494	N325	N326			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1132	M503	N326	N331			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1133	M511	N335	N294			TWR_RED_HORZ_3_T7	Beam	None	A36	Typical
1134	M533	N346	N347			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1135	M541	N353	N354			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1136	M550	N354	N359			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1137	M558	N365	N366			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1138	M567	N366	N371			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1139	M575	N377	N378			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1140	M584	N378	N383			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1141	M592	N387	N346			TWR_RED_HORZ_3_T8	Beam	None	A36	Typical
1142	M614	N398	N399			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1143	M622	N405	N406			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1144	M631	N406	N411			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1145	M639	N417	N418			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1146	M648	N418	N423			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1147	M656	N429	N430			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1148	M665	N430	N435			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1149	M673	N439	N398			TWR_RED_HORZ_3_T9	Beam	None	A36	Typical
1150	M695	N450	N451		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1151	M705	N459	N460		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1152	M716	N460	N467		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1153	M726	N474	N475		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1154	M737	N475	N482		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1155	M747	N489	N490		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1156	M758	N490	N497		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1157	M768	N502	N450		357.328	TWR_RED_HORZ_3_T10	Beam	None	A36	Typical
1158	M1298	N851	N864			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1159	M1299	N864	N863			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1160	M1300	N860	N865			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1161	M1301	N865	N859			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1162	M1302	N848	N866			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1163	M1303	N866	N852			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1164	M1304	N855	N867			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1165	M1305	N867	N856			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1166	M1306	N853	N854			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1167	M1307	N849	N850			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1168	M1308	N862	N861			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1169	M1309	N858	N857			TWR_RED_HORZ_4_T1	Beam	None	A36	Typical
1170	M697	N452	N453		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1171	M707	N461	N462		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1172	M718	N462	N468		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1173	M728	N476	N477		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1174	M739	N477	N483		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1175	M749	N491	N492		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1176	M760	N492	N498		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1177	M770	N503	N452		357.328	TWR_RED_HORZ_4_T10	Beam	None	A36	Typical
1178	M16	N14	N15			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1179	M19	N16	N17			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1180	M23	N17	N19			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1181	M26	N20	N21			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1182	M30	N21	N23			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1183	M33	N24	N25			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1184	M37	N25	N27			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1185	M40	N28	N14			TWR_RED_HORZ_T1	Beam	None	A36	Typical
1186	M52	N33	N34			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1187	M60	N40	N41			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1188	M68	N41	N47			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1189	M76	N51	N52			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1190	M84	N52	N58			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1191	M92	N62	N63			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1192	M100	N63	N69			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1193	M108	N73	N33			TWR_RED_HORZ_T2	Beam	None	A36	Typical
1194	M125	N82	N83			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1195	M133	N89	N90			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1196	M142	N90	N97			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1197	M150	N101	N102			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1198	M159	N102	N109			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1199	M167	N113	N114			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1200	M176	N114	N121			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1201	M184	N125	N82			TWR_RED_HORZ_T3	Beam	None	A36	Typical
1202	M206	N134	N135			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1203	M214	N141	N142			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1204	M223	N142	N149			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1205	M231	N153	N154			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1206	M240	N154	N161			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1207	M248	N165	N166			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1208	M257	N166	N173			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1209	M265	N177	N134			TWR_RED_HORZ_T4	Beam	None	A36	Typical
1210	M287	N186	N187			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1211	M295	N193	N194			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1212	M304	N194	N201			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1213	M312	N205	N206			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1214	M321	N206	N213			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1215	M329	N217	N218			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1216	M338	N218	N225			TWR_RED_HORZ_T5	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1217	M346	N229	N186			TWR_RED_HORZ_T5	Beam	None	A36	Typical
1218	M368	N238	N239			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1219	M376	N245	N246			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1220	M385	N246	N253			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1221	M393	N257	N258			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1222	M402	N258	N265			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1223	M410	N269	N270			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1224	M419	N270	N277			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1225	M427	N281	N238			TWR_RED_HORZ_T6	Beam	None	A36	Typical
1226	M449	N290	N291			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1227	M457	N297	N298			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1228	M466	N298	N305			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1229	M474	N309	N310			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1230	M483	N310	N317			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1231	M491	N321	N322			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1232	M500	N322	N329			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1233	M508	N333	N290			TWR_RED_HORZ_T7	Beam	None	A36	Typical
1234	M530	N342	N343			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1235	M538	N349	N350			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1236	M547	N350	N357			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1237	M555	N361	N362			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1238	M564	N362	N369			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1239	M572	N373	N374			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1240	M581	N374	N381			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1241	M589	N385	N342			TWR_RED_HORZ_T8	Beam	None	A36	Typical
1242	M611	N394	N395			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1243	M619	N401	N402			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1244	M628	N402	N409			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1245	M636	N413	N414			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1246	M645	N414	N421			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1247	M653	N425	N426			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1248	M662	N426	N433			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1249	M670	N437	N394			TWR_RED_HORZ_T9	Beam	None	A36	Typical
1250	M692	N446	N447		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1251	M702	N455	N456		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1252	M713	N456	N465		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1253	M723	N470	N471		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1254	M734	N471	N480		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1255	M744	N485	N486		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1256	M755	N486	N495		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1257	M765	N500	N446		357.328	TWR_RED_HORZ_T10	Beam	None	A36	Typical
1258	M5	N1	N3			TWR_TOP_GIRT_T1	Beam	Wide Flange	A36	Typical
1259	M6	N3	N5			TWR_TOP_GIRT_T1	Beam	Wide Flange	A36	Typical
1260	M7	N5	N7			TWR_TOP_GIRT_T1	Beam	Wide Flange	A36	Typical
1261	M8	N7	N1			TWR_TOP_GIRT_T1	Beam	Wide Flange	A36	Typical
1262	M10	N10	N11			TWR_INNER_SUPP_T1	Beam	None	A36_Gen	Typical
1263	M12	N12	N9			TWR_INNER_SUPP_T1	Beam	None	A36_Gen	Typical
1264	M13	N9	N11			TWR_INNER_SUPP_T1	Beam	None	A36_Gen	Typical
1265	M46	N13	N22			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
1266	M115	N46	N50			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
1267	M116	N57	N61			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
1268	M117	N68	N72			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
1269	M118	N76	N39			TWR_INNER_SUPP_T2	Beam	Wide Flange	A36	Typical
1270	M195	N81	N108			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
1271	M196	N95	N100			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
1272	M197	N107	N112			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
1273	M198	N119	N124			TWR_INNER_SUPP_T3	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1274	M199	N128	N88			TWR_INNER_SUPP_T3	Beam	None	A36	Typical
1275	M276	N133	N160			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
1276	M277	N147	N152			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
1277	M278	N159	N164			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
1278	M279	N171	N176			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
1279	M280	N180	N140			TWR_INNER_SUPP_T4	Beam	None	A36	Typical
1280	M357	N185	N212			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
1281	M358	N199	N204			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
1282	M359	N211	N216			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
1283	M360	N223	N228			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
1284	M361	N232	N192			TWR_INNER_SUPP_T5	Beam	None	A36	Typical
1285	M438	N237	N264			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
1286	M439	N251	N256			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
1287	M440	N263	N268			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
1288	M441	N275	N280			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
1289	M442	N284	N244			TWR_INNER_SUPP_T6	Beam	None	A36	Typical
1290	M519	N289	N316			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
1291	M520	N303	N308			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
1292	M521	N315	N320			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
1293	M522	N327	N332			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
1294	M523	N336	N296			TWR_INNER_SUPP_T7	Beam	None	A36	Typical
1295	M600	N341	N368			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
1296	M601	N355	N360			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
1297	M602	N367	N372			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
1298	M603	N379	N384			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
1299	M604	N388	N348			TWR_INNER_SUPP_T8	Beam	None	A36	Typical
1300	M681	N393	N420			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
1301	M682	N407	N412			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
1302	M683	N419	N424			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
1303	M684	N431	N436			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
1304	M685	N440	N400			TWR_INNER_SUPP_T9	Beam	None	A36	Typical
1305	M778	N445	N479			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
1306	M779	N463	N469			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
1307	M780	N478	N484			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
1308	M781	N493	N499			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical
1309	M782	N504	N454			TWR_INNER_SUPP_T10	Beam	None	A36_Gen	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
1	M1274	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
2	M1275	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
3	M1276	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
4	M1277	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
5	M1278	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
6	M1279	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
7	M1280	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
8	M1281	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
9	M1282	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
10	M1283	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
11	M1284	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
12	M1285	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
13	M1286	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
14	M1287	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
15	M1288	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
16	M1289	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
17	M15	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
18	M18	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
19	M22	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
20	M25	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
21	M29	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
22	M32	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
23	M36	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
24	M39	TWR_DIAG_T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1		Lateral
25	M51	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
26	M59	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
27	M67	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
28	M75	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
29	M83	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
30	M91	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
31	M99	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
32	M107	TWR_DIAG_T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
33	M124	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
34	M132	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
35	M141	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
36	M149	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
37	M158	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
38	M166	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
39	M175	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
40	M183	TWR_DIAG_T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1		Lateral
41	M205	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
42	M213	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
43	M222	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
44	M230	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
45	M239	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
46	M247	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
47	M256	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
48	M264	TWR_DIAG_T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
49	M286	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
50	M294	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
51	M303	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
52	M311	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
53	M320	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
54	M328	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
55	M337	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
56	M345	TWR_DIAG_T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1		Lateral
57	M367	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
58	M375	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
59	M384	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
60	M392	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
61	M401	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
62	M409	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
63	M418	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
64	M426	TWR_DIAG_T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
65	M448	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
66	M456	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
67	M465	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
68	M473	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
69	M482	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
70	M490	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
71	M499	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
72	M507	TWR_DIAG_T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
73	M529	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
74	M537	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
75	M546	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
76	M554	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
77	M563	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
78	M571	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
79	M580	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
80	M588	TWR_DIAG_T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
81	M610	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
82	M618	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
83	M627	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
84	M635	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
85	M644	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
86	M652	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
87	M661	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
88	M669	TWR_DIAG_T9	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1		Lateral
89	M691	TWR_DIAG_T10	41.787	13.929	6.965	6.965	6.965	6.965	1.02	1		Lateral
90	M701	TWR_DIAG_T10	41.787	13.929	6.965	6.965	6.965	6.965	1.02	1		Lateral
91	M712	TWR_DIAG_T10	41.451	13.817	6.909	6.909	6.909	6.909	1.02	1		Lateral
92	M722	TWR_DIAG_T10	41.451	13.817	6.909	6.909	6.909	6.909	1.02	1		Lateral
93	M733	TWR_DIAG_T10	41.787	13.929	6.965	6.965	6.965	6.965	1.02	1		Lateral
94	M743	TWR_DIAG_T10	41.787	13.929	6.965	6.965	6.965	6.965	1.02	1		Lateral
95	M754	TWR_DIAG_T10	41.451	13.817	6.909	6.909	6.909	6.909	1.02	1		Lateral
96	M764	TWR_DIAG_T10	41.451	13.817	6.909	6.909	6.909	6.909	1.02	1		Lateral
97	M1270	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	20.75	1	1		Lateral
98	M1271	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	20.75	1	1		Lateral
99	M1272	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	20.75	1	1		Lateral
100	M1273	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	20.75	1	1		Lateral
101	M123	TWR_HORZ_T3	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
102	M140	TWR_HORZ_T3	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
103	M157	TWR_HORZ_T3	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
104	M174	TWR_HORZ_T3	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
105	M204	TWR_HORZ_T4	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
106	M221	TWR_HORZ_T4	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
107	M238	TWR_HORZ_T4	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
108	M255	TWR_HORZ_T4	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
109	M285	TWR_HORZ_T5	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
110	M302	TWR_HORZ_T5	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
111	M319	TWR_HORZ_T5	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
112	M336	TWR_HORZ_T5	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
113	M366	TWR_HORZ_T6	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
114	M383	TWR_HORZ_T6	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
115	M400	TWR_HORZ_T6	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
116	M417	TWR_HORZ_T6	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
117	M447	TWR_HORZ_T7	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
118	M464	TWR_HORZ_T7	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
119	M481	TWR_HORZ_T7	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
120	M498	TWR_HORZ_T7	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
121	M528	TWR_HORZ_T8	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
122	M545	TWR_HORZ_T8	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
123	M562	TWR_HORZ_T8	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
124	M579	TWR_HORZ_T8	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
125	M609	TWR_HORZ_T9	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
126	M626	TWR_HORZ_T9	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
127	M643	TWR_HORZ_T9	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
128	M660	TWR_HORZ_T9	33.5	8.375	8.375	8.375	8.375	8.375	1.13	1		Lateral
129	M690	TWR_HORZ_T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
130	M711	TWR_HORZ_T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
131	M732	TWR_HORZ_T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
132	M753	TWR_HORZ_T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1		Lateral
133	M1221	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
134	M1222	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
135	M1223	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
136	M1224	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
137	M1225	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
138	M1226	TWR_INNER_BRACE_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
139	M1169	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
140	M1170	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
141	M1171	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
142	M1172	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
143	M1173	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
144	M1174	TWR_INNER_BRACE_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
145	M1117	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
146	M1118	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
147	M1119	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
148	M1120	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
149	M1121	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
150	M1122	TWR_INNER_BRACE_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
151	M1065	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
152	M1066	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
153	M1067	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
154	M1068	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
155	M1069	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
156	M1070	TWR_INNER_BRACE_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
157	M1013	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
158	M1014	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
159	M1015	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
160	M1016	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
161	M1017	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
162	M1018	TWR_INNER_BRACE_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
163	M961	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
164	M962	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
165	M963	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
166	M964	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
167	M965	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
168	M966	TWR_INNER_BRACE_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
169	M909	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
170	M910	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
171	M911	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
172	M912	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
173	M913	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
174	M914	TWR_INNER_BRACE_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
175	M1258	TWR_INNER_CORNER...	11.844			Lbyy			1	1		Lateral
176	M1259	TWR_INNER_CORNER...	11.844			Lbyy			1	1		Lateral
177	M1260	TWR_INNER_CORNER...	11.844			Lbyy			1	1		Lateral
178	M1261	TWR_INNER_CORNER...	11.844			Lbyy			1	1		Lateral
179	M1206	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
180	M1207	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
181	M1208	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
182	M1154	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
183	M1155	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
184	M1156	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
185	M1102	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
186	M1103	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
187	M1104	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
188	M1050	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
189	M1051	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
190	M1052	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
191	M998	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
192	M999	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
193	M1000	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
194	M946	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
195	M947	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
196	M948	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
197	M894	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
198	M895	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
199	M896	TWR_INNER_CORNER...	11.844			Lbyy			1.03	1		Lateral
200	M845	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
201	M846	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
202	M847	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
203	M848	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
204	M849	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
205	M850	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
206	M851	TWR_INNER_GIRT_T10	5.375	5.375	5.375	5.375	5.375	5.375	1	1		Lateral
207	M852	TWR_INNER_GIRT_T10	5.375	5.375	5.375	5.375	5.375	5.375	1	1		Lateral
208	M859	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
209	M860	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
210	M861	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
211	M862	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
212	M863	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
213	M864	TWR_INNER_GIRT_T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
214	M865	TWR_INNER_GIRT_T10	4.243	4.243	4.243	4.243	4.243	4.243	1	1		Lateral
215	M1227	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
216	M1228	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
217	M1229	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
218	M1175	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
219	M1176	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
220	M1177	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
221	M1123	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
222	M1124	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
223	M1125	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
224	M1071	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
225	M1072	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
226	M1073	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
227	M1019	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
228	M1020	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
229	M1021	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
230	M967	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
231	M968	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
232	M969	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
233	M915	TWR_INNER_LADDER_...	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1		Lateral
234	M916	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
235	M917	TWR_INNER_LADDER_...	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1		Lateral
236	M1254	TWR_INNER_SQ_T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1		Lateral
237	M1255	TWR_INNER_SQ_T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1		Lateral
238	M1256	TWR_INNER_SQ_T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1		Lateral
239	M1257	TWR_INNER_SQ_T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1		Lateral
240	M1202	TWR_INNER_SQ_T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
241	M1203	TWR_INNER_SQ_T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
242	M1204	TWR_INNER_SQ_T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
243	M1205	TWR_INNER_SQ_T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
244	M1150	TWR_INNER_SQ_T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
245	M1151	TWR_INNER_SQ_T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
246	M1152	TWR_INNER_SQ_T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
247	M1153	TWR_INNER_SQ_T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
248	M1098	TWR_INNER_SQ_T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
249	M1099	TWR_INNER_SQ_T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
250	M1100	TWR_INNER_SQ_T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
251	M1101	TWR_INNER_SQ_T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
252	M1046	TWR_INNER_SQ_T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
253	M1047	TWR_INNER_SQ_T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
254	M1048	TWR_INNER_SQ_T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
255	M1049	TWR_INNER_SQ_T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
256	M994	TWR_INNER_SQ_T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
257	M995	TWR_INNER_SQ_T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
258	M996	TWR_INNER_SQ_T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
259	M997	TWR_INNER_SQ_T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
260	M942	TWR_INNER_SQ_T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
261	M943	TWR_INNER_SQ_T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
262	M944	TWR_INNER_SQ_T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
263	M945	TWR_INNER_SQ_T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
264	M890	TWR_INNER_SQ_T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
265	M891	TWR_INNER_SQ_T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
266	M892	TWR_INNER_SQ_T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
267	M893	TWR_INNER_SQ_T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
268	M42	TWR_INNER_SUPP_T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
269	M43	TWR_INNER_SUPP_T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
270	M44	TWR_INNER_SUPP_T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
271	M45	TWR_INNER_SUPP_T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
272	M191	TWR_INNER_SUPP_T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
273	M192	TWR_INNER_SUPP_T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
274	M193	TWR_INNER_SUPP_T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
275	M194	TWR_INNER_SUPP_T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
276	M272	TWR_INNER_SUPP_T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
277	M273	TWR_INNER_SUPP_T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
278	M274	TWR_INNER_SUPP_T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
279	M275	TWR_INNER_SUPP_T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
280	M353	TWR_INNER_SUPP_T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
281	M354	TWR_INNER_SUPP_T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
282	M355	TWR_INNER_SUPP_T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
283	M356	TWR_INNER_SUPP_T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
284	M434	TWR_INNER_SUPP_T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
285	M435	TWR_INNER_SUPP_T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
286	M436	TWR_INNER_SUPP_T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
287	M437	TWR_INNER_SUPP_T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
288	M515	TWR_INNER_SUPP_T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
289	M516	TWR_INNER_SUPP_T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
290	M517	TWR_INNER_SUPP_T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
291	M518	TWR_INNER_SUPP_T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
292	M596	TWR_INNER_SUPP_T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
293	M597	TWR_INNER_SUPP_T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
294	M598	TWR_INNER_SUPP_T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
295	M599	TWR_INNER_SUPP_T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
296	M677	TWR_INNER_SUPP_T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
297	M678	TWR_INNER_SUPP_T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
298	M679	TWR_INNER_SUPP_T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
299	M680	TWR_INNER_SUPP_T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
300	M1209	TWR_INNER_TRI_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
301	M1210	TWR_INNER_TRI_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
302	M1211	TWR_INNER_TRI_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
303	M1212	TWR_INNER_TRI_T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
304	M1213	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
305	M1214	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
306	M1215	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
307	M1216	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
308	M1217	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
309	M1218	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
310	M1219	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
311	M1220	TWR_INNER_TRI_T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
312	M1157	TWR_INNER_TRI_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
313	M1158	TWR_INNER_TRI_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
314	M1159	TWR_INNER_TRI_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
315	M1160	TWR_INNER_TRI_T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
316	M1161	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
317	M1162	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
318	M1163	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
319	M1164	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
320	M1165	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
321	M1166	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
322	M1167	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
323	M1168	TWR_INNER_TRI_T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
324	M1105	TWR_INNER_TRI_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
325	M1106	TWR_INNER_TRI_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
326	M1107	TWR_INNER_TRI_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
327	M1108	TWR_INNER_TRI_T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
328	M1109	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
329	M1110	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
330	M1111	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
331	M1112	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
332	M1113	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
333	M1114	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
334	M1115	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
335	M1116	TWR_INNER_TRI_T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
336	M1053	TWR_INNER_TRI_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
337	M1054	TWR_INNER_TRI_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
338	M1055	TWR_INNER_TRI_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
339	M1056	TWR_INNER_TRI_T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
340	M1057	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
341	M1058	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
342	M1059	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
343	M1060	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
344	M1061	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
345	M1062	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
346	M1063	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
347	M1064	TWR_INNER_TRI_T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
348	M1001	TWR_INNER_TRI_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
349	M1002	TWR_INNER_TRI_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
350	M1003	TWR_INNER_TRI_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
351	M1004	TWR_INNER_TRI_T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
352	M1005	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
353	M1006	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
354	M1007	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
355	M1008	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
356	M1009	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
357	M1010	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
358	M1011	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
359	M1012	TWR_INNER_TRI_T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
360	M949	TWR_INNER_TRI_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
361	M950	TWR_INNER_TRI_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
362	M951	TWR_INNER_TRI_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
363	M952	TWR_INNER_TRI_T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
364	M953	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
365	M954	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
366	M955	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
367	M956	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
368	M957	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
369	M958	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
370	M959	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
371	M960	TWR_INNER_TRI_T8	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
372	M897	TWR_INNER_TRI_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
373	M898	TWR_INNER_TRI_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
374	M899	TWR_INNER_TRI_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
375	M900	TWR_INNER_TRI_T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
376	M901	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
377	M902	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
378	M903	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
379	M904	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
380	M905	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
381	M906	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
382	M907	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
383	M908	TWR_INNER_TRI_T9	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
384	M1266	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
385	M1267	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
386	M1268	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
387	M1269	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
388	M1	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
389	M2	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
390	M3	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
391	M4	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
392	M47	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
393	M48	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
394	M49	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
395	M50	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
396	M119	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
397	M120	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
398	M121	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
399	M122	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
400	M200	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
401	M201	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
402	M202	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
403	M203	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
404	M281	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
405	M282	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
406	M283	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
407	M284	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
408	M362	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
409	M363	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
410	M364	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
411	M365	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
412	M443	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
413	M444	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
414	M445	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
415	M446	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
416	M524	TWR_LEG_T8	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
417	M525	TWR_LEG_T8	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
418	M526	TWR_LEG_T8	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
419	M527	TWR_LEG_T8	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
420	M605	TWR_LEG_T9	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
421	M606	TWR_LEG_T9	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
422	M607	TWR_LEG_T9	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
423	M608	TWR_LEG_T9	25	6.25	6.25	6.25	6.25	6.25	1	1		Lateral
424	M686	TWR_LEG_T10	37.546	Segment	Segment	Segment	Segment	Seg...	1	1		Lateral
425	M687	TWR_LEG_T10	37.546	Segment	Segment	Segment	Segment	Seg...	1	1		Lateral
426	M688	TWR_LEG_T10	37.546	Segment	Segment	Segment	Segment	Seg...	1	1		Lateral
427	M689	TWR_LEG_T10	37.546	Segment	Segment	Segment	Segment	Seg...	1	1		Lateral
428	M882	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
429	M883	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
430	M884	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
431	M885	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
432	M886	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
433	M887	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
434	M888	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
435	M889	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
436	M791	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1		Lateral
437	M792	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1		Lateral
438	M793	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1		Lateral
439	M794	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1		Lateral
440	M795	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1		Lateral
441	M796	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1		Lateral
442	M797	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1		Lateral
443	M798	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1		Lateral
444	M56	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
445	M64	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
446	M72	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
447	M80	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
448	M88	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
449	M96	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
450	M104	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
451	M112	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
452	M129	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
453	M137	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
454	M146	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
455	M154	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
456	M163	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
457	M171	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
458	M180	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
459	M188	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
460	M210	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
461	M218	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
462	M227	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
463	M235	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
464	M244	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
465	M252	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
466	M261	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
467	M269	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
468	M291	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
469	M299	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
470	M308	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
471	M316	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
472	M325	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
473	M333	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
474	M342	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
475	M350	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
476	M372	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
477	M380	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
478	M389	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
479	M397	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
480	M406	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
481	M414	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
482	M423	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
483	M431	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
484	M453	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
485	M461	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
486	M470	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
487	M478	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
488	M487	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
489	M495	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
490	M504	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
491	M512	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
492	M534	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
493	M542	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
494	M551	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
495	M559	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
496	M568	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
497	M576	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
498	M585	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
499	M593	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
500	M615	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
501	M623	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
502	M632	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
503	M640	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
504	M649	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
505	M657	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
506	M666	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
507	M674	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
508	M696	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1		Lateral
509	M706	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1		Lateral
510	M717	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1		Lateral
511	M727	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1		Lateral
512	M738	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1		Lateral
513	M748	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1		Lateral
514	M759	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1		Lateral
515	M769	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1		Lateral
516	M57	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
517	M58	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
518	M65	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
519	M66	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
520	M73	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
521	M74	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
522	M81	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
523	M82	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
524	M89	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
525	M90	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
526	M97	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
527	M98	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
528	M105	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
529	M106	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
530	M113	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
531	M114	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
532	M130	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
533	M131	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
534	M138	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
535	M139	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
536	M147	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
537	M148	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
538	M155	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
539	M156	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
540	M164	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
541	M165	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
542	M172	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
543	M173	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
544	M181	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
545	M182	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
546	M189	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1		Lateral
547	M190	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1		Lateral
548	M211	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
549	M212	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
550	M219	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
551	M220	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
552	M228	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
553	M229	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
554	M236	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
555	M237	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
556	M245	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
557	M246	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
558	M253	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
559	M254	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
560	M262	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
561	M263	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
562	M270	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1		Lateral
563	M271	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1		Lateral
564	M292	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
565	M293	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
566	M300	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
567	M301	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
568	M309	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
569	M310	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
570	M317	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
571	M318	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
572	M326	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
573	M327	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
574	M334	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
575	M335	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
576	M343	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
577	M344	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
578	M351	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1		Lateral
579	M352	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1		Lateral
580	M373	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
581	M374	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
582	M381	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
583	M382	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
584	M390	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
585	M391	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
586	M398	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
587	M399	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
588	M407	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
589	M408	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
590	M415	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
591	M416	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
592	M424	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
593	M425	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
594	M432	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1		Lateral
595	M433	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1		Lateral
596	M454	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
597	M455	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
598	M462	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
599	M463	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
600	M471	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
601	M472	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
602	M479	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
603	M480	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
604	M488	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
605	M489	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
606	M496	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
607	M497	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
608	M505	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
609	M506	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
610	M513	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1		Lateral
611	M514	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1		Lateral
612	M535	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
613	M536	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
614	M543	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
615	M544	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
616	M552	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
617	M553	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
618	M560	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
619	M561	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
620	M569	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
621	M570	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
622	M577	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
623	M578	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
624	M586	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
625	M587	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
626	M594	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1		Lateral
627	M595	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1		Lateral
628	M616	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
629	M617	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
630	M624	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
631	M625	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
632	M633	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
633	M634	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
634	M641	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
635	M642	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
636	M650	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
637	M651	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
638	M658	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
639	M659	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
640	M667	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
641	M668	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral
642	M675	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1		Lateral
643	M676	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
644	M698	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1		Lateral
645	M708	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1		Lateral
646	M719	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1		Lateral
647	M729	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1		Lateral
648	M740	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1		Lateral
649	M750	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1		Lateral
650	M761	TWR_RED_DIAG_3_T10	12.679	12.266	12.266	12.266	12.266	12.266	1.03	1		Lateral
651	M771	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1		Lateral
652	M699	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1		Lateral
653	M700	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1		Lateral
654	M709	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1		Lateral
655	M710	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1		Lateral
656	M720	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1		Lateral
657	M721	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1		Lateral
658	M730	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1		Lateral
659	M731	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1		Lateral
660	M741	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1		Lateral
661	M742	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1		Lateral
662	M751	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1		Lateral
663	M752	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1		Lateral
664	M762	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1		Lateral
665	M763	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1		Lateral
666	M772	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1		Lateral
667	M773	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1		Lateral
668	M17	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
669	M20	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
670	M24	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
671	M27	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
672	M31	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
673	M34	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
674	M38	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
675	M41	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1		Lateral
676	M54	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
677	M62	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
678	M70	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
679	M78	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
680	M86	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
681	M94	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
682	M102	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
683	M110	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
684	M127	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
685	M135	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
686	M144	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
687	M152	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
688	M161	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
689	M169	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
690	M178	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
691	M186	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1		Lateral
692	M208	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
693	M216	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
694	M225	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
695	M233	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
696	M242	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
697	M250	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
698	M259	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
699	M267	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1		Lateral
700	M289	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
701	M297	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
702	M306	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
703	M314	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
704	M323	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
705	M331	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
706	M340	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
707	M348	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1		Lateral
708	M370	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
709	M378	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
710	M387	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
711	M395	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
712	M404	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
713	M412	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
714	M421	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
715	M429	TWR_RED_DIAG_T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1		Lateral
716	M451	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
717	M459	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
718	M468	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
719	M476	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
720	M485	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
721	M493	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
722	M502	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
723	M510	TWR_RED_DIAG_T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1		Lateral
724	M532	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
725	M540	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
726	M549	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
727	M557	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
728	M566	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
729	M574	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
730	M583	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
731	M591	TWR_RED_DIAG_T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1		Lateral
732	M613	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
733	M621	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
734	M630	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
735	M638	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
736	M647	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
737	M655	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
738	M664	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
739	M672	TWR_RED_DIAG_T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1		Lateral
740	M694	TWR_RED_DIAG_T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1		Lateral
741	M704	TWR_RED_DIAG_T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1		Lateral
742	M715	TWR_RED_DIAG_T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1		Lateral
743	M725	TWR_RED_DIAG_T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1		Lateral
744	M736	TWR_RED_DIAG_T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1		Lateral
745	M746	TWR_RED_DIAG_T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1		Lateral
746	M757	TWR_RED_DIAG_T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1		Lateral
747	M767	TWR_RED_DIAG_T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1		Lateral
748	M807	TWR_RED_HIPDIA_1_T...	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1		Lateral
749	M808	TWR_RED_HIPDIA_1_T...	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1		Lateral
750	M809	TWR_RED_HIPDIA_1_T...	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1		Lateral
751	M810	TWR_RED_HIPDIA_1_T...	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1		Lateral
752	M811	TWR_RED_HIPDIA_1_T...	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1		Lateral
753	M812	TWR_RED_HIPDIA_1_T...	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1		Lateral
754	M813	TWR_RED_HIPDIA_1_T...	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1		Lateral
755	M814	TWR_RED_HIPDIA_1_T...	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1		Lateral
756	M1246	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
757	M1247	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
758	M1248	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
759	M1249	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
760	M1250	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
761	M1251	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
762	M1252	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
763	M1253	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
764	M1194	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
765	M1195	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
766	M1196	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
767	M1197	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
768	M1198	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
769	M1199	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
770	M1200	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
771	M1201	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
772	M1142	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
773	M1143	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
774	M1144	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
775	M1145	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
776	M1146	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
777	M1147	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
778	M1148	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
779	M1149	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
780	M1090	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
781	M1091	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
782	M1092	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
783	M1093	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
784	M1094	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
785	M1095	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
786	M1096	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
787	M1097	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
788	M1038	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
789	M1039	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
790	M1040	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
791	M1041	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
792	M1042	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
793	M1043	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
794	M1044	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
795	M1045	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
796	M986	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
797	M987	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
798	M988	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
799	M989	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
800	M990	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
801	M991	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
802	M992	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
803	M993	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
804	M934	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
805	M935	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
806	M936	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
807	M937	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
808	M938	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
809	M939	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
810	M940	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
811	M941	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
812	M815	TWR_RED_HIPDIA_3_T...	15.567	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
813	M816	TWR_RED_HIPDIA_3_T...	15.366	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
814	M817	TWR_RED_HIPDIA_3_T...	15.366	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
815	M818	TWR_RED_HIPDIA_3_T...	15.567	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
816	M819	TWR_RED_HIPDIA_3_T...	15.567	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
817	M820	TWR_RED_HIPDIA_3_T...	15.366	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
818	M821	TWR_RED_HIPDIA_3_T...	15.366	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
819	M822	TWR_RED_HIPDIA_3_T...	15.567	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
820	M1238	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
821	M1239	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
822	M1240	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
823	M1241	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
824	M1242	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
825	M1243	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
826	M1244	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
827	M1245	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
828	M1186	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
829	M1187	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
830	M1188	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
831	M1189	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
832	M1190	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
833	M1191	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
834	M1192	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
835	M1193	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
836	M1134	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
837	M1135	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
838	M1136	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
839	M1137	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
840	M1138	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
841	M1139	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
842	M1140	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
843	M1141	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
844	M1082	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
845	M1083	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
846	M1084	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
847	M1085	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
848	M1086	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
849	M1087	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
850	M1088	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
851	M1089	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
852	M1030	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
853	M1031	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
854	M1032	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
855	M1033	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
856	M1034	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
857	M1035	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
858	M1036	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
859	M1037	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
860	M978	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
861	M979	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
862	M980	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
863	M981	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
864	M982	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
865	M983	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
866	M984	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
867	M985	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
868	M926	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
869	M927	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
870	M928	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
871	M929	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
872	M930	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
873	M931	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
874	M932	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
875	M933	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
876	M874	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
877	M875	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
878	M876	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
879	M877	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
880	M878	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
881	M879	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
882	M880	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
883	M881	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
884	M799	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
885	M800	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
886	M801	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
887	M806	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
888	M1234	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
889	M1235	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
890	M1236	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
891	M1237	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
892	M1182	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
893	M1183	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
894	M1184	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
895	M1185	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
896	M1130	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
897	M1131	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
898	M1132	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
899	M1133	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
900	M1078	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
901	M1079	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
902	M1080	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
903	M1081	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
904	M1026	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
905	M1027	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
906	M1028	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
907	M1029	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
908	M974	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
909	M975	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
910	M976	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
911	M977	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
912	M922	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
913	M923	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
914	M924	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
915	M925	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
916	M870	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
917	M871	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
918	M872	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
919	M873	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
920	M802	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
921	M803	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
922	M804	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
923	M805	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1		Lateral
924	M1230	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
925	M1231	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
926	M1232	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
927	M1233	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
928	M1178	TWR_RED_HIP_T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
929	M1179	TWR_RED_HIP_T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
930	M1180	TWR_RED_HIP_T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
931	M1181	TWR_RED_HIP_T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
932	M1126	TWR_RED_HIP_T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
933	M1127	TWR_RED_HIP_T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
934	M1128	TWR_RED_HIP_T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
935	M1129	TWR_RED_HIP_T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
936	M1074	TWR_RED_HIP_T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
937	M1075	TWR_RED_HIP_T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
938	M1076	TWR_RED_HIP_T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
939	M1077	TWR_RED_HIP_T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
940	M1022	TWR_RED_HIP_T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
941	M1023	TWR_RED_HIP_T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
942	M1024	TWR_RED_HIP_T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
943	M1025	TWR_RED_HIP_T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
944	M970	TWR_RED_HIP_T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
945	M971	TWR_RED_HIP_T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
946	M972	TWR_RED_HIP_T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
947	M973	TWR_RED_HIP_T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
948	M918	TWR_RED_HIP_T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
949	M919	TWR_RED_HIP_T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
950	M920	TWR_RED_HIP_T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
951	M921	TWR_RED_HIP_T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
952	M866	TWR_RED_HIP_T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
953	M867	TWR_RED_HIP_T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
954	M868	TWR_RED_HIP_T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
955	M869	TWR_RED_HIP_T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1		Lateral
956	M783	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
957	M784	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
958	M785	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
959	M786	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
960	M787	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
961	M788	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
962	M789	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
963	M790	TWR_RED_HORZ_0_T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1		Lateral
964	M1262	TWR_RED_HORZ_2_T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1		Lateral
965	M1263	TWR_RED_HORZ_2_T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1		Lateral
966	M1264	TWR_RED_HORZ_2_T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1		Lateral
967	M1265	TWR_RED_HORZ_2_T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1		Lateral
968	M53	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
969	M61	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
970	M69	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
971	M77	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
972	M85	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
973	M93	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
974	M101	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
975	M109	TWR_RED_HORZ_2_T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
976	M126	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
977	M134	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
978	M143	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
979	M151	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
980	M160	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
981	M168	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
982	M177	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
983	M185	TWR_RED_HORZ_2_T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1		Lateral
984	M207	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
985	M215	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
986	M224	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
987	M232	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
988	M241	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
989	M249	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
990	M258	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
991	M266	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1		Lateral
992	M288	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
993	M296	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
994	M305	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
995	M313	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
996	M322	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
997	M330	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
998	M339	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
999	M347	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1		Lateral
1000	M369	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1001	M377	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1002	M386	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1003	M394	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1004	M403	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1005	M411	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1006	M420	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1007	M428	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1		Lateral
1008	M450	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1009	M458	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1010	M467	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1011	M475	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1012	M484	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1013	M492	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1014	M501	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1015	M509	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1016	M531	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1017	M539	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1018	M548	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1019	M556	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1020	M565	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1021	M573	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1022	M582	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1023	M590	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1		Lateral
1024	M612	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1025	M620	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1026	M629	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1027	M637	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1028	M646	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1029	M654	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1030	M663	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1031	M671	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1		Lateral
1032	M693	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1033	M703	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1034	M714	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1035	M724	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1036	M735	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1037	M745	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1038	M756	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1039	M766	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1		Lateral
1040	M1290	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1041	M1291	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1042	M1292	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
1043	M1293	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1044	M1294	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1045	M1295	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1046	M1296	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1047	M1297	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1048	M55	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1049	M63	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1050	M71	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1051	M79	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1052	M87	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1053	M95	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1054	M103	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1055	M111	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1056	M128	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1057	M136	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1058	M145	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1059	M153	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1060	M162	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1061	M170	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1062	M179	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1063	M187	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1064	M209	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1065	M217	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1066	M226	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1067	M234	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1068	M243	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1069	M251	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1070	M260	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1071	M268	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1072	M290	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1073	M298	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1074	M307	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1075	M315	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1076	M324	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1077	M332	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1078	M341	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1079	M349	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1080	M371	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1081	M379	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1082	M388	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1083	M396	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1084	M405	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1085	M413	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1086	M422	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1087	M430	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1088	M452	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1089	M460	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1090	M469	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1091	M477	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1092	M486	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1093	M494	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1094	M503	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1095	M511	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1096	M533	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1097	M541	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1098	M550	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1099	M558	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
1100	M567	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1101	M575	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1102	M584	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1103	M592	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1104	M614	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1105	M622	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1106	M631	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1107	M639	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1108	M648	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1109	M656	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1110	M665	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1111	M673	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	12.13	1.03	1		Lateral
1112	M695	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1113	M705	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1114	M716	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1115	M726	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1116	M737	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1117	M747	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1118	M758	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1119	M768	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	10.647	1.04	1		Lateral
1120	M1298	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1121	M1299	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1122	M1300	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1123	M1301	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1124	M1302	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1125	M1303	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1126	M1304	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1127	M1305	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1128	M1306	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1129	M1307	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1130	M1308	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1131	M1309	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1132	M697	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1133	M707	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1134	M718	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1135	M728	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1136	M739	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1137	M749	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1138	M760	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1139	M770	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	13.438	1.02	1		Lateral
1140	M16	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1141	M19	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1142	M23	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1143	M26	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1144	M30	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1145	M33	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1146	M37	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1147	M40	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	8.13	1	1		Lateral
1148	M52	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1149	M60	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1150	M68	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1151	M76	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1152	M84	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1153	M92	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1154	M100	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1155	M108	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1156	M125	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
1157	M133	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1158	M142	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1159	M150	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1160	M159	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1161	M167	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1162	M176	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1163	M184	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1		Lateral
1164	M206	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1165	M214	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1166	M223	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1167	M231	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1168	M240	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1169	M248	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1170	M257	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1171	M265	TWR_RED_HORZ_T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1		Lateral
1172	M287	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1173	M295	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1174	M304	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1175	M312	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1176	M321	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1177	M329	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1178	M338	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1179	M346	TWR_RED_HORZ_T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1		Lateral
1180	M368	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1181	M376	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1182	M385	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1183	M393	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1184	M402	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1185	M410	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1186	M419	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1187	M427	TWR_RED_HORZ_T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1		Lateral
1188	M449	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1189	M457	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1190	M466	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1191	M474	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1192	M483	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1193	M491	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1194	M500	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1195	M508	TWR_RED_HORZ_T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1		Lateral
1196	M530	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1197	M538	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1198	M547	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1199	M555	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1200	M564	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1201	M572	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1202	M581	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1203	M589	TWR_RED_HORZ_T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1		Lateral
1204	M611	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1205	M619	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1206	M628	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1207	M636	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1208	M645	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1209	M653	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1210	M662	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1211	M670	TWR_RED_HORZ_T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1		Lateral
1212	M692	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1213	M702	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-tor...	Kyy	Kzz	Cb	Function
1214	M713	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1215	M723	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1216	M734	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1217	M744	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1218	M755	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1219	M765	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1		Lateral
1220	M5	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1		Lateral
1221	M6	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1		Lateral
1222	M7	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1		Lateral
1223	M8	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1		Lateral
1224	M46	TWR_INNER_SUPP_T2	33.5	33.5	33.5	33.5	33.5	33.5	1	1		Lateral
1225	M115	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1		Lateral
1226	M116	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1		Lateral
1227	M117	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1		Lateral
1228	M118	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1		Lateral
1229	M195	TWR_INNER_SUPP_T3	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1230	M196	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1231	M197	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1232	M198	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1233	M199	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1234	M276	TWR_INNER_SUPP_T4	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1235	M277	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1236	M278	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1237	M279	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1238	M280	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1239	M357	TWR_INNER_SUPP_T5	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1240	M358	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1241	M359	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1242	M360	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1243	M361	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1244	M438	TWR_INNER_SUPP_T6	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1245	M439	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1246	M440	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1247	M441	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1248	M442	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1249	M519	TWR_INNER_SUPP_T7	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1250	M520	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1251	M521	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1252	M522	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1253	M523	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1254	M600	TWR_INNER_SUPP_T8	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1255	M601	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1256	M602	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1257	M603	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1258	M604	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1259	M681	TWR_INNER_SUPP_T9	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1		Lateral
1260	M682	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1261	M683	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1262	M684	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral
1263	M685	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1		Lateral

Basic Load Cases

	BLC Description	Category	X Gra...	Y Gra...	Z Grav...	Joint	Point	Distrib...	Area(Member)	Surfac...
1	Dead	None		-1		40	372	40		
2	No Ice Wind 0 deg	None				40	1018	104		

Basic Load Cases (Continued)

	BLC Description	Category	X Gra...	Y Gra...	Z Grav...	Joint	Point	Distrib...	Area(Member)	Surfac...
3	No Ice Wind 45 deg	None				80	996	160		
4	No Ice Wind 90 deg	None				40	1022	120		
5	No Ice Wind 135 deg	None				80	988	160		
6	No Ice Wind 180 deg	None				40	1018	104		
7	No Ice Wind 225 deg	None				80	996	160		
8	No Ice Wind 270 deg	None				40	1022	120		
9	No Ice Wind 315 deg	None				80	988	160		
10	Ice	None				40	372	822		
11	Temperature Drop	None						1309		
12	Ice Wind 0 deg	None				40	1014	80		
13	Ice Wind 45 deg	None				80	956	160		
14	Ice Wind 90 deg	None				40	1022	120		
15	Ice Wind 135 deg	None				80	948	160		
16	Ice Wind 180 deg	None				40	1014	80		
17	Ice Wind 225 deg	None				80	956	160		
18	Ice Wind 270 deg	None				40	1022	120		
19	Ice Wind 315 deg	None				80	948	160		
20	Service Wind 0 deg	None				40	1008	96		
21	Service Wind 45 deg	None				80	952	160		
22	Service Wind 90 deg	None				40	1008	120		
23	Service Wind 135 deg	None				80	942	160		
24	Service Wind 180 deg	None				40	1008	96		
25	Service Wind 225 deg	None				80	952	160		
26	Service Wind 270 deg	None				40	1008	120		
27	Service Wind 315 deg	None				80	942	160		

Load Combinations

	Description	So...	P...	S...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...
1	Dead Only	Yes			1	1	28	1	29	1														
2	1.2 Dead+1.6 Wind 0 de...	Yes			1	1.2	2	1.6	28	1.2	29	1												
3	0.9 Dead+1.6 Wind 0 de...	Yes			1	.9	2	1.6	28	.9	29	1												
4	1.2 Dead+1.6 Wind 45 d...	Yes			1	1.2	3	1.6	28	1.2	29	1												
5	0.9 Dead+1.6 Wind 45 d...	Yes			1	.9	3	1.6	28	.9	29	1												
6	1.2 Dead+1.6 Wind 90 d...	Yes			1	1.2	4	1.6	28	1.2	29	1												
7	0.9 Dead+1.6 Wind 90 d...	Yes			1	.9	4	1.6	28	.9	29	1												
8	1.2 Dead+1.6 Wind 135 ...	Yes			1	1.2	5	1.6	28	1.2	29	1												
9	0.9 Dead+1.6 Wind 135 ...	Yes			1	.9	5	1.6	28	.9	29	1												
10	1.2 Dead+1.6 Wind 180 ...	Yes			1	1.2	6	1.6	28	1.2	29	1												
11	0.9 Dead+1.6 Wind 180 ...	Yes			1	.9	6	1.6	28	.9	29	1												
12	1.2 Dead+1.6 Wind 225 ...	Yes			1	1.2	7	1.6	28	1.2	29	1												
13	0.9 Dead+1.6 Wind 225 ...	Yes			1	.9	7	1.6	28	.9	29	1												
14	1.2 Dead+1.6 Wind 270 ...	Yes			1	1.2	8	1.6	28	1.2	29	1												
15	0.9 Dead+1.6 Wind 270 ...	Yes			1	.9	8	1.6	28	.9	29	1												
16	1.2 Dead+1.6 Wind 315 ...	Yes			1	1.2	9	1.6	28	1.2	29	1												
17	0.9 Dead+1.6 Wind 315 ...	Yes			1	.9	9	1.6	28	.9	29	1												
18	1.2 Dead+1.0 Ice+1.0 Te...	Yes			1	1.2	10	1	11	1	28	1.2	29	1										
19	1.2 Dead+1.0 Wind 0 de...	Yes			1	1.2	12	1	10	1	11	1	28	1.2	29	1								
20	1.2 Dead+1.0 Wind 45 d...	Yes			1	1.2	13	1	10	1	11	1	28	1.2	29	1								
21	1.2 Dead+1.0 Wind 90 d...	Yes			1	1.2	14	1	10	1	11	1	28	1.2	29	1								
22	1.2 Dead+1.0 Wind 135 ...	Yes			1	1.2	15	1	10	1	11	1	28	1.2	29	1								
23	1.2 Dead+1.0 Wind 180 ...	Yes			1	1.2	16	1	10	1	11	1	28	1.2	29	1								
24	1.2 Dead+1.0 Wind 225 ...	Yes			1	1.2	17	1	10	1	11	1	28	1.2	29	1								
25	1.2 Dead+1.0 Wind 270 ...	Yes			1	1.2	18	1	10	1	11	1	28	1.2	29	1								
26	1.2 Dead+1.0 Wind 315 ...	Yes			1	1.2	19	1	10	1	11	1	28	1.2	29	1								
27	Dead+Wind 0 deg - Servi...	Yes			1	1	20	1	28	1	29	1												

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...	BLC	Fa...
28	Dead+Wind 45 deg - Ser...	Yes			1	1	21	1	28	1	29	1												
29	Dead+Wind 90 deg - Ser...	Yes			1	1	22	1	28	1	29	1												
30	Dead+Wind 135 deg - S...	Yes			1	1	23	1	28	1	29	1												
31	Dead+Wind 180 deg - S...	Yes			1	1	24	1	28	1	29	1												
32	Dead+Wind 225 deg - S...	Yes			1	1	25	1	28	1	29	1												
33	Dead+Wind 270 deg - S...	Yes			1	1	26	1	28	1	29	1												
34	Dead+Wind 315 deg - S...	Yes			1	1	27	1	28	1	29	1												

Envelope AISC 13th(360-05): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
1	M1274	2L3 1/2x...	.057	9.0...	6	.002	9.0...	y	20	24.588	145.476	16.043	5.364	1	H1-1b
2	M1275	2L3 1/2x...	.059	9.0...	10	.002	9.0...	y	25	24.588	145.476	16.043	5.364	1	H1-1b
3	M1276	2L3 1/2x...	.057	9.0...	14	.002	9.0...	y	26	24.588	145.476	16.043	5.364	1	H1-1b
4	M1277	2L3 1/2x...	.059	9.0...	10	.002	9.0...	y	21	24.588	145.476	16.043	5.364	1	H1-1b
5	M1278	2L3 1/2x...	.059	9.0...	2	.002	9.0...	y	20	24.588	145.476	16.043	5.364	1	H1-1b
6	M1279	2L3 1/2x...	.058	9.0...	14	.002	9.0...	y	23	24.588	145.476	16.043	5.364	1	H1-1b
7	M1280	2L3 1/2x...	.058	9.0...	6	.002	9.0...	y	23	24.588	145.476	16.043	5.364	1	H1-1b
8	M1281	2L3 1/2x...	.059	9.0...	2	.002	9.0...	y	26	24.588	145.476	16.043	5.364	1	H1-1b
9	M1282	2L3 1/2x...	.052	7.7...	10	.002	7.7...	y	14	33.009	145.476	16.043	5.364	1	H1-1b
10	M1283	2L3 1/2x...	.052	7.7...	2	.002	7.7...	y	16	33.009	145.476	16.043	5.364	1	H1-1b
11	M1284	2L3 1/2x...	.051	7.7...	14	.002	7.7...	y	2	33.009	145.476	16.043	5.364	1	H1-1b
12	M1285	2L3 1/2x...	.051	7.7...	6	.002	7.7...	y	2	33.009	145.476	16.043	5.364	1	H1-1b
13	M1286	2L3 1/2x...	.052	7.7...	2	.002	7.7...	y	4	33.009	145.476	16.043	5.364	1	H1-1b
14	M1287	2L3 1/2x...	.052	7.7...	10	.002	7.7...	y	6	33.009	145.476	16.043	5.364	1	H1-1b
15	M1288	2L3 1/2x...	.051	7.7...	6	.002	7.7...	y	10	33.009	145.476	16.043	5.364	1	H1-1b
16	M1289	2L3 1/2x...	.051	7.7...	14	.002	7.7...	y	10	33.009	145.476	16.043	5.364	1	H1-1b
17	M15	2L3x4x5/...	.376	9.1...	6	.004	9.1...	y	22	15.416	135.432	15.999	3.964	1	H1-1a
18	M18	2L3x4x5/...	.375	9.1...	14	.004	9.1...	y	24	15.416	135.432	15.999	3.964	1	H1-1a
19	M22	2L3x4x5/...	.369	9.1...	2	.004	9.1...	y	20	15.416	135.432	15.999	3.964	1	H1-1a
20	M25	2L3x4x5/...	.369	9.1...	10	.004	9.1...	y	22	15.416	135.432	15.999	3.964	1	H1-1a
21	M29	2L3x4x5/...	.393	9.1...	14	.004	9.1...	y	26	15.416	135.432	15.999	3.964	1	H1-1a
22	M32	2L3x4x5/...	.392	9.1...	6	.004	9.1...	y	20	15.416	135.432	15.999	3.964	1	H1-1a
23	M36	2L3x4x5/...	.381	9.1...	10	.004	9.1...	y	24	15.416	135.432	15.999	3.964	1	H1-1a
24	M39	2L3x4x5/...	.382	9.1...	2	.004	9.1...	y	26	15.416	135.432	15.999	3.964	1	H1-1a
25	M51	2L3x2 1/...	.247	15....	14	.003	22....	y	20	61.942	124.416	8.283	4.374	1	H1-1a
26	M59	2L3x2 1/...	.246	15....	6	.003	22....	y	26	61.942	124.416	8.283	4.374	1	H1-1a
27	M67	2L3x2 1/...	.249	15....	10	.003	22....	y	26	61.942	124.416	8.283	4.374	1	H1-1a
28	M75	2L3x2 1/...	.250	15....	2	.003	22....	y	24	61.942	124.416	8.283	4.374	1	H1-1a
29	M83	2L3x2 1/...	.248	15....	6	.003	22....	y	24	61.942	124.416	8.283	4.374	1	H1-1a
30	M91	2L3x2 1/...	.248	15....	14	.003	22....	y	22	61.942	124.416	8.283	4.374	1	H1-1a
31	M99	2L3x2 1/...	.249	15....	2	.003	22....	y	22	61.942	124.416	8.283	4.374	1	H1-1a
32	M107	2L3x2 1/...	.249	15....	10	.003	22....	y	20	61.942	124.416	8.283	4.374	1	H1-1a
33	M124	2L3x2 1/...	.350	0	14	.003	22....	y	26	61.942	124.416	8.283	4.374	1	H1-1a
34	M132	2L3x2 1/...	.353	0	6	.003	22....	y	20	61.942	124.416	8.283	4.374	1	H1-1a
35	M141	2L3x2 1/...	.350	0	10	.003	22....	y	24	61.942	124.416	8.283	4.374	1	H1-1a
36	M149	2L3x2 1/...	.348	0	2	.003	22....	y	26	61.942	124.416	8.283	4.374	1	H1-1a
37	M158	2L3x2 1/...	.338	0	6	.003	22....	y	22	61.942	124.416	8.283	4.374	1	H1-1a
38	M166	2L3x2 1/...	.336	0	14	.003	22....	y	24	61.942	124.416	8.283	4.374	1	H1-1a
39	M175	2L3x2 1/...	.345	0	2	.003	22....	y	20	61.942	124.416	8.283	4.374	1	H1-1a
40	M183	2L3x2 1/...	.346	0	10	.003	22....	y	22	61.942	124.416	8.283	4.374	1	H1-1a
41	M205	2L3x2-1/...	.359	0	14	.003	0	y	23	82.809	162	11.25	5.625	1	H1-1a
42	M213	2L3x2-1/...	.362	0	6	.003	0	y	22	82.809	162	11.25	5.625	1	H1-1a
43	M222	2L3x2-1/...	.361	0	10	.003	0	y	21	82.809	162	11.25	5.625	1	H1-1a
44	M230	2L3x2-1/...	.357	0	2	.003	0	y	21	82.809	162	11.25	5.625	1	H1-1a
45	M239	2L3x2-1/...	.343	0	6	.003	22....	y	22	82.809	162	11.25	5.625	1	H1-1a

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
46	M247	2L3x2-1/...	.341	0	14	.002	22....	y	24	82.809	162	11.25	5.625	1	H1-1a
47	M256	2L3x2-1/...	.352	0	2	.003	22....	y	20	82.809	162	11.25	5.625	1	H1-1a
48	M264	2L3x2-1/...	.354	0	10	.003	0	y	25	82.809	162	11.25	5.625	1	H1-1a
49	M286	2L3x2-1/...	.433	0	14	.003	22....	y	25	82.809	162	11.25	5.625	1	H1-1a
50	M294	2L3x2-1/...	.436	0	6	.003	0	y	22	82.809	162	11.25	5.625	1	H1-1a
51	M303	2L3x2-1/...	.437	0	10	.003	0	y	22	82.809	162	11.25	5.625	1	H1-1a
52	M311	2L3x2-1/...	.433	0	2	.003	22....	y	19	82.809	162	11.25	5.625	1	H1-1a
53	M320	2L3x2-1/...	.411	0	6	.002	22....	y	22	82.809	162	11.25	5.625	1	H1-1a
54	M328	2L3x2-1/...	.409	0	14	.002	22....	y	24	82.809	162	11.25	5.625	1	H1-1a
55	M337	2L3x2-1/...	.428	0	2	.003	22....	y	19	82.809	162	11.25	5.625	1	H1-1a
56	M345	2L3x2-1/...	.431	0	10	.003	22....	y	23	82.809	162	11.25	5.625	1	H1-1a
57	M367	2L4x3x3/...	.467	0	14	.003	0	y	23	90.688	161.028	11.531	7.876	1	H1-1a
58	M375	2L4x3x3/...	.471	0	6	.004	0	y	23	90.688	161.028	11.531	7.876	1	H1-1a
59	M384	2L4x3x3/...	.475	0	10	.003	0	y	21	90.688	161.028	11.531	7.876	1	H1-1a
60	M392	2L4x3x3/...	.470	0	2	.003	0	y	21	90.688	161.028	11.531	7.876	1	H1-1a
61	M401	2L4x3x3/...	.443	0	6	.003	0	y	19	90.688	161.028	11.531	7.876	1	H1-1a
62	M409	2L4x3x3/...	.441	0	14	.003	0	y	19	90.688	161.028	11.531	7.876	1	H1-1a
63	M418	2L4x3x3/...	.466	0	2	.003	0	y	25	90.688	161.028	11.531	7.876	1	H1-1a
64	M426	2L4x3x3/...	.469	0	10	.003	0	y	25	90.688	161.028	11.531	7.876	1	H1-1a
65	M448	2L4x3x3/...	.522	0	14	.003	0	y	23	90.688	161.028	11.531	7.876	1	H1-1a
66	M456	2L4x3x3/...	.526	0	6	.003	0	y	23	90.688	161.028	11.531	7.876	1	H1-1a
67	M465	2L4x3x3/...	.527	0	10	.003	0	y	21	90.688	161.028	11.531	7.876	1	H1-1a
68	M473	2L4x3x3/...	.523	0	2	.003	0	y	21	90.688	161.028	11.531	7.876	1	H1-1a
69	M482	2L4x3x3/...	.492	0	6	.003	0	y	19	90.688	161.028	11.531	7.876	1	H1-1a
70	M490	2L4x3x3/...	.491	0	14	.003	0	y	19	90.688	161.028	11.531	7.876	1	H1-1a
71	M499	2L4x3x3/...	.519	0	2	.003	0	y	25	90.688	161.028	11.531	7.876	1	H1-1a
72	M507	2L4x3x3/...	.522	0	10	.003	0	y	25	90.688	161.028	11.531	7.876	1	H1-1a
73	M529	2L4x3x1/...	.464	0	14	.003	0	y	24	123.934	210.6	15.634	10.202	1	H1-1a
74	M537	2L4x3x1/...	.468	0	6	.003	0	y	22	123.934	210.6	15.634	10.202	1	H1-1a
75	M546	2L4x3x1/...	.467	0	10	.003	0	y	22	123.934	210.6	15.634	10.202	1	H1-1a
76	M554	2L4x3x1/...	.462	0	2	.003	0	y	20	123.934	210.6	15.634	10.202	1	H1-1a
77	M563	2L4x3x1/...	.436	0	6	.003	0	y	20	123.934	210.6	15.634	10.202	1	H1-1a
78	M571	2L4x3x1/...	.435	0	14	.003	0	y	26	123.934	210.6	15.634	10.202	1	H1-1a
79	M580	2L4x3x1/...	.459	0	2	.003	0	y	26	123.934	210.6	15.634	10.202	1	H1-1a
80	M588	2L4x3x1/...	.462	0	10	.003	0	y	24	123.934	210.6	15.634	10.202	1	H1-1a
81	M610	2L4x3x1/...	.509	0	14	.004	22....	y	16	123.934	210.6	15.634	10.202	1	H1-1a
82	M618	2L4x3x1/...	.511	0	6	.004	0	y	10	123.934	210.6	15.634	10.202	1	H1-1a
83	M627	2L4x3x1/...	.512	0	10	.004	22....	y	12	123.934	210.6	15.634	10.202	1	H1-1a
84	M635	2L4x3x1/...	.508	0	2	.003	0	y	6	123.934	210.6	15.634	10.202	1	H1-1a
85	M644	2L4x3x1/...	.478	0	6	.004	22....	y	8	123.934	210.6	15.634	10.202	1	H1-1a
86	M652	2L4x3x1/...	.478	0	14	.004	22....	y	12	123.934	210.6	15.634	10.202	1	H1-1a
87	M661	2L4x3x1/...	.506	0	2	.003	22....	y	4	123.934	210.6	15.634	10.202	1	H1-1a
88	M669	2L4x3x1/...	.508	0	10	.004	22....	y	8	123.934	210.6	15.634	10.202	1	H1-1a
89	M691	2L4x4x1/...	.481	0	14	.006	0	y	12	150.524	243	26.015	10.64	1	H1-1a
90	M701	2L4x4x1/...	.480	0	6	.004	0	y	8	150.524	243	26.015	10.64	1	H1-1a
91	M712	2L4x4x1/...	.527	0	10	.003	0	y	8	151.596	243	26.015	10.64	1	H1-1a
92	M722	2L4x4x1/...	.527	0	2	.006	0	y	4	151.596	243	26.015	10.64	1	H1-1a
93	M733	2L4x4x1/...	.436	0	6	.007	0	y	4	150.524	243	26.015	10.64	1	H1-1a
94	M743	2L4x4x1/...	.437	0	14	.007	0	y	16	150.524	243	26.015	10.64	1	H1-1a
95	M754	2L4x4x1/...	.525	0	2	.006	0	y	16	151.596	243	26.015	10.64	1	H1-1a
96	M764	2L4x4x1/...	.525	0	10	.006	0	y	12	151.596	243	26.015	10.64	1	H1-1a
97	M1270	W12x26	.091	20....	8	.006	0	y	6	190.321	247.86	22.059	52.598	1	H1-1b
98	M1271	W12x26	.091	20....	8	.006	41.5	y	10	190.321	247.86	22.059	52.598	1	H1-1b
99	M1272	W12x26	.091	20....	16	.006	41.5	y	14	190.321	247.86	22.059	52.598	1	H1-1b
100	M1273	W12x26	.091	20....	16	.006	0	y	2	190.321	247.86	22.059	52.598	1	H1-1b
101	M123	2L3x2 1/...	.118	25....	14	.007	25....	y	21	46.996	85.212	5.423	3.034	1	H1-1b
102	M140	2L3x2 1/...	.117	8.3...	2	.007	8.3...	y	24	46.996	85.212	5.423	3.034	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
103	M157	2L3x2 1/...	.101	17....	6	.005	8.3...	y	21	46.996	85.212	5.423	3.034	1	H1-1b
104	M174	2L3x2 1/...	.103	17....	3	.005	25....	y	23	46.996	85.212	5.423	3.034	1	H1-1b
105	M204	2L3x2 1/...	.300	25....	14	.007	25....	y	24	46.996	85.212	5.423	3.034	1	H1-1a
106	M221	2L3x2 1/...	.298	8.3...	2	.007	8.3...	y	19	46.996	85.212	5.423	3.034	1	H1-1a
107	M238	2L3x2 1/...	.287	16....	6	.005	8.3...	y	24	46.996	85.212	5.423	3.034	1	H1-1a
108	M255	2L3x2 1/...	.297	16....	10	.005	25....	y	20	46.996	85.212	5.423	3.034	1	H1-1a
109	M285	2L3x2 1/...	.363	16....	6	.007	25....	y	23	46.996	85.212	5.423	3.034	1	H1-1a
110	M302	2L3x2 1/...	.361	16....	10	.007	8.3...	y	21	46.996	85.212	5.423	3.034	1	H1-1a
111	M319	2L3x2 1/...	.348	16....	6	.005	8.3...	y	20	46.996	85.212	5.423	3.034	1	H1-1a
112	M336	2L3x2 1/...	.363	16....	10	.005	25....	y	24	46.996	85.212	5.423	3.034	1	H1-1a
113	M366	2L3x2 1/...	.359	16....	6	.006	25....	y	22	57.309	105.047	6.839	3.717	1	H1-1a
114	M383	2L3x2 1/...	.363	5.9...	2	.006	8.3...	y	21	57.309	105.047	6.839	5.947	1	H1-1a
115	M400	2L3x2 1/...	.341	16....	6	.004	8.3...	y	20	57.309	105.047	6.839	3.717	1	H1-1a
116	M417	2L3x2 1/...	.364	16....	10	.004	25....	y	24	57.309	105.047	6.839	3.717	1	H1-1a
117	M447	2L3x2 1/...	.358	16....	6	.005	25....	y	22	67.139	124.416	8.283	4.374	1	H1-1a
118	M464	2L3x2 1/...	.360	5.9...	2	.005	8.3...	y	22	67.139	124.416	8.283	6.998	1	H1-1a
119	M481	2L3x2 1/...	.339	16....	14	.004	8.3...	y	21	67.139	124.416	8.283	4.374	1	H1-1a
120	M498	2L3x2 1/...	.361	16....	10	.004	25....	y	23	67.139	124.416	8.283	4.374	1	H1-1a
121	M528	2L3x2 1/...	.411	27....	14	.005	25....	y	22	67.139	124.416	8.283	6.998	1	H1-1a
122	M545	2L3x2 1/...	.410	5.9...	2	.005	8.3...	y	22	67.139	124.416	8.283	6.998	1	H1-1a
123	M562	2L3x2 1/...	.384	16....	6	.004	16....	y	22	67.139	124.416	8.283	4.374	1	H1-1a
124	M579	2L3x2 1/...	.410	16....	10	.004	25....	y	23	67.139	124.416	8.283	4.374	1	H1-1a
125	M609	2L3x2 1/...	.449	27....	14	.005	25....	y	22	67.139	124.416	8.283	6.998	1	H1-1a
126	M626	2L3x2 1/...	.445	16....	10	.005	8.3...	y	22	67.139	124.416	8.283	4.374	1	H1-1a
127	M643	2L3x2 1/...	.419	16....	6	.004	8.3...	y	20	67.139	124.416	8.283	4.374	1	H1-1a
128	M660	2L3x2 1/...	.447	16....	10	.004	25....	y	24	67.139	124.416	8.283	4.374	1	H1-1a
129	M690	2L4x3x1/...	.231	28....	12	.005	25....	y	22	139.924	210.6	15.634	16.323	1	H1-1a
130	M711	2L4x3x1/...	.146	16....	4	.005	8.3...	y	21	139.924	210.6	15.634	10.202	1	H1-1b
131	M732	2L4x3x1/...	.152	16....	16	.003	16....	y	21	139.924	210.6	15.634	10.202	1	H1-1b
132	M753	2L4x3x1/...	.151	16....	16	.003	25....	y	24	139.924	210.6	15.634	10.202	1	H1-1b
133	M1221	2L2 1/2x...	.025	4.1...	4	.002	8.3...	y	12	24.183	58.32	4.017	2.611	1	H1-1b
134	M1222	2L2 1/2x...	.025	4.1...	6	.002	0	y	12	24.183	58.32	4.017	2.611	1	H1-1b
135	M1223	2L2 1/2x...	.025	4.1...	8	.002	8.3...	y	16	24.183	58.32	4.017	2.611	1	H1-1b
136	M1224	2L2 1/2x...	.025	4.1...	8	.002	0	y	16	24.183	58.32	4.017	2.611	1	H1-1b
137	M1225	2L2 1/2x...	.025	4.1...	10	.002	8.3...	y	4	24.183	58.32	4.017	2.611	1	H1-1b
138	M1226	2L2 1/2x...	.025	4.1...	12	.002	0	y	4	24.183	58.32	4.017	2.611	1	H1-1b
139	M1169	2L2 1/2x...	.025	4.1...	4	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
140	M1170	2L2 1/2x...	.025	4.1...	4	.002	0	y	14	24.183	58.32	4.017	2.611	1	H1-1b
141	M1171	2L2 1/2x...	.025	4.1...	8	.002	8.3...	y	14	24.183	58.32	4.017	2.611	1	H1-1b
142	M1172	2L2 1/2x...	.025	4.1...	8	.002	0	y	2	24.183	58.32	4.017	2.611	1	H1-1b
143	M1173	2L2 1/2x...	.025	4.1...	12	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
144	M1174	2L2 1/2x...	.025	4.1...	12	.002	0	y	2	24.183	58.32	4.017	2.611	1	H1-1b
145	M1117	2L2 1/2x...	.025	4.1...	2	.002	8.3...	y	12	24.183	58.32	4.017	2.611	1	H1-1b
146	M1118	2L2 1/2x...	.025	4.1...	4	.002	0	y	12	24.183	58.32	4.017	2.611	1	H1-1b
147	M1119	2L2 1/2x...	.025	4.1...	8	.002	8.3...	y	16	24.183	58.32	4.017	2.611	1	H1-1b
148	M1120	2L2 1/2x...	.025	4.1...	8	.002	0	y	16	24.183	58.32	4.017	2.611	1	H1-1b
149	M1121	2L2 1/2x...	.025	4.1...	12	.002	8.3...	y	4	24.183	58.32	4.017	2.611	1	H1-1b
150	M1122	2L2 1/2x...	.025	4.1...	12	.002	0	y	4	24.183	58.32	4.017	2.611	1	H1-1b
151	M1065	2L2 1/2x...	.025	4.1...	2	.002	8.3...	y	12	24.183	58.32	4.017	2.611	1	H1-1b
152	M1066	2L2 1/2x...	.025	4.1...	4	.002	0	y	12	24.183	58.32	4.017	2.611	1	H1-1b
153	M1067	2L2 1/2x...	.025	4.1...	8	.002	8.3...	y	16	24.183	58.32	4.017	2.611	1	H1-1b
154	M1068	2L2 1/2x...	.025	4.1...	8	.002	0	y	16	24.183	58.32	4.017	2.611	1	H1-1b
155	M1069	2L2 1/2x...	.025	4.1...	12	.002	8.3...	y	4	24.183	58.32	4.017	2.611	1	H1-1b
156	M1070	2L2 1/2x...	.025	4.1...	12	.002	0	y	4	24.183	58.32	4.017	2.611	1	H1-1b
157	M1013	2L2 1/2x...	.026	4.1...	2	.002	8.3...	y	12	24.183	58.32	4.017	2.611	1	H1-1b
158	M1014	2L2 1/2x...	.026	4.1...	6	.002	0	y	12	24.183	58.32	4.017	2.611	1	H1-1b
159	M1015	2L2 1/2x...	.026	4.1...	8	.002	8.3...	y	16	24.183	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
160	M1016	2L2 1/2x...	.026	4.1...	8	.002	0	y	16	24.183	58.32	4.017	2.611	1	H1-1b
161	M1017	2L2 1/2x...	.026	4.1...	10	.002	8.3...	y	4	24.183	58.32	4.017	2.611	1	H1-1b
162	M1018	2L2 1/2x...	.026	4.1...	14	.002	0	y	4	24.183	58.32	4.017	2.611	1	H1-1b
163	M961	2L2 1/2x...	.026	4.1...	2	.002	8.3...	y	12	24.183	58.32	4.017	2.611	1	H1-1b
164	M962	2L2 1/2x...	.026	4.1...	6	.002	0	y	12	24.183	58.32	4.017	2.611	1	H1-1b
165	M963	2L2 1/2x...	.026	4.1...	8	.002	8.3...	y	16	24.183	58.32	4.017	2.611	1	H1-1b
166	M964	2L2 1/2x...	.026	4.1...	8	.002	0	y	16	24.183	58.32	4.017	2.611	1	H1-1b
167	M965	2L2 1/2x...	.026	4.1...	10	.002	8.3...	y	4	24.183	58.32	4.017	2.611	1	H1-1b
168	M966	2L2 1/2x...	.026	4.1...	14	.002	0	y	4	24.183	58.32	4.017	2.611	1	H1-1b
169	M909	2L2 1/2x...	.026	4.1...	2	.003	0	y	2	24.183	58.32	4.017	2.611	1	H1-1b
170	M910	2L2 1/2x...	.026	4.1...	6	.003	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
171	M911	2L2 1/2x...	.026	4.1...	8	.003	0	y	8	24.183	58.32	4.017	2.611	1	H1-1b
172	M912	2L2 1/2x...	.026	4.1...	8	.003	8.3...	y	8	24.183	58.32	4.017	2.611	1	H1-1b
173	M913	2L2 1/2x...	.026	4.1...	10	.003	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
174	M914	2L2 1/2x...	.026	4.1...	14	.003	8.3...	y	14	24.183	58.32	4.017	2.611	1	H1-1b
175	M1258	W8x13	.008	0	24	.002	0	y	16	30.531	124.416	5.805	20.868	1...	H1-1b
176	M1259	W8x13	.008	0	26	.002	0	y	12	30.531	124.416	5.805	20.868	1...	H1-1b
177	M1260	W8x13	.008	0	20	.002	0	y	8	30.531	124.416	5.805	20.868	1...	H1-1b
178	M1261	W8x13	.008	0	22	.002	0	y	4	30.531	124.416	5.805	20.868	1...	H1-1b
179	M1206	2L2 1/2x...	.058	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
180	M1207	2L2 1/2x...	.060	0	16	.003	0	y	4	12.19	58.32	4.017	2.611	1	H1-1b
181	M1208	2L2 1/2x...	.058	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
182	M1154	2L2 1/2x...	.053	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
183	M1155	2L2 1/2x...	.057	0	16	.003	0	y	12	12.19	58.32	4.017	2.611	1	H1-1b
184	M1156	2L2 1/2x...	.053	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
185	M1102	2L2 1/2x...	.065	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
186	M1103	2L2 1/2x...	.069	0	16	.003	0	y	12	12.19	58.32	4.017	2.611	1	H1-1b
187	M1104	2L2 1/2x...	.065	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
188	M1050	2L2 1/2x...	.066	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
189	M1051	2L2 1/2x...	.070	0	16	.003	0	y	12	12.19	58.32	4.017	2.611	1	H1-1b
190	M1052	2L2 1/2x...	.067	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
191	M998	2L2 1/2x...	.067	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
192	M999	2L2 1/2x...	.071	0	16	.003	0	y	12	12.19	58.32	4.017	2.611	1	H1-1b
193	M1000	2L2 1/2x...	.067	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
194	M946	2L2 1/2x...	.076	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
195	M947	2L2 1/2x...	.080	0	16	.003	0	y	12	12.19	58.32	4.017	2.611	1	H1-1b
196	M948	2L2 1/2x...	.076	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
197	M894	2L2 1/2x...	.083	0	4	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
198	M895	2L2 1/2x...	.087	0	16	.003	0	y	4	12.19	58.32	4.017	2.611	1	H1-1b
199	M896	2L2 1/2x...	.083	0	12	.003	0	y	8	12.19	58.32	4.017	2.611	1	H1-1b
200	M845	C4x7.2	.030	2.0...	12	.003	0	y	12	35.442	69.012	1.456	7.09	1	H1-1b
201	M846	C4x7.2	.030	2.0...	12	.002	0	y	16	35.442	69.012	1.456	7.09	1	H1-1b
202	M847	C4x7.2	.030	2.0...	8	.003	0	y	8	35.442	69.012	1.456	7.09	1	H1-1b
203	M848	C4x7.2	.030	2.0...	8	.002	0	y	14	35.442	69.012	1.456	7.09	1	H1-1b
204	M849	C4x7.2	.031	2.0...	4	.003	0	y	4	35.442	69.012	1.456	7.09	1	H1-1b
205	M850	C4x7.2	.031	2.0...	4	.002	0	y	8	35.442	69.012	1.456	7.09	1	H1-1b
206	M851	C4x7.2	.033	2.6...	16	.003	0	y	16	23.079	69.012	1.456	6.795	1	H1-1b
207	M852	C4x7.2	.033	2.6...	16	.003	5.3...	y	16	23.079	69.012	1.456	6.795	1	H1-1b
208	M859	C4x7.2	.031	2.0...	4	.002	4.1...	y	14	35.442	69.012	1.456	7.09	1	H1-1b
209	M860	C4x7.2	.030	2.0...	8	.003	4.1...	y	8	35.442	69.012	1.456	7.09	1	H1-1b
210	M861	C4x7.2	.030	2.0...	8	.002	4.1...	y	4	35.442	69.012	1.456	7.09	1	H1-1b
211	M862	C4x7.2	.030	2.0...	4	.003	4.1...	y	4	35.442	69.012	1.456	7.09	1	H1-1b
212	M863	C4x7.2	.030	2.0...	12	.003	4.1...	y	12	35.442	69.012	1.456	7.09	1	H1-1b
213	M864	C4x7.2	.030	2.0...	12	.002	4.1...	y	6	35.442	69.012	1.456	7.09	1	H1-1b
214	M865	C4x7.2	.023	2.1...	16	.002	0	y	4	34.823	69.012	1.456	7.076	1	H1-1b
215	M1227	2L3x2 1/...	.044	4.2...	8	.002	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
216	M1228	2L3x2 1/...	.030	4.3...	8	.002	0	y	23	44.802	85.212	5.423	4.855	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
217	M1229	2L3x2 1/...	.030	4.3...	8	.002	0	y	21	44.802	85.212	5.423	4.855	1	H1-1b
218	M1175	2L3x2 1/...	.036	4.3...	16	.002	0	y	22	44.802	85.212	5.423	4.855	1	H1-1b
219	M1176	2L3x2 1/...	.036	4.3...	16	.002	0	y	22	44.802	85.212	5.423	4.855	1	H1-1b
220	M1177	2L3x2 1/...	.042	4.2...	10	.002	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
221	M1123	2L3x2 1/...	.046	4.2...	10	.002	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
222	M1124	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
223	M1125	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
224	M1071	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
225	M1072	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
226	M1073	2L3x2 1/...	.047	4.2...	10	.003	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
227	M1019	2L3x2 1/...	.047	4.2...	10	.003	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
228	M1020	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
229	M1021	2L3x2 1/...	.040	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
230	M967	2L3x2 1/...	.051	4.2...	10	.003	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
231	M968	2L3x2 1/...	.044	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
232	M969	2L3x2 1/...	.044	4.3...	16	.003	0	y	8	44.802	85.212	5.423	4.855	1	H1-1b
233	M915	2L3x2 1/...	.054	4.2...	10	.003	0	y	12	46.263	85.212	5.423	4.855	1	H1-1b
234	M916	2L3x2 1/...	.046	4.3...	16	.002	0	y	16	44.802	85.212	5.423	4.855	1	H1-1b
235	M917	2L3x2 1/...	.046	4.3...	16	.002	0	y	16	44.802	85.212	5.423	4.855	1	H1-1b
236	M1254	W8x13	.050	8.3...	2	.003	16....	y	6	58.893	124.416	5.805	11.712	1	H1-1b
237	M1255	W8x13	.050	8.3...	6	.003	0	y	19	58.893	124.416	5.805	11.712	1	H1-1b
238	M1256	W8x13	.050	8.3...	10	.003	16....	y	14	58.893	124.416	5.805	11.712	1	H1-1b
239	M1257	W8x13	.050	8.3...	14	.003	0	y	10	58.893	124.416	5.805	11.712	1	H1-1b
240	M1202	2L2 1/2x...	.359	8.3...	2	.005	0	y	22	6.095	58.32	4.017	2.611	1	H1-1a
241	M1203	2L2 1/2x...	.358	8.3...	14	.005	16....	y	22	6.095	58.32	4.017	2.611	1	H1-1a
242	M1204	2L2 1/2x...	.263	8.3...	10	.005	16....	y	20	6.095	58.32	4.017	2.611	1	H1-1b
243	M1205	2L2 1/2x...	.263	8.3...	6	.005	0	y	24	6.095	58.32	4.017	2.611	1	H1-1b
244	M1150	2L2 1/2x...	.261	8.3...	6	.005	16....	y	24	6.095	58.32	4.017	2.611	1	H1-1b
245	M1151	2L2 1/2x...	.262	8.3...	10	.005	0	y	20	6.095	58.32	4.017	2.611	1	H1-1b
246	M1152	2L2 1/2x...	.451	8.3...	16	.005	0	y	22	6.095	58.32	4.017	2.611	1	H1-1a
247	M1153	2L2 1/2x...	.456	8.3...	16	.005	16....	y	22	6.095	58.32	4.017	2.611	1	H1-1a
248	M1098	2L2 1/2x...	.526	8.3...	16	.005	16....	y	21	6.095	58.32	4.017	2.611	1	H1-1a
249	M1099	2L2 1/2x...	.366	8.3...	6	.005	16....	y	23	6.095	58.32	4.017	2.611	1	H1-1a
250	M1100	2L2 1/2x...	.369	8.3...	10	.005	0	y	21	6.095	58.32	4.017	2.611	1	H1-1a
251	M1101	2L2 1/2x...	.519	8.3...	16	.005	0	y	23	6.095	58.32	4.017	2.611	1	H1-1a
252	M1046	2L2 1/2x...	.368	8.3...	6	.005	16....	y	23	6.095	58.32	4.017	2.611	1	H1-1a
253	M1047	2L2 1/2x...	.375	8.3...	10	.005	0	y	21	6.095	58.32	4.017	2.611	1	H1-1a
254	M1048	2L2 1/2x...	.522	8.3...	16	.005	0	y	23	6.095	58.32	4.017	2.611	1	H1-1a
255	M1049	2L2 1/2x...	.541	8.3...	16	.005	16....	y	21	6.095	58.32	4.017	2.611	1	H1-1a
256	M994	2L2 1/2x...	.542	8.3...	16	.005	16....	y	21	6.095	58.32	4.017	2.611	1	H1-1a
257	M995	2L2 1/2x...	.370	8.3...	6	.005	16....	y	23	6.095	58.32	4.017	2.611	1	H1-1a
258	M996	2L2 1/2x...	.376	8.3...	10	.005	0	y	21	6.095	58.32	4.017	2.611	1	H1-1a
259	M997	2L2 1/2x...	.526	8.3...	16	.005	0	y	23	6.095	58.32	4.017	2.611	1	H1-1a
260	M942	2L2 1/2x...	.395	8.3...	6	.005	16....	y	23	6.095	58.32	4.017	2.611	1	H1-1a
261	M943	2L2 1/2x...	.402	8.3...	10	.005	0	y	21	6.095	58.32	4.017	2.611	1	H1-1a
262	M944	2L2 1/2x...	.582	8.3...	16	.005	0	y	23	6.095	58.32	4.017	2.611	1	H1-1a
263	M945	2L2 1/2x...	.599	8.3...	16	.005	16....	y	6	6.095	58.32	4.017	2.611	1	H1-1a
264	M890	2L2 1/2x...	.620	8.3...	16	.005	16....	y	2	6.095	58.32	4.017	2.611	1	H1-1a
265	M891	2L2 1/2x...	.421	8.3...	10	.005	0	y	4	6.095	58.32	4.017	2.611	1	H1-1a
266	M892	2L2 1/2x...	.414	8.3...	6	.005	16....	y	12	6.095	58.32	4.017	2.611	1	H1-1a
267	M893	2L2 1/2x...	.637	8.3...	16	.005	0	y	14	6.095	58.32	4.017	2.611	1	H1-1a
268	M42	W10x30	.024	11....	22	.010	11....	y	22	248.816	286.416	23.868	83.699	1	H1-1b
269	M43	W10x30	.024	11....	20	.010	11....	y	20	248.816	286.416	23.868	83.699	1	H1-1b
270	M44	W10x30	.024	11....	26	.010	11....	y	26	248.816	286.416	23.868	83.699	1	H1-1b
271	M45	W10x30	.024	11....	24	.010	11....	y	24	248.816	286.416	23.868	83.699	1	H1-1b
272	M191	2L3x2 1/...	.213	11....	24	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
273	M192	2L3x2 1/...	.214	11....	25	.009	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
274	M193	2L3x2 1/...	.212	11....	26	.009	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
275	M194	2L3x2 1/...	.214	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
276	M272	2L3x2 1/...	.214	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
277	M273	2L3x2 1/...	.214	11....	25	.009	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b
278	M274	2L3x2 1/...	.214	11....	23	.009	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
279	M275	2L3x2 1/...	.214	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
280	M353	2L3x2 1/...	.210	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
281	M354	2L3x2 1/...	.210	11....	25	.009	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b
282	M355	2L3x2 1/...	.209	11....	23	.009	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
283	M356	2L3x2 1/...	.210	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
284	M434	2L3x2 1/...	.210	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
285	M435	2L3x2 1/...	.209	11....	25	.009	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b
286	M436	2L3x2 1/...	.209	11....	23	.009	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
287	M437	2L3x2 1/...	.210	11....	19	.009	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
288	M515	2L3x2 1/...	.204	11....	19	.008	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
289	M516	2L3x2 1/...	.203	11....	25	.008	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b
290	M517	2L3x2 1/...	.203	11....	23	.008	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
291	M518	2L3x2 1/...	.203	11....	19	.008	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
292	M596	2L3x2 1/...	.205	11....	19	.008	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
293	M597	2L3x2 1/...	.204	11....	25	.008	11....	y	21	26.281	85.212	5.423	3.034	1	H1-1b
294	M598	2L3x2 1/...	.204	11....	23	.008	11....	y	25	26.281	85.212	5.423	3.034	1	H1-1b
295	M599	2L3x2 1/...	.205	11....	19	.008	11....	y	23	26.281	85.212	5.423	3.034	1	H1-1b
296	M677	2L3x2 1/...	.201	11....	19	.009	11....	y	22	26.281	85.212	5.423	3.034	1	H1-1b
297	M678	2L3x2 1/...	.200	11....	25	.009	11....	y	20	26.281	85.212	5.423	3.034	1	H1-1b
298	M679	2L3x2 1/...	.199	11....	23	.009	11....	y	26	26.281	85.212	5.423	3.034	1	H1-1b
299	M680	2L3x2 1/...	.201	11....	26	.009	11....	y	24	26.281	85.212	5.423	3.034	1	H1-1b
300	M1209	2L2 1/2x...	.025	4.1...	10	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
301	M1210	2L2 1/2x...	.025	4.1...	14	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
302	M1211	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
303	M1212	2L2 1/2x...	.025	4.1...	6	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
304	M1213	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
305	M1214	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
306	M1215	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
307	M1216	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
308	M1217	2L2 1/2x...	.012	2.9...	16	.002	0	y	25	37.234	58.32	4.017	2.611	1	H1-1b
309	M1218	2L2 1/2x...	.012	2.9...	12	.002	0	y	25	37.234	58.32	4.017	2.611	1	H1-1b
310	M1219	2L2 1/2x...	.012	2.9...	4	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
311	M1220	2L2 1/2x...	.012	2.9...	16	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
312	M1157	2L2 1/2x...	.025	4.1...	16	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
313	M1158	2L2 1/2x...	.025	4.1...	14	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
314	M1159	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
315	M1160	2L2 1/2x...	.025	4.1...	16	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
316	M1161	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
317	M1162	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
318	M1163	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
319	M1164	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
320	M1165	2L2 1/2x...	.012	2.9...	16	.002	0	y	25	37.234	58.32	4.017	2.611	1	H1-1b
321	M1166	2L2 1/2x...	.012	2.9...	12	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
322	M1167	2L2 1/2x...	.012	2.9...	4	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
323	M1168	2L2 1/2x...	.012	2.9...	16	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
324	M1105	2L2 1/2x...	.025	4.1...	16	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
325	M1106	2L2 1/2x...	.025	4.1...	16	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
326	M1107	2L2 1/2x...	.025	4.1...	2	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
327	M1108	2L2 1/2x...	.025	4.1...	14	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
328	M1109	2L2 1/2x...	.012	2.9...	16	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
329	M1110	2L2 1/2x...	.012	2.9...	12	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
330	M1111	2L2 1/2x...	.012	2.9...	4	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
331	M1112	2L2 1/2x...	.012	2.9...	16	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
332	M1113	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
333	M1114	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
334	M1115	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
335	M1116	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
336	M1053	2L2 1/2x...	.025	4.1...	16	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
337	M1054	2L2 1/2x...	.025	4.1...	14	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
338	M1055	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
339	M1056	2L2 1/2x...	.025	4.1...	16	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
340	M1057	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
341	M1058	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
342	M1059	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
343	M1060	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
344	M1061	2L2 1/2x...	.012	2.9...	16	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
345	M1062	2L2 1/2x...	.012	2.9...	12	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
346	M1063	2L2 1/2x...	.012	2.9...	4	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
347	M1064	2L2 1/2x...	.012	2.9...	16	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
348	M1001	2L2 1/2x...	.025	4.1...	16	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
349	M1002	2L2 1/2x...	.025	4.1...	14	.002	8.3...	y	10	24.183	58.32	4.017	2.611	1	H1-1b
350	M1003	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
351	M1004	2L2 1/2x...	.025	4.1...	16	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
352	M1005	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
353	M1006	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
354	M1007	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
355	M1008	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
356	M1009	2L2 1/2x...	.012	2.9...	16	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
357	M1010	2L2 1/2x...	.012	2.9...	12	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
358	M1011	2L2 1/2x...	.012	2.9...	4	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
359	M1012	2L2 1/2x...	.012	2.9...	16	.002	0	y	19	37.234	58.32	4.017	2.611	1	H1-1b
360	M949	2L2 1/2x...	.025	4.1...	16	.002	8.3...	y	6	24.183	58.32	4.017	2.611	1	H1-1b
361	M950	2L2 1/2x...	.025	4.1...	14	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
362	M951	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
363	M952	2L2 1/2x...	.025	4.1...	16	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
364	M953	2L2 1/2x...	.012	2.9...	4	.002	0	y	21	37.234	58.32	4.017	2.611	1	H1-1b
365	M954	2L2 1/2x...	.012	2.9...	8	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
366	M955	2L2 1/2x...	.012	2.9...	12	.002	0	y	23	37.234	58.32	4.017	2.611	1	H1-1b
367	M956	2L2 1/2x...	.012	2.9...	8	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
368	M957	2L2 1/2x...	.012	2.9...	16	.002	0	y	24	37.234	58.32	4.017	2.611	1	H1-1b
369	M958	2L2 1/2x...	.012	2.9...	12	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
370	M959	2L2 1/2x...	.012	2.9...	4	.002	0	y	26	37.234	58.32	4.017	2.611	1	H1-1b
371	M960	2L2 1/2x...	.012	2.9...	16	.002	0	y	20	37.234	58.32	4.017	2.611	1	H1-1b
372	M897	2L2 1/2x...	.025	4.1...	16	.002	0	y	14	24.183	58.32	4.017	2.611	1	H1-1b
373	M898	2L2 1/2x...	.025	4.1...	14	.002	0	y	10	24.183	58.32	4.017	2.611	1	H1-1b
374	M899	2L2 1/2x...	.025	4.1...	2	.002	0	y	6	24.183	58.32	4.017	2.611	1	H1-1b
375	M900	2L2 1/2x...	.025	4.1...	16	.002	0	y	2	24.183	58.32	4.017	2.611	1	H1-1b
376	M901	2L2 1/2x...	.012	2.9...	4	.001	0	y	4	37.234	58.32	4.017	2.611	1	H1-1b
377	M902	2L2 1/2x...	.012	2.9...	8	.001	0	y	6	37.234	58.32	4.017	2.611	1	H1-1b
378	M903	2L2 1/2x...	.012	2.9...	16	.001	0	y	2	37.234	58.32	4.017	2.611	1	H1-1b
379	M904	2L2 1/2x...	.012	2.9...	4	.001	0	y	2	37.234	58.32	4.017	2.611	1	H1-1b
380	M905	2L2 1/2x...	.012	2.9...	12	.001	0	y	14	37.234	58.32	4.017	2.611	1	H1-1b
381	M906	2L2 1/2x...	.012	2.9...	16	.001	0	y	16	37.234	58.32	4.017	2.611	1	H1-1b
382	M907	2L2 1/2x...	.012	2.9...	8	.001	0	y	10	37.234	58.32	4.017	2.611	1	H1-1b
383	M908	2L2 1/2x...	.012	2.9...	12	.001	0	y	12	37.234	58.32	4.017	2.611	1	H1-1b
384	M1266	2L2 1/2x...	.239	6.86	24	.001	6.86	y	16	11.751	77.112	5.381	2.133	1	H1-1a
385	M1267	2L2 1/2x...	.240	6.86	22	.001	6.86	y	4	11.751	77.112	5.381	2.133	1	H1-1a
386	M1268	2L2 1/2x...	.242	6.86	20	.001	6.86	y	8	11.751	77.112	5.381	2.133	1	H1-1a
387	M1269	2L2 1/2x...	.243	6.86	26	.001	6.86	y	12	11.751	77.112	5.381	2.133	1	H1-1a

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
388	M1	L6x6x1/2	.236	1.2...	24	.049	13....	y	4	66.727	186.3	5.312	24.449	1	H2-1
389	M2	L6x6x1/2	.229	1.2...	21	.049	13....	z	16	66.727	186.3	5.312	24.449	1	H2-1
390	M3	L6x6x1/2	.232	1.2...	19	.050	13....	y	12	66.727	186.3	5.312	24.449	1	H2-1
391	M4	L6x6x1/2	.236	1.2...	19	.052	13....	z	8	66.727	186.3	5.312	24.449	1	H2-1
392	M47	W6x20	.112	0	22	.013	0	y	4	166.887	190.188	18.144	40.5	1	H1-1b
393	M48	W6x20	.115	0	24	.012	0	y	16	166.887	190.188	18.144	40.5	1	H1-1b
394	M49	W6x20	.102	0	22	.013	0	y	12	166.887	190.188	18.144	40.5	1	H1-1b
395	M50	W6x20	.100	0	24	.012	0	y	8	166.887	190.188	18.144	40.5	1	H1-1b
396	M119	W6x20	.353	0	24	.025	0	y	20	166.887	190.188	18.144	40.5	1	H1-1a
397	M120	W6x20	.369	0	22	.025	0	y	26	166.887	190.188	18.144	40.5	1	H1-1a
398	M121	W6x20	.314	0	21	.024	25	y	12	166.887	190.188	18.144	40.5	1	H1-1a
399	M122	W6x20	.297	0	26	.021	25	y	8	166.887	190.188	18.144	40.5	1	H1-1a
400	M200	W6x25	.398	0	24	.028	6.25	y	24	209.43	237.816	23.112	51.03	1	H1-1a
401	M201	W6x25	.413	0	22	.030	6.25	y	22	209.43	237.816	23.112	51.03	1	H1-1a
402	M202	W6x25	.344	0	20	.025	6.25	y	20	209.43	237.816	23.112	51.03	1	H1-1a
403	M203	W6x25	.332	0	16	.024	6.25	y	26	209.43	237.816	23.112	51.03	1	H1-1a
404	M281	W8x31	.393	0	24	.041	6.25	y	24	275.022	295.812	38.07	82.08	1	H1-1a
405	M282	W8x31	.404	0	22	.042	6.25	y	22	275.022	295.812	38.07	82.08	1	H1-1a
406	M283	W8x31	.391	0	4	.035	6.25	y	4	275.022	295.812	38.07	82.08	1	H1-1a
407	M284	W8x31	.386	0	16	.034	6.25	y	16	275.022	295.812	38.07	82.08	1	H1-1a
408	M362	W8x40	.429	0	12	.037	6.25	y	24	353.253	379.08	49.95	107.46	1	H1-1a
409	M363	W8x40	.439	0	8	.038	6.25	y	22	353.253	379.08	49.95	107.46	1	H1-1a
410	M364	W8x40	.428	0	4	.033	6.25	y	4	353.253	379.08	49.95	107.46	1	H1-1a
411	M365	W8x40	.424	0	16	.032	6.25	y	16	353.253	379.08	49.95	107.46	1	H1-1a
412	M443	W10x54	.410	25	12	.036	6.25	y	24	489.186	511.92	84.51	179.82	1	H1-1a
413	M444	W10x54	.418	25	8	.037	6.25	y	22	489.186	511.92	84.51	179.82	1	H1-1a
414	M445	W10x54	.409	25	4	.032	6.25	y	4	489.186	511.92	84.51	179.82	1	H1-1a
415	M446	W10x54	.406	25	16	.031	6.25	y	16	489.186	511.92	84.51	179.82	1	H1-1a
416	M524	W10x60	.482	0	12	.045	6.25	y	12	548.144	573.48	94.5	201.42	1	H1-1a
417	M525	W10x60	.490	0	8	.047	6.25	y	8	548.144	573.48	94.5	201.42	1	H1-1a
418	M526	W10x60	.480	0	4	.045	6.25	y	4	548.144	573.48	94.5	201.42	1	H1-1a
419	M527	W10x60	.477	0	16	.044	6.25	y	16	548.144	573.48	94.5	201.42	1	H1-1a
420	M605	W10x68	.545	0	12	.050	6.25	y	12	617.02	644.76	108.27	230.31	1	H1-1a
421	M606	W10x68	.551	25	8	.050	6.25	y	8	617.02	644.76	108.27	230.31	1	H1-1a
422	M607	W10x68	.545	0	4	.049	6.25	y	4	617.02	644.76	108.27	230.31	1	H1-1a
423	M608	W10x68	.542	0	16	.049	6.25	y	16	617.02	644.76	108.27	230.31	1	H1-1a
424	M686	W12x79	.624	6.2...	12	.047	6.2...	y	12	728.091	751.68	146.61	321.3	1...	H1-1a
425	M687	W12x79	.630	6.2...	8	.048	6.2...	y	8	728.091	751.68	146.61	321.3	1...	H1-1a
426	M688	W12x79	.615	6.2...	4	.047	6.2...	y	4	728.091	751.68	146.61	321.3	1...	H1-1a
427	M689	W12x79	.612	6.2...	16	.047	6.2...	y	16	728.091	751.68	146.61	321.3	1...	H1-1a
428	M882	2L2 1/2x...	.074	0	24	.002	12....	y	4	11.603	58.32	4.017	1.632	1	H1-1b
429	M883	2L2 1/2x...	.073	12....	24	.002	0	y	4	11.603	58.32	4.017	1.632	1	H1-1b
430	M884	2L2 1/2x...	.073	0	26	.002	12....	y	8	11.603	58.32	4.017	1.632	1	H1-1b
431	M885	2L2 1/2x...	.073	12....	26	.002	0	y	8	11.603	58.32	4.017	1.632	1	H1-1b
432	M886	2L2 1/2x...	.073	0	20	.002	12....	y	12	11.603	58.32	4.017	1.632	1	H1-1b
433	M887	2L2 1/2x...	.073	12....	20	.002	0	y	12	11.603	58.32	4.017	1.632	1	H1-1b
434	M888	2L2 1/2x...	.073	0	22	.002	0	y	22	11.603	58.32	4.017	1.632	1	H1-1b
435	M889	2L2 1/2x...	.073	12....	22	.002	12....	y	22	11.603	58.32	4.017	1.632	1	H1-1b
436	M791	L2.5x2.5x8	.487	0	8	.002	0	y	10	17.766	73.224	1.865	4.283	1	H2-1
437	M792	L2.5x2.5x8	.615	6.7...	8	.002	6.7...	y	6	18.068	73.224	1.865	4.289	1	H2-1
438	M793	L2.5x2.5x8	.477	0	4	.004	0	y	4	17.766	73.224	1.865	4.283	1	H2-1
439	M794	L2.5x2.5x8	.617	6.7...	4	.004	6.7...	y	4	18.068	73.224	1.865	4.289	1	H2-1
440	M795	L2.5x2.5x8	.613	0	16	.004	0	y	16	18.068	73.224	1.865	4.289	1	H2-1
441	M796	L2.5x2.5x8	.474	6.7...	16	.004	6.7...	y	16	17.766	73.224	1.865	4.283	1	H2-1
442	M797	L2.5x2.5x8	.489	0	12	.004	0	y	12	17.766	73.224	1.865	4.283	1	H2-1
443	M798	L2.5x2.5x8	.612	6.7...	12	.004	6.7...	y	12	18.068	73.224	1.865	4.289	1	H2-1
444	M56	2L2 1/2x...	.103	5.2...	21	.005	10....	y	21	16.664	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
445	M64	2L2 1/2x...	.103	5.2...	25	.005	10....	y	26	16.664	58.32	4.017	2.611	1	H1-1b
446	M72	2L2 1/2x...	.103	5.2...	19	.005	10....	y	26	16.664	58.32	4.017	2.611	1	H1-1b
447	M80	2L2 1/2x...	.103	5.2...	23	.005	0	y	24	16.664	58.32	4.017	2.611	1	H1-1b
448	M88	2L2 1/2x...	.103	5.2...	25	.005	0	y	24	16.664	58.32	4.017	2.611	1	H1-1b
449	M96	2L2 1/2x...	.103	5.2...	21	.005	0	y	22	16.664	58.32	4.017	2.611	1	H1-1b
450	M104	2L2 1/2x...	.103	5.2...	23	.005	10....	y	22	16.664	58.32	4.017	2.611	1	H1-1b
451	M112	2L2 1/2x...	.103	5.2...	19	.005	0	y	19	16.664	58.32	4.017	2.611	1	H1-1b
452	M129	2L2 1/2x...	.102	5.2...	21	.005	0	y	22	16.664	58.32	4.017	2.611	1	H1-1b
453	M137	2L2 1/2x...	.102	5.2...	25	.005	10....	y	25	16.664	58.32	4.017	2.611	1	H1-1b
454	M146	2L2 1/2x...	.102	5.2...	19	.005	0	y	21	16.664	58.32	4.017	2.611	1	H1-1b
455	M154	2L2 1/2x...	.102	5.2...	23	.005	10....	y	21	16.664	58.32	4.017	2.611	1	H1-1b
456	M163	2L2 1/2x...	.102	5.2...	26	.005	10....	y	24	16.664	58.32	4.017	2.611	1	H1-1b
457	M171	2L2 1/2x...	.102	5.2...	22	.005	10....	y	20	16.664	58.32	4.017	2.611	1	H1-1b
458	M180	2L2 1/2x...	.102	5.2...	22	.005	10....	y	23	16.664	58.32	4.017	2.611	1	H1-1b
459	M188	2L2 1/2x...	.102	5.2...	26	.005	0	y	19	16.664	58.32	4.017	2.611	1	H1-1b
460	M210	2L2 1/2x...	.097	5.2...	20	.005	10....	y	26	16.697	58.32	4.017	2.611	1	H1-1b
461	M218	2L2 1/2x...	.097	5.2...	25	.005	0	y	20	16.697	58.32	4.017	2.611	1	H1-1b
462	M227	2L2 1/2x...	.098	5.2...	19	.005	0	y	24	16.697	58.32	4.017	2.611	1	H1-1b
463	M235	2L2 1/2x...	.098	5.2...	23	.005	0	y	26	16.697	58.32	4.017	2.611	1	H1-1b
464	M244	2L2 1/2x...	.097	5.2...	26	.005	0	y	22	16.697	58.32	4.017	2.611	1	H1-1b
465	M252	2L2 1/2x...	.098	5.2...	22	.005	0	y	23	16.697	58.32	4.017	2.611	1	H1-1b
466	M261	2L2 1/2x...	.098	5.2...	23	.005	10....	y	20	16.697	58.32	4.017	2.611	1	H1-1b
467	M269	2L2 1/2x...	.097	5.2...	19	.005	0	y	22	16.697	58.32	4.017	2.611	1	H1-1b
468	M291	2L2 1/2x...	.096	5.2...	20	.005	10....	y	26	16.998	58.32	4.017	2.611	1	H1-1b
469	M299	2L2 1/2x...	.096	5.2...	26	.005	0	y	20	16.998	58.32	4.017	2.611	1	H1-1b
470	M308	2L2 1/2x...	.096	5.2...	26	.005	0	y	24	16.998	58.32	4.017	2.611	1	H1-1b
471	M316	2L2 1/2x...	.097	5.2...	24	.005	10....	y	26	16.998	58.32	4.017	2.611	1	H1-1b
472	M325	2L2 1/2x...	.097	5.2...	24	.005	0	y	22	16.998	58.32	4.017	2.611	1	H1-1b
473	M333	2L2 1/2x...	.097	5.2...	22	.005	10....	y	24	16.998	58.32	4.017	2.611	1	H1-1b
474	M342	2L2 1/2x...	.097	5.2...	22	.005	0	y	20	16.998	58.32	4.017	2.611	1	H1-1b
475	M350	2L2 1/2x...	.096	5.2...	20	.005	0	y	22	16.998	58.32	4.017	2.611	1	H1-1b
476	M372	2L2 1/2x...	.096	5.2...	20	.005	10....	y	26	17.032	58.32	4.017	2.611	1	H1-1b
477	M380	2L2 1/2x...	.096	5.2...	26	.005	0	y	20	17.032	58.32	4.017	2.611	1	H1-1b
478	M389	2L2 1/2x...	.096	5.2...	26	.005	0	y	24	17.032	58.32	4.017	2.611	1	H1-1b
479	M397	2L2 1/2x...	.097	5.2...	24	.005	10....	y	26	17.032	58.32	4.017	2.611	1	H1-1b
480	M406	2L2 1/2x...	.097	5.2...	24	.005	0	y	22	17.032	58.32	4.017	2.611	1	H1-1b
481	M414	2L2 1/2x...	.097	5.2...	22	.005	0	y	24	17.032	58.32	4.017	2.611	1	H1-1b
482	M423	2L2 1/2x...	.097	5.2...	22	.005	10....	y	20	17.032	58.32	4.017	2.611	1	H1-1b
483	M431	2L2 1/2x...	.096	5.2...	20	.005	10....	y	22	17.032	58.32	4.017	2.611	1	H1-1b
484	M453	2L2 1/2x...	.092	5.1...	23	.005	0	y	26	17.342	58.32	4.017	2.611	1	H1-1b
485	M461	2L2 1/2x...	.092	5.1...	23	.005	10....	y	20	17.342	58.32	4.017	2.611	1	H1-1b
486	M470	2L2 1/2x...	.092	5.1...	21	.005	10....	y	24	17.342	58.32	4.017	2.611	1	H1-1b
487	M478	2L2 1/2x...	.092	5.2...	25	.005	10....	y	26	17.342	58.32	4.017	2.611	1	H1-1b
488	M487	2L2 1/2x...	.092	5.2...	23	.005	10....	y	23	17.342	58.32	4.017	2.611	1	H1-1b
489	M495	2L2 1/2x...	.092	5.2...	23	.005	10....	y	23	17.342	58.32	4.017	2.611	1	H1-1b
490	M504	2L2 1/2x...	.092	5.2...	21	.005	0	y	21	17.342	58.32	4.017	2.611	1	H1-1b
491	M512	2L2 1/2x...	.091	5.1...	25	.005	0	y	21	17.342	58.32	4.017	2.611	1	H1-1b
492	M534	2L2 1/2x...	.098	5.1...	24	.005	0	y	26	17.377	58.32	4.017	2.611	1	H1-1b
493	M542	2L2 1/2x...	.098	5.1...	22	.005	10....	y	20	17.377	58.32	4.017	2.611	1	H1-1b
494	M551	2L2 1/2x...	.097	5.1...	22	.005	10....	y	24	17.377	58.32	4.017	2.611	1	H1-1b
495	M559	2L2 1/2x...	.092	5.2...	24	.005	10....	y	26	17.377	58.32	4.017	2.611	1	H1-1b
496	M568	2L2 1/2x...	.092	5.2...	24	.005	10....	y	22	17.377	58.32	4.017	2.611	1	H1-1b
497	M576	2L2 1/2x...	.092	5.2...	22	.005	10....	y	24	17.377	58.32	4.017	2.611	1	H1-1b
498	M585	2L2 1/2x...	.092	5.2...	22	.005	0	y	20	17.377	58.32	4.017	2.611	1	H1-1b
499	M593	2L2 1/2x...	.097	5.1...	24	.005	10....	y	22	17.377	58.32	4.017	2.611	1	H1-1b
500	M615	2L2 1/2x...	.100	5.1...	23	.005	10....	y	26	17.412	58.32	4.017	2.611	1	H1-1b
501	M623	2L2 1/2x...	.101	5.1...	23	.005	10....	y	20	17.412	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
502	M632	2L2 1/2x...	.097	5.1...	21	.005	10....	y	24	17.412	58.32	4.017	2.611	1	H1-1b
503	M640	2L2 1/2x...	.091	5.1...	20	.005	0	y	26	17.412	58.32	4.017	2.611	1	H1-1b
504	M649	2L2 1/2x...	.092	5.1...	19	.005	0	y	22	17.412	58.32	4.017	2.611	1	H1-1b
505	M657	2L2 1/2x...	.092	5.1...	19	.005	10....	y	24	17.412	58.32	4.017	2.611	1	H1-1b
506	M666	2L2 1/2x...	.090	5.1...	26	.005	0	y	20	17.412	58.32	4.017	2.611	1	H1-1b
507	M674	2L2 1/2x...	.097	5.1...	24	.005	10....	y	22	17.412	58.32	4.017	2.611	1	H1-1b
508	M696	2L2 1/2x...	.072	5.1...	20	.004	10....	y	25	24.823	77.112	5.381	3.414	1	H1-1b
509	M706	2L2 1/2x...	.072	5.1...	26	.004	0	y	20	24.823	77.112	5.381	3.414	1	H1-1b
510	M717	2L2 1/2x...	.074	5.1...	26	.004	0	y	20	24.239	77.112	5.381	3.414	1	H1-1b
511	M727	2L2 1/2x...	.074	5.1...	24	.004	10....	y	26	24.239	77.112	5.381	3.414	1	H1-1b
512	M738	2L2 1/2x...	.072	5.1...	24	.004	0	y	22	24.823	77.112	5.381	3.414	1	H1-1b
513	M748	2L2 1/2x...	.072	5.1...	22	.004	0	y	24	24.823	77.112	5.381	3.414	1	H1-1b
514	M759	2L2 1/2x...	.074	5.1...	22	.004	10....	y	20	24.239	77.112	5.381	3.414	1	H1-1b
515	M769	2L2 1/2x...	.074	5.1...	20	.004	10....	y	22	24.239	77.112	5.381	3.414	1	H1-1b
516	M57	2L2 1/2x...	.139	5.1...	22	.005	10....	y	26	16.664	58.32	4.017	2.611	1	H1-1b
517	M58	2L2 1/2x...	.046	3.6...	24	.003	7.5...	y	23	30.275	58.32	4.017	2.611	1	H1-1b
518	M65	2L2 1/2x...	.140	5.1...	24	.005	0	y	20	16.664	58.32	4.017	2.611	1	H1-1b
519	M66	2L2 1/2x...	.046	3.6...	21	.003	0	y	23	30.275	58.32	4.017	2.611	1	H1-1b
520	M73	2L2 1/2x...	.140	5.1...	20	.005	0	y	24	16.664	58.32	4.017	2.611	1	H1-1b
521	M74	2L2 1/2x...	.046	3.6...	23	.003	7.5...	y	21	30.275	58.32	4.017	2.611	1	H1-1b
522	M81	2L2 1/2x...	.139	5.1...	22	.005	0	y	26	16.664	58.32	4.017	2.611	1	H1-1b
523	M82	2L2 1/2x...	.046	3.6...	19	.003	0	y	21	30.275	58.32	4.017	2.611	1	H1-1b
524	M89	2L2 1/2x...	.138	5.1...	19	.005	10....	y	22	16.664	58.32	4.017	2.611	1	H1-1b
525	M90	2L2 1/2x...	.045	3.6...	21	.003	7.5...	y	19	30.275	58.32	4.017	2.611	1	H1-1b
526	M97	2L2 1/2x...	.138	5.1...	20	.005	0	y	24	16.664	58.32	4.017	2.611	1	H1-1b
527	M98	2L2 1/2x...	.045	3.6...	26	.003	0	y	19	30.275	58.32	4.017	2.611	1	H1-1b
528	M105	2L2 1/2x...	.139	5.1...	25	.005	10....	y	20	16.664	58.32	4.017	2.611	1	H1-1b
529	M106	2L2 1/2x...	.045	3.6...	26	.003	7.5...	y	25	30.275	58.32	4.017	2.611	1	H1-1b
530	M113	2L2 1/2x...	.140	5.1...	25	.005	10....	y	22	16.664	58.32	4.017	2.611	1	H1-1b
531	M114	2L2 1/2x...	.046	3.6...	23	.003	0	y	25	30.275	58.32	4.017	2.611	1	H1-1b
532	M130	2L2 1/2x...	.119	5.1...	21	.005	10....	y	23	16.664	58.32	4.017	2.611	1	H1-1b
533	M131	2L2 1/2x...	.039	3.6...	25	.003	7.5...	y	23	30.275	58.32	4.017	2.611	1	H1-1b
534	M138	2L2 1/2x...	.120	5.1...	25	.005	0	y	24	16.664	58.32	4.017	2.611	1	H1-1b
535	M139	2L2 1/2x...	.040	3.6...	21	.003	7.5...	y	24	30.275	58.32	4.017	2.611	1	H1-1b
536	M147	2L2 1/2x...	.119	5.1...	19	.005	0	y	20	16.664	58.32	4.017	2.611	1	H1-1b
537	M148	2L2 1/2x...	.040	3.6...	23	.003	0	y	21	30.275	58.32	4.017	2.611	1	H1-1b
538	M155	2L2 1/2x...	.119	5.1...	23	.005	0	y	21	16.664	58.32	4.017	2.611	1	H1-1b
539	M156	2L2 1/2x...	.039	3.6...	19	.003	7.5...	y	21	30.275	58.32	4.017	2.611	1	H1-1b
540	M164	2L2 1/2x...	.118	5.1...	25	.005	0	y	19	16.664	58.32	4.017	2.611	1	H1-1b
541	M165	2L2 1/2x...	.039	3.6...	21	.003	0	y	19	30.275	58.32	4.017	2.611	1	H1-1b
542	M172	2L2 1/2x...	.119	5.1...	21	.005	0	y	19	16.664	58.32	4.017	2.611	1	H1-1b
543	M173	2L2 1/2x...	.038	3.6...	25	.003	0	y	19	30.275	58.32	4.017	2.611	1	H1-1b
544	M181	2L2 1/2x...	.119	5.1...	23	.005	10....	y	24	16.664	58.32	4.017	2.611	1	H1-1b
545	M182	2L2 1/2x...	.039	3.6...	19	.003	0	y	25	30.275	58.32	4.017	2.611	1	H1-1b
546	M189	2L2 1/2x...	.118	5.1...	19	.005	0	y	25	16.664	58.32	4.017	2.611	1	H1-1b
547	M190	2L2 1/2x...	.039	3.6...	23	.003	0	y	25	30.275	58.32	4.017	2.611	1	H1-1b
548	M211	2L2 1/2x...	.108	5.1...	20	.005	10....	y	26	16.697	58.32	4.017	2.611	1	H1-1b
549	M212	2L2 1/2x...	.039	3.6...	24	.003	0	y	25	30.329	58.32	4.017	2.611	1	H1-1b
550	M219	2L2 1/2x...	.108	5.1...	25	.005	10....	y	19	16.697	58.32	4.017	2.611	1	H1-1b
551	M220	2L2 1/2x...	.040	3.6...	21	.003	7.5...	y	22	30.329	58.32	4.017	2.611	1	H1-1b
552	M228	2L2 1/2x...	.108	5.1...	19	.005	10....	y	25	16.697	58.32	4.017	2.611	1	H1-1b
553	M229	2L2 1/2x...	.040	3.6...	23	.003	7.5...	y	22	30.329	58.32	4.017	2.611	1	H1-1b
554	M236	2L2 1/2x...	.109	5.1...	24	.005	0	y	26	16.697	58.32	4.017	2.611	1	H1-1b
555	M237	2L2 1/2x...	.038	3.6...	20	.003	0	y	19	30.329	58.32	4.017	2.611	1	H1-1b
556	M245	2L2 1/2x...	.108	5.1...	24	.005	10....	y	22	16.697	58.32	4.017	2.611	1	H1-1b
557	M246	2L2 1/2x...	.038	3.6...	20	.003	0	y	21	30.329	58.32	4.017	2.611	1	H1-1b
558	M253	2L2 1/2x...	.109	5.1...	22	.005	0	y	24	16.697	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
559	M254	2L2 1/2x...	.038	3.6...	26	.003	0	y	25	30.329	58.32	4.017	2.611	1	H1-1b
560	M262	2L2 1/2x...	.109	5.1...	22	.005	10....	y	20	16.697	58.32	4.017	2.611	1	H1-1b
561	M263	2L2 1/2x...	.038	3.6...	26	.003	7.5...	y	19	30.329	58.32	4.017	2.611	1	H1-1b
562	M270	2L2 1/2x...	.107	5.1...	20	.005	0	y	22	16.697	58.32	4.017	2.611	1	H1-1b
563	M271	2L2 1/2x...	.039	3.6...	24	.003	0	y	24	30.329	58.32	4.017	2.611	1	H1-1b
564	M292	2L2 1/2x...	.102	5.1...	20	.005	10....	y	26	16.998	58.32	4.017	2.611	1	H1-1b
565	M293	2L2 1/2x...	.042	3.6...	24	.003	0	y	24	30.813	58.32	4.017	2.611	1	H1-1b
566	M300	2L2 1/2x...	.102	5.1...	26	.005	0	y	22	16.998	58.32	4.017	2.611	1	H1-1b
567	M301	2L2 1/2x...	.043	3.6...	22	.003	7.5...	y	22	30.813	58.32	4.017	2.611	1	H1-1b
568	M309	2L2 1/2x...	.102	5.1...	26	.005	10....	y	22	16.998	58.32	4.017	2.611	1	H1-1b
569	M310	2L2 1/2x...	.043	3.6...	22	.003	7.5...	y	22	30.813	58.32	4.017	2.611	1	H1-1b
570	M317	2L2 1/2x...	.104	5.1...	24	.005	0	y	26	16.998	58.32	4.017	2.611	1	H1-1b
571	M318	2L2 1/2x...	.041	3.6...	20	.003	7.5...	y	20	30.813	58.32	4.017	2.611	1	H1-1b
572	M326	2L2 1/2x...	.104	5.1...	24	.005	0	y	21	16.998	58.32	4.017	2.611	1	H1-1b
573	M327	2L2 1/2x...	.041	3.6...	20	.003	7.5...	y	20	30.813	58.32	4.017	2.611	1	H1-1b
574	M334	2L2 1/2x...	.105	5.1...	22	.005	10....	y	24	16.998	58.32	4.017	2.611	1	H1-1b
575	M335	2L2 1/2x...	.040	3.6...	26	.003	7.5...	y	26	30.813	58.32	4.017	2.611	1	H1-1b
576	M343	2L2 1/2x...	.105	5.1...	22	.005	10....	y	20	16.998	58.32	4.017	2.611	1	H1-1b
577	M344	2L2 1/2x...	.041	3.6...	26	.003	7.5...	y	26	30.813	58.32	4.017	2.611	1	H1-1b
578	M351	2L2 1/2x...	.102	5.1...	20	.005	0	y	22	16.998	58.32	4.017	2.611	1	H1-1b
579	M352	2L2 1/2x...	.042	3.6...	24	.003	7.5...	y	24	30.813	58.32	4.017	2.611	1	H1-1b
580	M373	2L2 1/2x...	.097	5.1...	20	.005	10....	y	26	17.032	58.32	4.017	2.611	1	H1-1b
581	M374	2L2 1/2x...	.045	3.6...	24	.003	7.5...	y	24	30.866	58.32	4.017	2.611	1	H1-1b
582	M381	2L2 1/2x...	.097	5.1...	26	.005	0	y	21	17.032	58.32	4.017	2.611	1	H1-1b
583	M382	2L2 1/2x...	.046	3.6...	22	.003	0	y	22	30.866	58.32	4.017	2.611	1	H1-1b
584	M390	2L2 1/2x...	.097	5.1...	26	.005	10....	y	23	17.032	58.32	4.017	2.611	1	H1-1b
585	M391	2L2 1/2x...	.045	3.6...	22	.003	7.5...	y	22	30.866	58.32	4.017	2.611	1	H1-1b
586	M398	2L2 1/2x...	.101	5.1...	25	.005	10....	y	26	17.032	58.32	4.017	2.611	1	H1-1b
587	M399	2L2 1/2x...	.043	3.6...	21	.003	0	y	20	30.866	58.32	4.017	2.611	1	H1-1b
588	M407	2L2 1/2x...	.101	5.1...	24	.005	0	y	22	17.032	58.32	4.017	2.611	1	H1-1b
589	M408	2L2 1/2x...	.043	3.6...	20	.003	0	y	20	30.866	58.32	4.017	2.611	1	H1-1b
590	M415	2L2 1/2x...	.102	5.1...	22	.005	10....	y	24	17.032	58.32	4.017	2.611	1	H1-1b
591	M416	2L2 1/2x...	.043	3.6...	26	.003	0	y	26	30.866	58.32	4.017	2.611	1	H1-1b
592	M424	2L2 1/2x...	.101	5.1...	21	.005	10....	y	19	17.032	58.32	4.017	2.611	1	H1-1b
593	M425	2L2 1/2x...	.043	3.6...	25	.003	0	y	26	30.866	58.32	4.017	2.611	1	H1-1b
594	M432	2L2 1/2x...	.097	5.1...	20	.005	0	y	23	17.032	58.32	4.017	2.611	1	H1-1b
595	M433	2L2 1/2x...	.044	3.6...	24	.003	0	y	24	30.866	58.32	4.017	2.611	1	H1-1b
596	M454	2L2 1/2x...	.093	5.2...	23	.005	10....	y	26	17.342	58.32	4.017	2.611	1	H1-1b
597	M455	2L2 1/2x...	.046	3.6...	23	.003	7.5...	y	24	31.352	58.32	4.017	2.611	1	H1-1b
598	M462	2L2 1/2x...	.093	5.2...	23	.005	10....	y	21	17.342	58.32	4.017	2.611	1	H1-1b
599	M463	2L2 1/2x...	.047	3.6...	23	.003	0	y	22	31.352	58.32	4.017	2.611	1	H1-1b
600	M471	2L2 1/2x...	.092	5.2...	21	.005	10....	y	23	17.342	58.32	4.017	2.611	1	H1-1b
601	M472	2L2 1/2x...	.046	3.6...	21	.003	7.5...	y	22	31.352	58.32	4.017	2.611	1	H1-1b
602	M479	2L2 1/2x...	.093	5.1...	25	.005	0	y	26	17.342	58.32	4.017	2.611	1	H1-1b
603	M480	2L2 1/2x...	.044	3.6...	21	.003	0	y	20	31.352	58.32	4.017	2.611	1	H1-1b
604	M488	2L2 1/2x...	.093	5.1...	23	.005	10....	y	22	17.342	58.32	4.017	2.611	1	H1-1b
605	M489	2L2 1/2x...	.044	3.6...	19	.003	7.5...	y	20	31.352	58.32	4.017	2.611	1	H1-1b
606	M496	2L2 1/2x...	.094	5.1...	23	.005	10....	y	24	17.342	58.32	4.017	2.611	1	H1-1b
607	M497	2L2 1/2x...	.043	3.6...	19	.003	7.5...	y	26	31.352	58.32	4.017	2.611	1	H1-1b
608	M505	2L2 1/2x...	.093	5.1...	21	.005	10....	y	19	17.342	58.32	4.017	2.611	1	H1-1b
609	M506	2L2 1/2x...	.044	3.6...	25	.003	7.5...	y	26	31.352	58.32	4.017	2.611	1	H1-1b
610	M513	2L2 1/2x...	.092	5.2...	25	.005	0	y	23	17.342	58.32	4.017	2.611	1	H1-1b
611	M514	2L2 1/2x...	.046	3.6...	25	.003	7.5...	y	24	31.352	58.32	4.017	2.611	1	H1-1b
612	M535	2L2 1/2x...	.094	5.2...	23	.005	10....	y	26	17.377	58.32	4.017	2.611	1	H1-1b
613	M536	2L2 1/2x...	.048	3.6...	23	.003	7.5...	y	25	31.406	58.32	4.017	2.611	1	H1-1b
614	M543	2L2 1/2x...	.095	5.2...	23	.005	10....	y	20	17.377	58.32	4.017	2.611	1	H1-1b
615	M544	2L2 1/2x...	.049	3.6...	23	.003	0	y	21	31.406	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
616	M552	2L2 1/2x...	.094	5.2...	21	.005	10....	y	24	17.377	58.32	4.017	2.611	1	H1-1b
617	M553	2L2 1/2x...	.049	3.6...	21	.003	0	y	23	31.406	58.32	4.017	2.611	1	H1-1b
618	M560	2L2 1/2x...	.093	5.2...	21	.005	0	y	26	17.377	58.32	4.017	2.611	1	H1-1b
619	M561	2L2 1/2x...	.046	3.6...	21	.003	7.5...	y	19	31.406	58.32	4.017	2.611	1	H1-1b
620	M569	2L2 1/2x...	.093	5.1...	23	.005	10....	y	22	17.377	58.32	4.017	2.611	1	H1-1b
621	M570	2L2 1/2x...	.046	3.6...	19	.003	7.5...	y	21	31.406	58.32	4.017	2.611	1	H1-1b
622	M577	2L2 1/2x...	.093	5.1...	23	.005	10....	y	24	17.377	58.32	4.017	2.611	1	H1-1b
623	M578	2L2 1/2x...	.045	3.6...	19	.003	0	y	25	31.406	58.32	4.017	2.611	1	H1-1b
624	M586	2L2 1/2x...	.092	5.2...	25	.005	0	y	20	17.377	58.32	4.017	2.611	1	H1-1b
625	M587	2L2 1/2x...	.046	3.6...	25	.003	7.5...	y	19	31.406	58.32	4.017	2.611	1	H1-1b
626	M594	2L2 1/2x...	.094	5.2...	25	.005	10....	y	22	17.377	58.32	4.017	2.611	1	H1-1b
627	M595	2L2 1/2x...	.048	3.6...	25	.003	0	y	24	31.406	58.32	4.017	2.611	1	H1-1b
628	M616	2L2 1/2x...	.093	5.2...	23	.005	10....	y	26	17.412	58.32	4.017	2.611	1	H1-1b
629	M617	2L2 1/2x...	.051	3.6...	23	.003	7.5...	y	24	31.46	58.32	4.017	2.611	1	H1-1b
630	M624	2L2 1/2x...	.093	5.2...	23	.005	0	y	21	17.412	58.32	4.017	2.611	1	H1-1b
631	M625	2L2 1/2x...	.052	3.6...	23	.003	0	y	21	31.46	58.32	4.017	2.611	1	H1-1b
632	M633	2L2 1/2x...	.092	5.2...	21	.005	0	y	23	17.412	58.32	4.017	2.611	1	H1-1b
633	M634	2L2 1/2x...	.050	3.6...	21	.003	7.5...	y	23	31.46	58.32	4.017	2.611	1	H1-1b
634	M641	2L2 1/2x...	.091	5.2...	21	.005	10....	y	19	17.412	58.32	4.017	2.611	1	H1-1b
635	M642	2L2 1/2x...	.047	3.6...	21	.003	7.5...	y	19	31.46	58.32	4.017	2.611	1	H1-1b
636	M650	2L2 1/2x...	.091	5.2...	19	.005	10....	y	21	17.412	58.32	4.017	2.611	1	H1-1b
637	M651	2L2 1/2x...	.047	3.6...	19	.003	7.5...	y	20	31.46	58.32	4.017	2.611	1	H1-1b
638	M658	2L2 1/2x...	.091	5.2...	19	.005	10....	y	25	17.412	58.32	4.017	2.611	1	H1-1b
639	M659	2L2 1/2x...	.047	3.6...	19	.003	0	y	26	31.46	58.32	4.017	2.611	1	H1-1b
640	M667	2L2 1/2x...	.090	5.2...	25	.005	10....	y	19	17.412	58.32	4.017	2.611	1	H1-1b
641	M668	2L2 1/2x...	.047	3.6...	25	.003	0	y	19	31.46	58.32	4.017	2.611	1	H1-1b
642	M675	2L2 1/2x...	.092	5.2...	25	.005	10....	y	23	17.412	58.32	4.017	2.611	1	H1-1b
643	M676	2L2 1/2x...	.049	3.6...	25	.003	0	y	24	31.46	58.32	4.017	2.611	1	H1-1b
644	M698	2L2 1/2x...	.120	6.2...	20	.005	0	y	26	15.631	77.112	5.381	3.414	1	H1-1b
645	M708	2L2 1/2x...	.119	6.2...	26	.005	12....	y	20	15.631	77.112	5.381	3.414	1	H1-1b
646	M719	2L2 1/2x...	.122	6.3...	19	.005	12....	y	20	15.313	77.112	5.381	3.414	1	H1-1b
647	M729	2L2 1/2x...	.123	6.3...	23	.005	0	y	22	15.313	77.112	5.381	3.414	1	H1-1b
648	M740	2L2 1/2x...	.120	6.2...	24	.005	0	y	22	15.631	77.112	5.381	3.414	1	H1-1b
649	M750	2L2 1/2x...	.120	6.2...	22	.005	0	y	24	15.631	77.112	5.381	3.414	1	H1-1b
650	M761	2L2 1/2x...	.123	6.3...	23	.005	12....	y	24	14.702	77.112	5.381	3.414	1	H1-1b
651	M771	2L2 1/2x...	.122	6.3...	19	.005	0	y	25	15.313	77.112	5.381	3.414	1	H1-1b
652	M699	2L2 1/2x...	.083	5.3...	19	.004	10....	y	25	22.143	77.112	5.381	3.414	1	H1-1b
653	M700	2L2 1/2x...	.052	4.0...	23	.003	8.1...	y	25	37.406	77.112	5.381	3.414	1	H1-1b
654	M709	2L2 1/2x...	.084	5.3...	19	.004	10....	y	21	22.143	77.112	5.381	3.414	1	H1-1b
655	M710	2L2 1/2x...	.053	4.0...	23	.003	0	y	21	37.406	77.112	5.381	3.414	1	H1-1b
656	M720	2L2 1/2x...	.082	5.2...	25	.004	0	y	23	22.638	77.112	5.381	3.414	1	H1-1b
657	M721	2L2 1/2x...	.054	4.06	21	.003	0	y	23	36.731	77.112	5.381	3.414	1	H1-1b
658	M730	2L2 1/2x...	.084	5.2...	25	.004	0	y	19	22.638	77.112	5.381	3.414	1	H1-1b
659	M731	2L2 1/2x...	.052	4.06	21	.003	0	y	23	36.731	77.112	5.381	3.414	1	H1-1b
660	M741	2L2 1/2x...	.087	5.3...	23	.004	0	y	21	22.143	77.112	5.381	3.414	1	H1-1b
661	M742	2L2 1/2x...	.050	4.0...	19	.003	0	y	21	37.406	77.112	5.381	3.414	1	H1-1b
662	M751	2L2 1/2x...	.088	5.3...	23	.004	10....	y	25	22.143	77.112	5.381	3.414	1	H1-1b
663	M752	2L2 1/2x...	.049	4.0...	19	.003	0	y	25	37.406	77.112	5.381	3.414	1	H1-1b
664	M762	2L2 1/2x...	.084	5.2...	21	.004	0	y	19	22.638	77.112	5.381	3.414	1	H1-1b
665	M763	2L2 1/2x...	.052	4.06	25	.003	8.2...	y	23	36.731	77.112	5.381	3.414	1	H1-1b
666	M772	2L2 1/2x...	.081	5.2...	21	.004	0	y	23	22.638	77.112	5.381	3.414	1	H1-1b
667	M773	2L2 1/2x...	.053	4.06	25	.003	8.2...	y	23	36.731	77.112	5.381	3.414	1	H1-1b
668	M17	L2 1/2x2 ...	.197	9.1...	6	.006	0	z	23	4.438	29.225	.351	1.309	1	H2-1
669	M20	L2 1/2x2 ...	.198	9.1...	14	.006	0	z	23	4.438	29.225	.351	1.309	1	H2-1
670	M24	L2 1/2x2 ...	.168	9.1...	19	.006	0	z	21	4.438	29.225	.351	1.309	1	H2-1
671	M27	L2 1/2x2 ...	.154	9.1...	10	.006	9.1...	z	21	4.438	29.225	.351	1.309	1	H2-1
672	M31	L2 1/2x2 ...	.200	9.1...	14	.006	0	z	19	4.438	29.225	.351	1.309	1	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
673	M34	L2 1/2x2 ...	.200	9.1...	6	.006	9.1...	z	19	4.438	29.225	.351	1.309	1	H2-1
674	M38	L2 1/2x2 ...	.157	9.1...	10	.006	0	z	25	4.438	29.225	.351	1.309	1	H2-1
675	M41	L2 1/2x2 ...	.167	9.1...	19	.006	9.1...	z	25	4.438	29.225	.351	1.309	1	H2-1
676	M54	L3x3x3/16	.015	0	21	.004	0	y	20	12.187	35.316	.509	2.096	1	H2-1
677	M62	L3x3x3/16	.016	0	25	.004	7.5...	y	26	12.187	35.316	.509	2.096	1	H2-1
678	M70	L3x3x3/16	.017	0	19	.004	7.5...	y	26	12.187	35.316	.509	2.096	1	H2-1
679	M78	L3x3x3/16	.014	0	23	.004	7.5...	y	24	12.187	35.316	.509	2.096	1	H2-1
680	M86	L3x3x3/16	.015	0	25	.004	7.5...	y	24	12.187	35.316	.509	2.096	1	H2-1
681	M94	L3x3x3/16	.014	0	21	.004	0	y	22	12.187	35.316	.509	2.096	1	H2-1
682	M102	L3x3x3/16	.013	0	23	.004	7.5...	y	22	12.187	35.316	.509	2.096	1	H2-1
683	M110	L3x3x3/16	.017	0	20	.004	7.5...	y	20	12.187	35.316	.509	2.096	1	H2-1
684	M127	L3x3x3/16	.059	0	24	.005	7.5...	y	26	12.187	35.316	.509	2.096	1	H2-1
685	M135	L3x3x3/16	.062	0	22	.005	0	y	20	12.187	35.316	.509	2.096	1	H2-1
686	M144	L3x3x3/16	.063	0	23	.005	7.5...	y	24	12.187	35.316	.509	2.096	1	H2-1
687	M152	L3x3x3/16	.053	0	20	.005	0	y	26	12.187	35.316	.509	2.096	1	H2-1
688	M161	L3x3x3/16	.049	0	21	.005	0	y	22	12.187	35.316	.509	2.096	1	H2-1
689	M169	L3x3x3/16	.047	0	26	.005	7.5...	y	24	12.187	35.316	.509	2.096	1	H2-1
690	M178	L3x3x3/16	.049	0	26	.005	0	y	20	12.187	35.316	.509	2.096	1	H2-1
691	M186	L3x3x3/16	.059	0	23	.005	0	y	22	12.187	35.316	.509	2.096	1	H2-1
692	M208	L3x3x3/16	.093	0	24	.005	7.5...	y	26	12.221	35.316	.509	2.098	1	H2-1
693	M216	L3x3x3/16	.095	0	22	.005	0	y	20	12.221	35.316	.509	2.098	1	H2-1
694	M225	L3x3x3/16	.097	0	22	.005	0	y	24	12.221	35.316	.509	2.098	1	H2-1
695	M233	L3x3x3/16	.081	0	4	.005	0	y	19	12.221	35.316	.509	2.098	1	H2-1
696	M242	L3x3x3/16	.075	0	20	.005	7.5...	y	22	12.221	35.316	.509	2.098	1	H2-1
697	M250	L3x3x3/16	.073	0	26	.005	0	y	24	12.221	35.316	.509	2.098	1	H2-1
698	M259	L3x3x3/16	.074	0	16	.005	7.5...	y	19	12.221	35.316	.509	2.098	1	H2-1
699	M267	L3x3x3/16	.091	0	24	.005	7.5...	y	22	12.221	35.316	.509	2.098	1	H2-1
700	M289	L3x3x3/16	.138	0	24	.005	0	y	25	12.682	35.316	.509	2.113	1	H2-1
701	M297	L3x3x3/16	.143	0	22	.005	7.5...	y	21	12.682	35.316	.509	2.113	1	H2-1
702	M306	L3x3x3/16	.143	0	22	.005	0	y	23	12.682	35.316	.509	2.113	1	H2-1
703	M314	L3x3x3/16	.131	0	4	.005	0	y	19	12.682	35.316	.509	2.113	1	H2-1
704	M323	L3x3x3/16	.123	0	4	.005	7.5...	y	21	12.682	35.316	.509	2.113	1	H2-1
705	M331	L3x3x3/16	.120	0	16	.005	0	y	25	12.682	35.316	.509	2.113	1	H2-1
706	M340	L3x3x3/16	.130	0	16	.005	7.5...	y	19	12.682	35.316	.509	2.113	1	H2-1
707	M348	L3x3x3/16	.138	0	24	.005	7.5...	y	23	12.682	35.316	.509	2.113	1	H2-1
708	M370	L3x3x3/16	.169	0	23	.005	7.5...	y	25	12.716	35.316	.509	2.114	1	H2-1
709	M378	L3x3x3/16	.174	0	23	.005	7.5...	y	20	12.716	35.316	.509	2.114	1	H2-1
710	M387	L3x3x3/16	.172	0	21	.005	0	y	23	12.716	35.316	.509	2.114	1	H2-1
711	M395	L3x3x3/16	.165	0	6	.004	7.5...	y	19	12.716	35.316	.509	2.114	1	H2-1
712	M404	L3x3x3/16	.166	0	2	.004	0	y	22	12.716	35.316	.509	2.114	1	H2-1
713	M412	L3x3x3/16	.162	0	2	.004	0	y	25	12.716	35.316	.509	2.114	1	H2-1
714	M421	L3x3x3/16	.162	0	14	.004	0	y	19	12.716	35.316	.509	2.114	1	H2-1
715	M429	L3x3x3/16	.167	0	25	.005	0	y	23	12.716	35.316	.509	2.114	1	H2-1
716	M451	L3x3x3/16	.214	0	10	.004	7.5...	y	26	13.199	35.316	.509	2.131	1	H2-1
717	M459	L3x3x3/16	.220	0	10	.004	0	y	20	13.199	35.316	.509	2.131	1	H2-1
718	M468	L3x3x3/16	.218	0	6	.004	7.5...	y	24	13.199	35.316	.509	2.131	1	H2-1
719	M476	L3x3x3/16	.207	0	6	.004	0	y	26	13.199	35.316	.509	2.131	1	H2-1
720	M485	L3x3x3/16	.212	0	2	.004	0	y	22	13.199	35.316	.509	2.131	1	H2-1
721	M493	L3x3x3/16	.208	0	2	.004	7.5...	y	24	13.199	35.316	.509	2.131	1	H2-1
722	M502	L3x3x3/16	.203	0	14	.004	0	y	20	13.199	35.316	.509	2.131	1	H2-1
723	M510	L3x3x3/16	.213	0	14	.004	7.5...	y	22	13.199	35.316	.509	2.131	1	H2-1
724	M532	L3x3x3/16	.285	0	12	.004	7.5...	y	25	13.233	35.316	.509	2.132	1	H2-1
725	M540	L3x3x3/16	.292	0	8	.004	7.5...	y	21	13.233	35.316	.509	2.132	1	H2-1
726	M549	L3x3x3/16	.293	0	8	.004	0	y	23	13.233	35.316	.509	2.132	1	H2-1
727	M557	L3x3x3/16	.278	0	4	.004	0	y	19	13.233	35.316	.509	2.132	1	H2-1
728	M566	L3x3x3/16	.285	0	4	.004	7.5...	y	21	13.233	35.316	.509	2.132	1	H2-1
729	M574	L3x3x3/16	.283	0	16	.004	7.5...	y	25	13.233	35.316	.509	2.132	1	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
730	M583	L3x3x3/16	.275	0	16	.004	7.5...	y	19	13.233	35.316	.509	2.132	1	H2-1
731	M591	L3x3x3/16	.285	0	12	.004	7.5...	y	23	13.233	35.316	.509	2.132	1	H2-1
732	M613	L3x3x3/16	.385	0	10	.004	7.5...	y	25	13.303	35.316	.509	2.134	1	H2-1
733	M621	L3x3x3/16	.390	0	10	.004	7.5...	y	21	13.303	35.316	.509	2.134	1	H2-1
734	M630	L3x3x3/16	.361	0	6	.004	7.5...	y	23	13.303	35.316	.509	2.134	1	H2-1
735	M638	L3x3x3/16	.345	0	6	.004	7.5...	y	19	13.303	35.316	.509	2.134	1	H2-1
736	M647	L3x3x3/16	.379	0	2	.004	0	y	21	13.303	35.316	.509	2.134	1	H2-1
737	M655	L3x3x3/16	.376	0	2	.004	7.5...	y	25	13.303	35.316	.509	2.134	1	H2-1
738	M664	L3x3x3/16	.341	0	14	.004	7.5...	y	19	13.303	35.316	.509	2.134	1	H2-1
739	M672	L3x3x3/16	.356	0	14	.004	7.5...	y	23	13.303	35.316	.509	2.134	1	H2-1
740	M694	L3x3x3/16	.112	0	12	.005	0	y	25	13.063	35.316	.509	2.126	1	H2-1
741	M704	L3x3x3/16	.114	0	8	.004	0	y	20	13.063	35.316	.509	2.126	1	H2-1
742	M715	L3x3x3/16	.061	0	9	.005	0	y	24	12.74	35.316	.509	2.115	1	H2-1
743	M725	L3x3x3/16	.062	0	5	.005	8.2...	y	19	12.74	35.316	.509	2.115	1	H2-1
744	M736	L3x3x3/16	.113	0	4	.005	0	y	21	13.063	35.316	.509	2.126	1	H2-1
745	M746	L3x3x3/16	.112	0	16	.005	8.1...	y	25	13.063	35.316	.509	2.126	1	H2-1
746	M757	L3x3x3/16	.062	0	17	.005	0	y	19	12.74	35.316	.509	2.115	1	H2-1
747	M767	L3x3x3/16	.061	0	13	.005	8.2...	y	23	12.74	35.316	.509	2.115	1	H2-1
748	M807	LL3x3x3x3	.032	6.6...	12	.001	13....	y	10	15.364	70.632	5.543	3.751	1	H1-1b
749	M808	LL3x3x3x3	.030	7.1...	4	.001	13....	y	6	15.614	70.632	5.543	3.751	1	H1-1b
750	M809	LL3x3x3x3	.030	6.6...	16	.002	0	y	10	15.614	70.632	5.543	3.751	1	H1-1b
751	M810	LL3x3x3x3	.032	7.2...	8	.002	0	y	14	15.364	70.632	5.543	3.751	1	H1-1b
752	M811	LL3x3x3x3	.032	6.6...	4	.002	13....	y	14	15.364	70.632	5.543	3.751	1	H1-1b
753	M812	LL3x3x3x3	.029	7.1...	12	.002	0	y	2	15.614	70.632	5.543	3.751	1	H1-1b
754	M813	LL3x3x3x3	.029	6.6...	8	.002	0	y	2	15.614	70.632	5.543	3.751	1	H1-1b
755	M814	LL3x3x3x3	.032	7.2...	16	.002	13....	y	6	15.364	70.632	5.543	3.751	1	H1-1b
756	M1246	2L2 1/2x...	.096	5.9...	24	.002	12....	y	14	11.603	58.32	4.017	2.611	1	H1-1b
757	M1247	2L2 1/2x...	.096	6.1...	24	.002	0	y	10	11.603	58.32	4.017	2.611	1	H1-1b
758	M1248	2L2 1/2x...	.096	5.9...	22	.002	12....	y	6	11.603	58.32	4.017	2.611	1	H1-1b
759	M1249	2L2 1/2x...	.096	6.1...	22	.002	0	y	10	11.603	58.32	4.017	2.611	1	H1-1b
760	M1250	2L2 1/2x...	.096	5.9...	20	.002	0	y	2	11.603	58.32	4.017	2.611	1	H1-1b
761	M1251	2L2 1/2x...	.096	6.1...	20	.002	12....	y	6	11.603	58.32	4.017	2.611	1	H1-1b
762	M1252	2L2 1/2x...	.096	5.9...	26	.002	0	y	14	11.603	58.32	4.017	2.611	1	H1-1b
763	M1253	2L2 1/2x...	.096	6.1...	26	.002	0	y	2	11.603	58.32	4.017	2.611	1	H1-1b
764	M1194	2L2 1/2x...	.065	5.9...	22	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
765	M1195	2L2 1/2x...	.065	6.1...	25	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
766	M1196	2L2 1/2x...	.064	5.9...	24	.002	0	y	8	11.603	58.32	4.017	2.611	1	H1-1b
767	M1197	2L2 1/2x...	.064	6.1...	21	.002	12....	y	8	11.603	58.32	4.017	2.611	1	H1-1b
768	M1198	2L2 1/2x...	.065	5.9...	21	.002	12....	y	4	11.603	58.32	4.017	2.611	1	H1-1b
769	M1199	2L2 1/2x...	.065	6.1...	26	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
770	M1200	2L2 1/2x...	.065	5.9...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
771	M1201	2L2 1/2x...	.065	6.1...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
772	M1142	2L2 1/2x...	.065	5.9...	23	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
773	M1143	2L2 1/2x...	.065	6.1...	26	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
774	M1144	2L2 1/2x...	.065	5.9...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
775	M1145	2L2 1/2x...	.065	6.1...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
776	M1146	2L2 1/2x...	.065	5.9...	21	.002	12....	y	4	11.603	58.32	4.017	2.611	1	H1-1b
777	M1147	2L2 1/2x...	.065	6.1...	26	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
778	M1148	2L2 1/2x...	.064	5.9...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
779	M1149	2L2 1/2x...	.064	6.1...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
780	M1090	2L2 1/2x...	.064	5.9...	23	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
781	M1091	2L2 1/2x...	.064	6.1...	26	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
782	M1092	2L2 1/2x...	.064	5.9...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
783	M1093	2L2 1/2x...	.064	6.1...	20	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
784	M1094	2L2 1/2x...	.064	5.9...	25	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
785	M1095	2L2 1/2x...	.064	6.1...	20	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
786	M1096	2L2 1/2x...	.064	5.9...	21	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
787	M1097	2L2 1/2x...	.064	6.1...	26	.002	12....	y	4	11.603	58.32	4.017	2.611	1	H1-1b
788	M1038	2L2 1/2x...	.064	5.9...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
789	M1039	2L2 1/2x...	.064	6.1...	20	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
790	M1040	2L2 1/2x...	.064	5.9...	22	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
791	M1041	2L2 1/2x...	.064	6.1...	26	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
792	M1042	2L2 1/2x...	.064	5.9...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
793	M1043	2L2 1/2x...	.064	6.1...	24	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
794	M1044	2L2 1/2x...	.064	5.9...	23	.002	0	y	12	11.603	58.32	4.017	2.611	1	H1-1b
795	M1045	2L2 1/2x...	.064	6.1...	26	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
796	M986	2L2 1/2x...	.064	5.9...	22	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
797	M987	2L2 1/2x...	.064	6.1...	26	.002	0	y	12	11.603	58.32	4.017	2.611	1	H1-1b
798	M988	2L2 1/2x...	.064	5.9...	24	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
799	M989	2L2 1/2x...	.064	6.1...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
800	M990	2L2 1/2x...	.064	5.9...	22	.002	12....	y	4	11.603	58.32	4.017	2.611	1	H1-1b
801	M991	2L2 1/2x...	.064	6.1...	26	.002	12....	y	4	11.603	58.32	4.017	2.611	1	H1-1b
802	M992	2L2 1/2x...	.064	5.9...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
803	M993	2L2 1/2x...	.064	6.1...	24	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
804	M934	2L2 1/2x...	.064	5.9...	23	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
805	M935	2L2 1/2x...	.064	6.1...	26	.002	12....	y	12	11.603	58.32	4.017	2.611	1	H1-1b
806	M936	2L2 1/2x...	.064	5.9...	24	.002	0	y	16	11.603	58.32	4.017	2.611	1	H1-1b
807	M937	2L2 1/2x...	.064	6.1...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
808	M938	2L2 1/2x...	.064	5.9...	22	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
809	M939	2L2 1/2x...	.064	6.1...	26	.002	0	y	4	11.603	58.32	4.017	2.611	1	H1-1b
810	M940	2L2 1/2x...	.064	5.9...	20	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
811	M941	2L2 1/2x...	.064	6.1...	24	.002	12....	y	16	11.603	58.32	4.017	2.611	1	H1-1b
812	M815	LL3x3x3x3	.081	7.6...	20	.002	15....	y	10	12.3	70.632	5.543	3.751	1	H1-1b
813	M816	LL3x3x3x3	.075	7.8...	24	.002	15....	y	6	12.624	70.632	5.543	3.751	1	H1-1b
814	M817	LL3x3x3x3	.077	7.5...	22	.002	15....	y	6	12.624	70.632	5.543	3.751	1	H1-1b
815	M818	LL3x3x3x3	.084	7.9...	26	.002	0	y	2	12.3	70.632	5.543	3.751	1	H1-1b
816	M819	LL3x3x3x3	.084	7.6...	24	.002	15....	y	10	12.3	70.632	5.543	3.751	1	H1-1b
817	M820	LL3x3x3x3	.077	7.8...	20	.002	15....	y	6	12.624	70.632	5.543	3.751	1	H1-1b
818	M821	LL3x3x3x3	.077	7.5...	26	.002	15....	y	14	12.624	70.632	5.543	3.751	1	H1-1b
819	M822	LL3x3x3x3	.084	7.9...	22	.002	0	y	10	12.3	70.632	5.543	3.751	1	H1-1b
820	M1238	2L2 1/2x...	.023	4.9...	8	.001	10....	y	20	16.995	58.32	4.017	2.611	1	H1-1b
821	M1239	2L2 1/2x...	.023	5.12	16	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
822	M1240	2L2 1/2x...	.023	4.9...	12	.001	0	y	26	16.995	58.32	4.017	2.611	1	H1-1b
823	M1241	2L2 1/2x...	.023	5.12	4	.001	0	y	26	16.995	58.32	4.017	2.611	1	H1-1b
824	M1242	2L2 1/2x...	.023	4.9...	8	.001	0	y	24	16.995	58.32	4.017	2.611	1	H1-1b
825	M1243	2L2 1/2x...	.023	5.12	16	.001	0	y	24	16.995	58.32	4.017	2.611	1	H1-1b
826	M1244	2L2 1/2x...	.023	4.9...	4	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
827	M1245	2L2 1/2x...	.023	5.12	12	.001	10....	y	22	16.995	58.32	4.017	2.611	1	H1-1b
828	M1186	2L2 1/2x...	.023	4.9...	12	.001	0	y	25	16.995	58.32	4.017	2.611	1	H1-1b
829	M1187	2L2 1/2x...	.023	5.12	4	.001	10....	y	19	16.995	58.32	4.017	2.611	1	H1-1b
830	M1188	2L2 1/2x...	.023	4.9...	8	.001	0	y	23	16.995	58.32	4.017	2.611	1	H1-1b
831	M1189	2L2 1/2x...	.023	5.12	16	.001	10....	y	25	16.995	58.32	4.017	2.611	1	H1-1b
832	M1190	2L2 1/2x...	.023	4.9...	8	.001	10....	y	21	16.995	58.32	4.017	2.611	1	H1-1b
833	M1191	2L2 1/2x...	.023	5.12	16	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
834	M1192	2L2 1/2x...	.023	4.9...	12	.001	10....	y	23	16.995	58.32	4.017	2.611	1	H1-1b
835	M1193	2L2 1/2x...	.023	5.12	4	.001	0	y	21	16.995	58.32	4.017	2.611	1	H1-1b
836	M1134	2L2 1/2x...	.023	4.9...	12	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
837	M1135	2L2 1/2x...	.023	5.12	4	.001	10....	y	22	16.995	58.32	4.017	2.611	1	H1-1b
838	M1136	2L2 1/2x...	.023	4.9...	8	.001	10....	y	25	16.995	58.32	4.017	2.611	1	H1-1b
839	M1137	2L2 1/2x...	.023	5.12	16	.001	10....	y	20	16.995	58.32	4.017	2.611	1	H1-1b
840	M1138	2L2 1/2x...	.023	4.9...	12	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
841	M1139	2L2 1/2x...	.023	5.12	4	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
842	M1140	2L2 1/2x...	.023	4.9...	8	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
843	M1141	2L2 1/2x...	.023	5.12	16	.001	0	y	24	16.995	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
844	M1082	2L2 1/2x...	.023	4.9...	8	.001	10....	y	24	16.995	58.32	4.017	2.611	1	H1-1b
845	M1083	2L2 1/2x...	.023	5.12	16	.001	10....	y	20	16.995	58.32	4.017	2.611	1	H1-1b
846	M1084	2L2 1/2x...	.023	4.9...	12	.001	0	y	23	16.995	58.32	4.017	2.611	1	H1-1b
847	M1085	2L2 1/2x...	.023	5.12	4	.001	10....	y	19	16.995	58.32	4.017	2.611	1	H1-1b
848	M1086	2L2 1/2x...	.023	4.9...	8	.001	10....	y	21	16.995	58.32	4.017	2.611	1	H1-1b
849	M1087	2L2 1/2x...	.023	5.12	16	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
850	M1088	2L2 1/2x...	.023	4.9...	4	.001	10....	y	19	16.995	58.32	4.017	2.611	1	H1-1b
851	M1089	2L2 1/2x...	.023	5.12	12	.001	10....	y	22	16.995	58.32	4.017	2.611	1	H1-1b
852	M1030	2L2 1/2x...	.024	4.9...	8	.001	0	y	25	16.995	58.32	4.017	2.611	1	H1-1b
853	M1031	2L2 1/2x...	.024	5.12	16	.001	0	y	21	16.995	58.32	4.017	2.611	1	H1-1b
854	M1032	2L2 1/2x...	.024	4.9...	12	.001	0	y	21	16.995	58.32	4.017	2.611	1	H1-1b
855	M1033	2L2 1/2x...	.024	5.12	4	.001	10....	y	23	16.995	58.32	4.017	2.611	1	H1-1b
856	M1034	2L2 1/2x...	.024	4.9...	8	.001	10....	y	19	16.995	58.32	4.017	2.611	1	H1-1b
857	M1035	2L2 1/2x...	.024	5.12	16	.001	0	y	23	16.995	58.32	4.017	2.611	1	H1-1b
858	M1036	2L2 1/2x...	.024	4.9...	4	.001	10....	y	25	16.995	58.32	4.017	2.611	1	H1-1b
859	M1037	2L2 1/2x...	.024	5.12	12	.001	10....	y	19	16.995	58.32	4.017	2.611	1	H1-1b
860	M978	2L2 1/2x...	.025	4.9...	8	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
861	M979	2L2 1/2x...	.024	5.12	16	.001	10....	y	20	16.995	58.32	4.017	2.611	1	H1-1b
862	M980	2L2 1/2x...	.025	4.9...	12	.001	0	y	26	16.995	58.32	4.017	2.611	1	H1-1b
863	M981	2L2 1/2x...	.025	5.12	4	.001	0	y	19	16.995	58.32	4.017	2.611	1	H1-1b
864	M982	2L2 1/2x...	.024	4.9...	12	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
865	M983	2L2 1/2x...	.024	5.12	4	.001	10....	y	22	16.995	58.32	4.017	2.611	1	H1-1b
866	M984	2L2 1/2x...	.025	4.9...	8	.001	10....	y	24	16.995	58.32	4.017	2.611	1	H1-1b
867	M985	2L2 1/2x...	.024	5.12	16	.001	10....	y	24	16.995	58.32	4.017	2.611	1	H1-1b
868	M926	2L2 1/2x...	.025	4.9...	8	.001	0	y	24	16.995	58.32	4.017	2.611	1	H1-1b
869	M927	2L2 1/2x...	.025	5.12	16	.001	0	y	24	16.995	58.32	4.017	2.611	1	H1-1b
870	M928	2L2 1/2x...	.025	4.9...	12	.001	0	y	22	16.995	58.32	4.017	2.611	1	H1-1b
871	M929	2L2 1/2x...	.025	5.12	4	.001	10....	y	22	16.995	58.32	4.017	2.611	1	H1-1b
872	M930	2L2 1/2x...	.025	4.9...	8	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
873	M931	2L2 1/2x...	.025	5.12	16	.001	0	y	20	16.995	58.32	4.017	2.611	1	H1-1b
874	M932	2L2 1/2x...	.025	4.9...	4	.001	10....	y	26	16.995	58.32	4.017	2.611	1	H1-1b
875	M933	2L2 1/2x...	.025	5.12	12	.001	10....	y	26	16.995	58.32	4.017	2.611	1	H1-1b
876	M874	2L2 1/2x...	.028	4.9...	8	.001	10....	y	6	16.995	58.32	4.017	2.611	1	H1-1b
877	M875	2L2 1/2x...	.028	5.12	16	.001	0	y	2	16.995	58.32	4.017	2.611	1	H1-1b
878	M876	2L2 1/2x...	.028	4.9...	12	.001	0	y	16	16.995	58.32	4.017	2.611	1	H1-1b
879	M877	2L2 1/2x...	.028	5.12	4	.001	10....	y	16	16.995	58.32	4.017	2.611	1	H1-1b
880	M878	2L2 1/2x...	.028	4.9...	8	.001	0	y	10	16.995	58.32	4.017	2.611	1	H1-1b
881	M879	2L2 1/2x...	.027	5.12	16	.001	10....	y	10	16.995	58.32	4.017	2.611	1	H1-1b
882	M880	2L2 1/2x...	.027	4.9...	12	.001	10....	y	10	16.995	58.32	4.017	2.611	1	H1-1b
883	M881	2L2 1/2x...	.027	5.12	4	.001	10....	y	6	16.995	58.32	4.017	2.611	1	H1-1b
884	M799	LL4x4x8x3	.014	3.9...	4	.002	0	y	8	176.057	243	25.894	16.851	1	H1-1b
885	M800	LL4x4x8x3	.014	3.9...	8	.002	0	y	4	176.057	243	25.894	16.851	1	H1-1b
886	M801	LL4x4x8x3	.014	3.9...	16	.002	7.8...	y	12	176.057	243	25.894	16.851	1	H1-1b
887	M806	LL4x4x8x3	.014	3.9...	12	.002	0	y	16	176.057	243	25.894	16.851	1	H1-1b
888	M1234	2L2 1/2x...	.083	7.8...	24	.002	0	z	8	6.857	58.32	4.017	1.632	1	H1-1b
889	M1235	2L2 1/2x...	.083	7.8...	22	.002	0	z	12	6.857	58.32	4.017	1.632	1	H1-1b
890	M1236	2L2 1/2x...	.083	7.8...	20	.002	0	z	8	6.857	58.32	4.017	1.632	1	H1-1b
891	M1237	2L2 1/2x...	.083	7.8...	26	.002	7.8...	z	4	6.857	58.32	4.017	1.632	1	H1-1b
892	M1182	2L2 1/2x...	.079	7.8...	12	.002	0	z	8	6.857	58.32	4.017	1.632	1	H1-1b
893	M1183	2L2 1/2x...	.079	7.8...	8	.002	0	z	12	6.857	58.32	4.017	1.632	1	H1-1b
894	M1184	2L2 1/2x...	.079	7.8...	16	.002	7.8...	z	4	6.857	58.32	4.017	1.632	1	H1-1b
895	M1185	2L2 1/2x...	.079	7.8...	4	.002	0	z	8	6.857	58.32	4.017	1.632	1	H1-1b
896	M1130	2L2 1/2x...	.079	7.8...	12	.002	7.8...	z	23	6.857	58.32	4.017	1.632	1	H1-1b
897	M1131	2L2 1/2x...	.079	7.8...	16	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
898	M1132	2L2 1/2x...	.079	7.8...	8	.002	7.8...	z	23	6.857	58.32	4.017	1.632	1	H1-1b
899	M1133	2L2 1/2x...	.079	7.8...	4	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
900	M1078	2L2 1/2x...	.082	7.8...	12	.002	0	z	10	6.857	58.32	4.017	1.632	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
901	M1079	2L2 1/2x...	.082	7.8...	8	.002	0	z	10	6.857	58.32	4.017	1.632	1	H1-1b
902	M1080	2L2 1/2x...	.082	7.8...	4	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
903	M1081	2L2 1/2x...	.082	7.8...	16	.002	0	z	2	6.857	58.32	4.017	1.632	1	H1-1b
904	M1026	2L2 1/2x...	.085	7.8...	8	.002	7.8...	z	6	6.857	58.32	4.017	1.632	1	H1-1b
905	M1027	2L2 1/2x...	.085	7.8...	12	.002	7.8...	z	14	6.857	58.32	4.017	1.632	1	H1-1b
906	M1028	2L2 1/2x...	.085	7.8...	4	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
907	M1029	2L2 1/2x...	.085	7.8...	16	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
908	M974	2L2 1/2x...	.087	7.8...	12	.002	7.8...	z	14	6.857	58.32	4.017	1.632	1	H1-1b
909	M975	2L2 1/2x...	.087	7.8...	8	.002	7.8...	z	6	6.857	58.32	4.017	1.632	1	H1-1b
910	M976	2L2 1/2x...	.087	7.8...	4	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
911	M977	2L2 1/2x...	.087	7.8...	16	.002	0	z	2	6.857	58.32	4.017	1.632	1	H1-1b
912	M922	2L2 1/2x...	.085	7.8...	12	.002	7.8...	z	14	6.857	58.32	4.017	1.632	1	H1-1b
913	M923	2L2 1/2x...	.085	7.8...	16	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
914	M924	2L2 1/2x...	.085	7.8...	4	.002	7.8...	z	2	6.857	58.32	4.017	1.632	1	H1-1b
915	M925	2L2 1/2x...	.085	7.8...	8	.002	0	z	6	6.857	58.32	4.017	1.632	1	H1-1b
916	M870	2L2 1/2x...	.086	7.8...	8	.002	0	z	4	6.857	58.32	4.017	1.632	1	H1-1b
917	M871	2L2 1/2x...	.086	7.8...	12	.002	7.8...	z	8	6.857	58.32	4.017	1.632	1	H1-1b
918	M872	2L2 1/2x...	.086	7.8...	4	.002	7.8...	z	8	6.857	58.32	4.017	1.632	1	H1-1b
919	M873	2L2 1/2x...	.086	7.8...	16	.002	0	z	12	6.857	58.32	4.017	1.632	1	H1-1b
920	M802	LL3x3x3x3	.091	7.8...	4	.002	7.8...	y	4	11.952	70.632	5.543	2.345	1	H1-1b
921	M803	LL3x3x3x3	.091	7.8...	8	.002	7.8...	y	8	11.952	70.632	5.543	2.345	1	H1-1b
922	M804	LL3x3x3x3	.091	7.8...	16	.002	7.8...	y	16	11.952	70.632	5.543	2.345	1	H1-1b
923	M805	LL3x3x3x3	.091	7.8...	12	.002	7.8...	y	12	11.952	70.632	5.543	2.345	1	H1-1b
924	M1230	2L2 1/2x...	.023	3.9...	20	.002	7.8...	y	8	26.617	58.32	4.017	2.611	1	H1-1b
925	M1231	2L2 1/2x...	.023	3.9...	26	.002	7.8...	y	12	26.617	58.32	4.017	2.611	1	H1-1b
926	M1232	2L2 1/2x...	.023	3.9...	24	.002	7.8...	y	8	26.617	58.32	4.017	2.611	1	H1-1b
927	M1233	2L2 1/2x...	.023	3.9...	22	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
928	M1178	2L2 1/2x...	.023	3.9...	24	.002	7.8...	y	8	26.617	58.32	4.017	2.611	1	H1-1b
929	M1179	2L2 1/2x...	.023	3.9...	22	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
930	M1180	2L2 1/2x...	.023	3.9...	20	.002	7.8...	y	8	26.617	58.32	4.017	2.611	1	H1-1b
931	M1181	2L2 1/2x...	.023	3.9...	26	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
932	M1126	2L2 1/2x...	.023	3.9...	24	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
933	M1127	2L2 1/2x...	.023	3.9...	22	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
934	M1128	2L2 1/2x...	.023	3.9...	20	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
935	M1129	2L2 1/2x...	.023	3.9...	26	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
936	M1074	2L2 1/2x...	.023	3.9...	24	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
937	M1075	2L2 1/2x...	.023	3.9...	22	.002	7.8...	y	12	26.617	58.32	4.017	2.611	1	H1-1b
938	M1076	2L2 1/2x...	.023	3.9...	4	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
939	M1077	2L2 1/2x...	.023	3.9...	16	.002	7.8...	y	12	26.617	58.32	4.017	2.611	1	H1-1b
940	M1022	2L2 1/2x...	.023	3.9...	12	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
941	M1023	2L2 1/2x...	.023	3.9...	8	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
942	M1024	2L2 1/2x...	.023	3.9...	4	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
943	M1025	2L2 1/2x...	.023	3.9...	16	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
944	M970	2L2 1/2x...	.023	3.9...	12	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
945	M971	2L2 1/2x...	.023	3.9...	8	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
946	M972	2L2 1/2x...	.023	3.9...	4	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
947	M973	2L2 1/2x...	.023	3.9...	16	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
948	M918	2L2 1/2x...	.024	3.9...	12	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
949	M919	2L2 1/2x...	.024	3.9...	8	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
950	M920	2L2 1/2x...	.024	3.9...	4	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
951	M921	2L2 1/2x...	.024	3.9...	16	.002	7.8...	y	12	26.617	58.32	4.017	2.611	1	H1-1b
952	M866	2L2 1/2x...	.024	3.9...	12	.002	7.8...	y	16	26.617	58.32	4.017	2.611	1	H1-1b
953	M867	2L2 1/2x...	.024	3.9...	16	.002	7.8...	y	12	26.617	58.32	4.017	2.611	1	H1-1b
954	M868	2L2 1/2x...	.024	3.9...	4	.002	7.8...	y	8	26.617	58.32	4.017	2.611	1	H1-1b
955	M869	2L2 1/2x...	.024	3.9...	8	.002	7.8...	y	4	26.617	58.32	4.017	2.611	1	H1-1b
956	M783	L2.5x2.5x3	.284	1.3...	4	.002	0	y	4	22.347	29.192	.873	1.836	1	H2-1
957	M784	L2.5x2.5x3	.209	1.3...	4	.002	0	y	4	22.347	29.192	.873	1.836	1	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
958	M785	L2.5x2.5x3	.283	1.3...	16	.002	2.7...	y	16	22.347	29.192	.873	1.836	1	H2-1
959	M786	L2.5x2.5x3	.207	1.3...	16	.002	0	y	16	22.347	29.192	.873	1.836	1	H2-1
960	M787	L2.5x2.5x3	.214	1.3...	12	.002	0	y	12	22.347	29.192	.873	1.836	1	H2-1
961	M788	L2.5x2.5x3	.282	1.3...	12	.002	2.7...	y	12	22.347	29.192	.873	1.836	1	H2-1
962	M789	L2.5x2.5x3	.216	1.3...	8	.001	0	y	6	22.347	29.192	.873	1.836	1	H2-1
963	M790	L2.5x2.5x3	.285	1.3...	8	.001	2.7...	y	10	22.347	29.192	.873	1.836	1	H2-1
964	M1262	2L2 1/2x...	.065	6.3...	23	.003	12....	y	14	10.519	58.32	4.017	2.611	1	H1-1b
965	M1263	2L2 1/2x...	.064	6.3...	25	.003	0	y	10	10.519	58.32	4.017	2.611	1	H1-1b
966	M1264	2L2 1/2x...	.066	6.3...	10	.003	0	y	14	10.519	58.32	4.017	2.611	1	H1-1b
967	M1265	2L2 1/2x...	.064	6.3...	21	.003	12....	y	10	10.519	58.32	4.017	2.611	1	H1-1b
968	M53	2L2 1/2x...	.084	4.1...	21	.005	0	y	25	25.468	58.32	4.017	2.611	1	H1-1b
969	M61	2L2 1/2x...	.084	4.1...	25	.005	0	y	22	25.468	58.32	4.017	2.611	1	H1-1b
970	M69	2L2 1/2x...	.085	4.1...	19	.005	0	y	23	25.468	58.32	4.017	2.611	1	H1-1b
971	M77	2L2 1/2x...	.085	4.1...	23	.005	0	y	20	25.468	58.32	4.017	2.611	1	H1-1b
972	M85	2L2 1/2x...	.084	4.1...	25	.005	0	y	20	25.468	58.32	4.017	2.611	1	H1-1b
973	M93	2L2 1/2x...	.084	4.1...	21	.005	0	y	26	25.468	58.32	4.017	2.611	1	H1-1b
974	M101	2L2 1/2x...	.084	4.1...	23	.005	0	y	26	25.468	58.32	4.017	2.611	1	H1-1b
975	M109	2L2 1/2x...	.084	4.1...	19	.005	0	y	23	25.468	58.32	4.017	2.611	1	H1-1b
976	M126	2L2 1/2x...	.082	4.1...	21	.005	0	y	26	25.468	58.32	4.017	2.611	1	H1-1b
977	M134	2L2 1/2x...	.082	4.1...	25	.005	0	y	20	25.468	58.32	4.017	2.611	1	H1-1b
978	M143	2L2 1/2x...	.081	4.1...	19	.005	0	y	24	25.468	58.32	4.017	2.611	1	H1-1b
979	M151	2L2 1/2x...	.082	4.1...	23	.005	0	y	26	25.468	58.32	4.017	2.611	1	H1-1b
980	M160	2L2 1/2x...	.081	4.1...	26	.005	0	y	22	25.468	58.32	4.017	2.611	1	H1-1b
981	M168	2L2 1/2x...	.081	4.1...	22	.005	0	y	24	25.468	58.32	4.017	2.611	1	H1-1b
982	M177	2L2 1/2x...	.082	4.1...	22	.005	0	y	20	25.468	58.32	4.017	2.611	1	H1-1b
983	M185	2L2 1/2x...	.081	4.1...	26	.005	0	y	22	25.468	58.32	4.017	2.611	1	H1-1b
984	M207	2L2 1/2x...	.077	4.1...	20	.005	0	y	25	25.519	58.32	4.017	2.611	1	H1-1b
985	M215	2L2 1/2x...	.077	4.1...	25	.005	0	y	20	25.519	58.32	4.017	2.611	1	H1-1b
986	M224	2L2 1/2x...	.077	4.1...	19	.005	0	y	23	25.519	58.32	4.017	2.611	1	H1-1b
987	M232	2L2 1/2x...	.078	4.1...	23	.005	0	y	19	25.519	58.32	4.017	2.611	1	H1-1b
988	M241	2L2 1/2x...	.077	4.1...	25	.005	0	y	22	25.519	58.32	4.017	2.611	1	H1-1b
989	M249	2L2 1/2x...	.078	4.1...	22	.005	0	y	25	25.519	58.32	4.017	2.611	1	H1-1b
990	M258	2L2 1/2x...	.078	4.1...	22	.005	0	y	20	25.519	58.32	4.017	2.611	1	H1-1b
991	M266	2L2 1/2x...	.077	4.1...	19	.005	0	y	23	25.519	58.32	4.017	2.611	1	H1-1b
992	M288	2L2 1/2x...	.077	4.1...	24	.005	0	y	25	25.876	58.32	4.017	2.611	1	H1-1b
993	M296	2L2 1/2x...	.077	4.1...	22	.005	0	y	21	25.876	58.32	4.017	2.611	1	H1-1b
994	M305	2L2 1/2x...	.077	4.1...	22	.005	0	y	23	25.876	58.32	4.017	2.611	1	H1-1b
995	M313	2L2 1/2x...	.076	4.1...	20	.005	0	y	19	25.876	58.32	4.017	2.611	1	H1-1b
996	M322	2L2 1/2x...	.076	4.1...	20	.005	0	y	21	25.876	58.32	4.017	2.611	1	H1-1b
997	M330	2L2 1/2x...	.076	4.1...	22	.005	0	y	25	25.876	58.32	4.017	2.611	1	H1-1b
998	M339	2L2 1/2x...	.076	4.1...	22	.005	0	y	19	25.876	58.32	4.017	2.611	1	H1-1b
999	M347	2L2 1/2x...	.077	4.1...	24	.005	0	y	23	25.876	58.32	4.017	2.611	1	H1-1b
1000	M369	2L2 1/2x...	.078	4.1...	24	.005	0	y	23	25.927	58.32	4.017	2.611	1	H1-1b
1001	M377	2L2 1/2x...	.078	4.1...	22	.005	0	y	23	25.927	58.32	4.017	2.611	1	H1-1b
1002	M386	2L2 1/2x...	.078	4.1...	22	.005	0	y	21	25.927	58.32	4.017	2.611	1	H1-1b
1003	M394	2L2 1/2x...	.077	4.1...	20	.005	0	y	21	25.927	58.32	4.017	2.611	1	H1-1b
1004	M403	2L2 1/2x...	.077	4.1...	20	.005	0	y	19	25.927	58.32	4.017	2.611	1	H1-1b
1005	M411	2L2 1/2x...	.076	4.1...	26	.005	0	y	19	25.927	58.32	4.017	2.611	1	H1-1b
1006	M420	2L2 1/2x...	.077	4.1...	26	.005	0	y	25	25.927	58.32	4.017	2.611	1	H1-1b
1007	M428	2L2 1/2x...	.078	4.1...	24	.005	0	y	25	25.927	58.32	4.017	2.611	1	H1-1b
1008	M450	2L2 1/2x...	.076	4.1...	23	.005	0	y	23	26.338	58.32	4.017	2.611	1	H1-1b
1009	M458	2L2 1/2x...	.077	4.1...	23	.005	0	y	23	26.338	58.32	4.017	2.611	1	H1-1b
1010	M467	2L2 1/2x...	.076	4.1...	21	.005	0	y	21	26.338	58.32	4.017	2.611	1	H1-1b
1011	M475	2L2 1/2x...	.075	4.1...	21	.005	0	y	22	26.338	58.32	4.017	2.611	1	H1-1b
1012	M484	2L2 1/2x...	.075	4.1...	19	.005	0	y	19	26.338	58.32	4.017	2.611	1	H1-1b
1013	M492	2L2 1/2x...	.075	4.1...	19	.005	0	y	19	26.338	58.32	4.017	2.611	1	H1-1b
1014	M501	2L2 1/2x...	.075	4.1...	25	.005	0	y	25	26.338	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
1015	M509	2L2 1/2x...	.076	4.1...	25	.005	0	y	25	26.338	58.32	4.017	2.611	1	H1-1b
1016	M531	2L2 1/2x...	.079	4.1...	24	.005	0	y	22	26.338	58.32	4.017	2.611	1	H1-1b
1017	M539	2L2 1/2x...	.079	4.1...	22	.005	0	y	23	26.338	58.32	4.017	2.611	1	H1-1b
1018	M548	2L2 1/2x...	.079	4.1...	22	.005	0	y	21	26.338	58.32	4.017	2.611	1	H1-1b
1019	M556	2L2 1/2x...	.077	4.1...	20	.005	0	y	25	26.338	58.32	4.017	2.611	1	H1-1b
1020	M565	2L2 1/2x...	.077	4.1...	20	.005	0	y	23	26.338	58.32	4.017	2.611	1	H1-1b
1021	M573	2L2 1/2x...	.076	4.1...	26	.005	0	y	23	26.338	58.32	4.017	2.611	1	H1-1b
1022	M582	2L2 1/2x...	.077	4.1...	26	.005	0	y	22	26.338	58.32	4.017	2.611	1	H1-1b
1023	M590	2L2 1/2x...	.079	4.1...	24	.005	0	y	25	26.338	58.32	4.017	2.611	1	H1-1b
1024	M612	2L2 1/2x...	.078	4.1...	23	.005	0	y	22	26.39	58.32	4.017	2.611	1	H1-1b
1025	M620	2L2 1/2x...	.078	4.1...	23	.005	0	y	24	26.39	58.32	4.017	2.611	1	H1-1b
1026	M629	2L2 1/2x...	.077	4.1...	21	.005	0	y	20	26.39	58.32	4.017	2.611	1	H1-1b
1027	M637	2L2 1/2x...	.074	4.1...	21	.005	0	y	22	26.39	58.32	4.017	2.611	1	H1-1b
1028	M646	2L2 1/2x...	.075	4.1...	19	.005	0	y	26	26.39	58.32	4.017	2.611	1	H1-1b
1029	M654	2L2 1/2x...	.075	4.1...	19	.005	0	y	20	26.39	58.32	4.017	2.611	1	H1-1b
1030	M663	2L2 1/2x...	.074	4.1...	25	.005	0	y	24	26.39	58.32	4.017	2.611	1	H1-1b
1031	M671	2L2 1/2x...	.077	4.1...	25	.005	0	y	26	26.39	58.32	4.017	2.611	1	H1-1b
1032	M693	2L2 1/2x...	.073	4.1...	20	.005	0	y	22	26.83	58.32	4.017	2.611	1	H1-1b
1033	M703	2L2 1/2x...	.073	4.1...	26	.005	0	y	21	26.83	58.32	4.017	2.611	1	H1-1b
1034	M714	2L2 1/2x...	.072	4.1...	26	.005	0	y	23	26.83	58.32	4.017	2.611	1	H1-1b
1035	M724	2L2 1/2x...	.073	4.1...	24	.005	0	y	22	26.83	58.32	4.017	2.611	1	H1-1b
1036	M735	2L2 1/2x...	.074	4.1...	24	.005	0	y	26	26.83	58.32	4.017	2.611	1	H1-1b
1037	M745	2L2 1/2x...	.074	4.1...	22	.005	0	y	20	26.83	58.32	4.017	2.611	1	H1-1b
1038	M756	2L2 1/2x...	.073	4.1...	22	.005	0	y	24	26.83	58.32	4.017	2.611	1	H1-1b
1039	M766	2L2 1/2x...	.072	4.1...	20	.005	0	y	26	26.83	58.32	4.017	2.611	1	H1-1b
1040	M1290	2L2 1/2x...	.040	5.1...	6	.004	0	y	8	15.886	58.32	4.017	2.611	1	H1-1b
1041	M1291	2L2 1/2x...	.040	5.1...	6	.004	10....	y	4	15.886	58.32	4.017	2.611	1	H1-1b
1042	M1292	2L2 1/2x...	.040	5.1...	10	.004	0	y	8	15.886	58.32	4.017	2.611	1	H1-1b
1043	M1293	2L2 1/2x...	.040	5.1...	10	.004	10....	y	12	15.886	58.32	4.017	2.611	1	H1-1b
1044	M1294	2L2 1/2x...	.040	5.1...	14	.004	0	y	12	15.886	58.32	4.017	2.611	1	H1-1b
1045	M1295	2L2 1/2x...	.040	5.1...	14	.004	10....	y	16	15.886	58.32	4.017	2.611	1	H1-1b
1046	M1296	2L2 1/2x...	.040	5.1...	2	.004	0	y	16	15.886	58.32	4.017	2.611	1	H1-1b
1047	M1297	2L2 1/2x...	.040	5.1...	2	.004	10....	y	4	15.886	58.32	4.017	2.611	1	H1-1b
1048	M55	2L2 1/2x...	.186	6.2...	24	.008	12....	y	21	11.303	58.32	4.017	2.611	1	H1-1b
1049	M63	2L2 1/2x...	.186	6.2...	21	.008	12....	y	24	11.303	58.32	4.017	2.611	1	H1-1b
1050	M71	2L2 1/2x...	.186	6.2...	23	.008	12....	y	19	11.303	58.32	4.017	2.611	1	H1-1b
1051	M79	2L2 1/2x...	.186	6.2...	19	.008	12....	y	22	11.303	58.32	4.017	2.611	1	H1-1b
1052	M87	2L2 1/2x...	.185	6.2...	21	.008	12....	y	26	11.303	58.32	4.017	2.611	1	H1-1b
1053	M95	2L2 1/2x...	.185	6.2...	26	.008	12....	y	21	11.303	58.32	4.017	2.611	1	H1-1b
1054	M103	2L2 1/2x...	.186	6.2...	26	.008	12....	y	24	11.303	58.32	4.017	2.611	1	H1-1b
1055	M111	2L2 1/2x...	.186	6.2...	23	.008	12....	y	26	11.303	58.32	4.017	2.611	1	H1-1b
1056	M128	2L2 1/2x...	.182	6.2...	25	.008	12....	y	19	11.303	58.32	4.017	2.611	1	H1-1b
1057	M136	2L2 1/2x...	.183	6.2...	21	.008	12....	y	19	11.303	58.32	4.017	2.611	1	H1-1b
1058	M145	2L2 1/2x...	.182	6.2...	23	.008	12....	y	25	11.303	58.32	4.017	2.611	1	H1-1b
1059	M153	2L2 1/2x...	.182	6.2...	19	.008	12....	y	25	11.303	58.32	4.017	2.611	1	H1-1b
1060	M162	2L2 1/2x...	.182	6.2...	21	.008	12....	y	23	11.303	58.32	4.017	2.611	1	H1-1b
1061	M170	2L2 1/2x...	.182	6.2...	25	.008	12....	y	23	11.303	58.32	4.017	2.611	1	H1-1b
1062	M179	2L2 1/2x...	.182	6.2...	19	.008	12....	y	21	11.303	58.32	4.017	2.611	1	H1-1b
1063	M187	2L2 1/2x...	.182	6.2...	23	.008	12....	y	21	11.303	58.32	4.017	2.611	1	H1-1b
1064	M209	2L2 1/2x...	.175	6.2...	25	.008	0	y	20	11.303	58.32	4.017	2.611	1	H1-1b
1065	M217	2L2 1/2x...	.176	6.2...	21	.008	0	y	26	11.303	58.32	4.017	2.611	1	H1-1b
1066	M226	2L2 1/2x...	.176	6.2...	23	.008	0	y	26	11.303	58.32	4.017	2.611	1	H1-1b
1067	M234	2L2 1/2x...	.175	6.2...	20	.008	0	y	24	11.303	58.32	4.017	2.611	1	H1-1b
1068	M243	2L2 1/2x...	.175	6.2...	20	.008	0	y	24	11.303	58.32	4.017	2.611	1	H1-1b
1069	M251	2L2 1/2x...	.175	6.2...	26	.008	0	y	22	11.303	58.32	4.017	2.611	1	H1-1b
1070	M260	2L2 1/2x...	.175	6.2...	26	.008	0	y	22	11.303	58.32	4.017	2.611	1	H1-1b
1071	M268	2L2 1/2x...	.175	6.2...	23	.008	0	y	20	11.303	58.32	4.017	2.611	1	H1-1b

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
1072	M290	2L2 1/2x...	.177	6.2...	24	.008	0	y	20	11.433	58.32	4.017	2.611	1	H1-1b
1073	M298	2L2 1/2x...	.178	6.2...	22	.008	0	y	26	11.433	58.32	4.017	2.611	1	H1-1b
1074	M307	2L2 1/2x...	.177	6.2...	22	.008	0	y	26	11.433	58.32	4.017	2.611	1	H1-1b
1075	M315	2L2 1/2x...	.176	6.2...	20	.008	0	y	24	11.433	58.32	4.017	2.611	1	H1-1b
1076	M324	2L2 1/2x...	.176	6.2...	20	.008	0	y	24	11.433	58.32	4.017	2.611	1	H1-1b
1077	M332	2L2 1/2x...	.176	6.2...	26	.008	0	y	22	11.433	58.32	4.017	2.611	1	H1-1b
1078	M341	2L2 1/2x...	.176	6.2...	26	.008	0	y	22	11.433	58.32	4.017	2.611	1	H1-1b
1079	M349	2L2 1/2x...	.177	6.2...	24	.008	0	y	20	11.433	58.32	4.017	2.611	1	H1-1b
1080	M371	2L2 1/2x...	.179	6.2...	24	.008	0	y	20	11.451	58.32	4.017	2.611	1	H1-1b
1081	M379	2L2 1/2x...	.179	6.2...	22	.008	0	y	26	11.451	58.32	4.017	2.611	1	H1-1b
1082	M388	2L2 1/2x...	.179	6.2...	22	.008	0	y	26	11.451	58.32	4.017	2.611	1	H1-1b
1083	M396	2L2 1/2x...	.178	6.2...	20	.008	0	y	24	11.451	58.32	4.017	2.611	1	H1-1b
1084	M405	2L2 1/2x...	.178	6.2...	20	.008	0	y	24	11.451	58.32	4.017	2.611	1	H1-1b
1085	M413	2L2 1/2x...	.178	6.2...	26	.008	0	y	22	11.451	58.32	4.017	2.611	1	H1-1b
1086	M422	2L2 1/2x...	.178	6.2...	26	.008	0	y	22	11.451	58.32	4.017	2.611	1	H1-1b
1087	M430	2L2 1/2x...	.179	6.2...	24	.008	0	y	20	11.451	58.32	4.017	2.611	1	H1-1b
1088	M452	2L2 1/2x...	.173	6.2...	23	.007	0	y	20	11.603	58.32	4.017	2.611	1	H1-1b
1089	M460	2L2 1/2x...	.173	6.2...	23	.007	0	y	26	11.603	58.32	4.017	2.611	1	H1-1b
1090	M469	2L2 1/2x...	.173	6.2...	21	.007	0	y	26	11.603	58.32	4.017	2.611	1	H1-1b
1091	M477	2L2 1/2x...	.172	6.2...	21	.007	0	y	24	11.603	58.32	4.017	2.611	1	H1-1b
1092	M486	2L2 1/2x...	.171	6.2...	19	.007	0	y	24	11.603	58.32	4.017	2.611	1	H1-1b
1093	M494	2L2 1/2x...	.171	6.2...	19	.007	0	y	22	11.603	58.32	4.017	2.611	1	H1-1b
1094	M503	2L2 1/2x...	.171	6.2...	25	.007	0	y	22	11.603	58.32	4.017	2.611	1	H1-1b
1095	M511	2L2 1/2x...	.173	6.2...	25	.007	0	y	20	11.603	58.32	4.017	2.611	1	H1-1b
1096	M533	2L2 1/2x...	.174	6.2...	23	.007	0	y	20	11.603	58.32	4.017	2.611	1	H1-1b
1097	M541	2L2 1/2x...	.175	6.2...	23	.007	0	y	26	11.603	58.32	4.017	2.611	1	H1-1b
1098	M550	2L2 1/2x...	.175	6.2...	21	.007	0	y	26	11.603	58.32	4.017	2.611	1	H1-1b
1099	M558	2L2 1/2x...	.173	6.2...	21	.007	0	y	24	11.603	58.32	4.017	2.611	1	H1-1b
1100	M567	2L2 1/2x...	.173	6.2...	19	.007	0	y	24	11.603	58.32	4.017	2.611	1	H1-1b
1101	M575	2L2 1/2x...	.173	6.2...	19	.007	0	y	22	11.603	58.32	4.017	2.611	1	H1-1b
1102	M584	2L2 1/2x...	.173	6.2...	25	.007	0	y	22	11.603	58.32	4.017	2.611	1	H1-1b
1103	M592	2L2 1/2x...	.174	6.2...	25	.007	0	y	20	11.603	58.32	4.017	2.611	1	H1-1b
1104	M614	2L2 1/2x...	.169	6.2...	23	.007	0	y	24	11.622	58.32	4.017	2.611	1	H1-1b
1105	M622	2L2 1/2x...	.169	6.2...	23	.007	0	y	22	11.622	58.32	4.017	2.611	1	H1-1b
1106	M631	2L2 1/2x...	.169	6.2...	22	.007	0	y	22	11.622	58.32	4.017	2.611	1	H1-1b
1107	M639	2L2 1/2x...	.167	6.2...	21	.007	0	y	20	11.622	58.32	4.017	2.611	1	H1-1b
1108	M648	2L2 1/2x...	.167	6.2...	19	.007	0	y	20	11.622	58.32	4.017	2.611	1	H1-1b
1109	M656	2L2 1/2x...	.167	6.2...	19	.007	0	y	26	11.622	58.32	4.017	2.611	1	H1-1b
1110	M665	2L2 1/2x...	.167	6.2...	26	.007	0	y	26	11.622	58.32	4.017	2.611	1	H1-1b
1111	M673	2L2 1/2x...	.168	6.2...	25	.007	0	y	24	11.622	58.32	4.017	2.611	1	H1-1b
1112	M695	2L2 1/2x...	.121	5.5...	20	.005	11....	y	22	19.514	77.112	5.381	3.414	1	H1-1b
1113	M705	2L2 1/2x...	.120	5.5...	26	.005	11....	y	21	19.514	77.112	5.381	3.414	1	H1-1b
1114	M716	2L2 1/2x...	.120	5.5...	19	.005	11....	y	19	19.514	77.112	5.381	3.414	1	H1-1b
1115	M726	2L2 1/2x...	.122	5.5...	24	.005	11....	y	22	19.514	77.112	5.381	3.414	1	H1-1b
1116	M737	2L2 1/2x...	.122	5.5...	24	.005	11....	y	26	19.514	77.112	5.381	3.414	1	H1-1b
1117	M747	2L2 1/2x...	.123	5.5...	22	.005	11....	y	20	19.514	77.112	5.381	3.414	1	H1-1b
1118	M758	2L2 1/2x...	.122	5.5...	22	.005	11....	y	24	19.514	77.112	5.381	3.414	1	H1-1b
1119	M768	2L2 1/2x...	.121	5.5...	19	.005	11....	y	25	19.514	77.112	5.381	3.414	1	H1-1b
1120	M1298	L2 1/2x2 ...	.001	0	6	.001	0	y	10	16.851	29.225	.351	1.699	1	H2-1
1121	M1299	L2 1/2x2 ...	.001	0	2	.001	4.1...	y	14	16.851	29.225	.351	1.699	1	H2-1
1122	M1300	L2 1/2x2 ...	.001	0	2	.001	0	y	6	16.851	29.225	.351	1.699	1	H2-1
1123	M1301	L2 1/2x2 ...	.001	0	14	.001	4.1...	y	10	16.851	29.225	.351	1.699	1	H2-1
1124	M1302	L2 1/2x2 ...	.001	0	6	.001	0	y	2	16.851	29.225	.351	1.699	1	H2-1
1125	M1303	L2 1/2x2 ...	.001	0	10	.001	4.1...	y	14	16.851	29.225	.351	1.699	1	H2-1
1126	M1304	L2 1/2x2 ...	.001	0	10	.001	0	y	6	16.851	29.225	.351	1.699	1	H2-1
1127	M1305	L2 1/2x2 ...	.001	0	14	.001	4.1...	y	2	16.851	29.225	.351	1.699	1	H2-1
1128	M1306	L2 1/2x2 ...	.004	0	10	.002	0	y	14	4.943	29.225	.351	1.342	1	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
1129	M1307	L2 1/2x2 ...	.004	0	6	.002	0	y	2	4.943	29.225	.351	1.342	1	H2-1
1130	M1308	L2 1/2x2 ...	.004	0	2	.002	0	y	14	4.943	29.225	.351	1.342	1	H2-1
1131	M1309	L2 1/2x2 ...	.004	0	14	.002	8.3...	y	2	4.943	29.225	.351	1.342	1	H2-1
1132	M697	2L3x3x1/...	.132	6.9...	23	.006	0	y	21	21.633	93.312	7.501	4.982	1	H1-1b
1133	M707	2L3x3x1/...	.132	6.9...	23	.006	0	y	21	21.633	93.312	7.501	4.982	1	H1-1b
1134	M718	2L3x3x1/...	.132	6.9...	21	.006	0	y	19	21.633	93.312	7.501	4.982	1	H1-1b
1135	M728	2L3x3x1/...	.131	6.9...	21	.006	0	y	22	21.633	93.312	7.501	4.982	1	H1-1b
1136	M739	2L3x3x1/...	.131	6.9...	19	.006	0	y	26	21.633	93.312	7.501	4.982	1	H1-1b
1137	M749	2L3x3x1/...	.131	6.9...	19	.006	0	y	21	21.633	93.312	7.501	4.982	1	H1-1b
1138	M760	2L3x3x1/...	.131	6.9...	25	.006	0	y	24	21.633	93.312	7.501	4.982	1	H1-1b
1139	M770	2L3x3x1/...	.132	6.9...	25	.006	0	y	26	21.633	93.312	7.501	4.982	1	H1-1b
1140	M16	L2 1/2x2 ...	.255	0	8	.010	0	y	22	5.246	29.225	.351	1.36	1	H2-1
1141	M19	L2 1/2x2 ...	.245	0	12	.010	0	y	24	5.246	29.225	.351	1.36	1	H2-1
1142	M23	L2 1/2x2 ...	.184	0	2	.009	0	y	20	5.246	29.225	.351	1.36	1	H2-1
1143	M26	L2 1/2x2 ...	.178	0	10	.009	0	y	22	5.246	29.225	.351	1.36	1	H2-1
1144	M30	L2 1/2x2 ...	.247	0	16	.010	0	y	26	5.246	29.225	.351	1.36	1	H2-1
1145	M33	L2 1/2x2 ...	.247	0	4	.009	0	y	20	5.246	29.225	.351	1.36	1	H2-1
1146	M37	L2 1/2x2 ...	.179	0	10	.009	0	y	24	5.246	29.225	.351	1.36	1	H2-1
1147	M40	L2 1/2x2 ...	.186	0	2	.009	0	y	26	5.246	29.225	.351	1.36	1	H2-1
1148	M52	L3x3x3/16	.010	0	21	.004	0	y	23	23.838	35.316	.509	2.515	1	H2-1
1149	M60	L3x3x3/16	.011	0	20	.004	4.1...	y	24	23.838	35.316	.509	2.515	1	H2-1
1150	M68	L3x3x3/16	.011	0	25	.004	4.1...	y	21	23.838	35.316	.509	2.515	1	H2-1
1151	M76	L3x3x3/16	.010	0	23	.004	4.1...	y	21	23.838	35.316	.509	2.515	1	H2-1
1152	M84	L3x3x3/16	.010	0	25	.004	0	y	19	23.838	35.316	.509	2.515	1	H2-1
1153	M92	L3x3x3/16	.010	0	21	.004	4.1...	y	19	23.838	35.316	.509	2.515	1	H2-1
1154	M100	L3x3x3/16	.010	0	23	.004	0	y	24	23.838	35.316	.509	2.515	1	H2-1
1155	M108	L3x3x3/16	.011	0	20	.004	0	y	25	23.838	35.316	.509	2.515	1	H2-1
1156	M125	L3x3x3/16	.026	0	24	.004	0	y	21	23.838	35.316	.509	2.515	1	H2-1
1157	M133	L3x3x3/16	.027	0	22	.004	4.1...	y	25	23.838	35.316	.509	2.515	1	H2-1
1158	M142	L3x3x3/16	.027	0	23	.004	4.1...	y	21	23.838	35.316	.509	2.515	1	H2-1
1159	M150	L3x3x3/16	.023	0	20	.004	4.1...	y	22	23.838	35.316	.509	2.515	1	H2-1
1160	M159	L3x3x3/16	.022	0	21	.004	0	y	19	23.838	35.316	.509	2.515	1	H2-1
1161	M167	L3x3x3/16	.022	0	26	.004	0	y	25	23.838	35.316	.509	2.515	1	H2-1
1162	M176	L3x3x3/16	.022	0	26	.004	0	y	26	23.838	35.316	.509	2.515	1	H2-1
1163	M184	L3x3x3/16	.026	0	23	.004	0	y	25	23.838	35.316	.509	2.515	1	H2-1
1164	M206	L3x3x3/16	.038	0	24	.004	0	y	22	23.874	35.316	.509	2.517	1	H2-1
1165	M214	L3x3x3/16	.039	0	22	.004	4.1...	y	23	23.874	35.316	.509	2.517	1	H2-1
1166	M223	L3x3x3/16	.039	0	22	.004	0	y	20	23.874	35.316	.509	2.517	1	H2-1
1167	M231	L3x3x3/16	.033	0	20	.004	4.1...	y	22	23.874	35.316	.509	2.517	1	H2-1
1168	M240	L3x3x3/16	.032	0	20	.004	0	y	19	23.874	35.316	.509	2.517	1	H2-1
1169	M248	L3x3x3/16	.031	0	26	.004	4.1...	y	20	23.874	35.316	.509	2.517	1	H2-1
1170	M257	L3x3x3/16	.031	0	26	.004	0	y	24	23.874	35.316	.509	2.517	1	H2-1
1171	M265	L3x3x3/16	.037	0	24	.004	0	y	25	23.874	35.316	.509	2.517	1	H2-1
1172	M287	L3x3x3/16	.057	0	24	.004	0	y	22	24.128	35.316	.509	2.528	1	H2-1
1173	M295	L3x3x3/16	.059	0	22	.004	4.1...	y	24	24.128	35.316	.509	2.528	1	H2-1
1174	M304	L3x3x3/16	.060	0	22	.004	4.1...	y	21	24.128	35.316	.509	2.528	1	H2-1
1175	M312	L3x3x3/16	.053	0	4	.004	4.1...	y	22	24.128	35.316	.509	2.528	1	H2-1
1176	M321	L3x3x3/16	.049	0	4	.004	0	y	26	24.128	35.316	.509	2.528	1	H2-1
1177	M329	L3x3x3/16	.048	0	16	.004	4.1...	y	20	24.128	35.316	.509	2.528	1	H2-1
1178	M338	L3x3x3/16	.052	0	16	.004	0	y	25	24.128	35.316	.509	2.528	1	H2-1
1179	M346	L3x3x3/16	.058	0	24	.004	0	y	25	24.128	35.316	.509	2.528	1	H2-1
1180	M368	L3x3x3/16	.068	0	23	.004	0	y	22	24.164	35.316	.509	2.529	1	H2-1
1181	M376	L3x3x3/16	.070	0	23	.004	4.1...	y	24	24.164	35.316	.509	2.529	1	H2-1
1182	M385	L3x3x3/16	.069	0	21	.004	0	y	20	24.164	35.316	.509	2.529	1	H2-1
1183	M393	L3x3x3/16	.064	0	6	.004	4.1...	y	22	24.164	35.316	.509	2.529	1	H2-1
1184	M402	L3x3x3/16	.064	0	2	.004	0	y	26	24.164	35.316	.509	2.529	1	H2-1
1185	M410	L3x3x3/16	.063	0	2	.004	4.1...	y	20	24.164	35.316	.509	2.529	1	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc...	LC	Shea...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y...	phi*Mn z-z.....		Eqn
1186	M419	L3x3x3/16	.063	0	14	.004	0	y	24	24.164	35.316	.509	2.529	1	H2-1
1187	M427	L3x3x3/16	.067	0	25	.004	4.1...	y	26	24.164	35.316	.509	2.529	1	H2-1
1188	M449	L3x3x3/16	.088	0	10	.004	0	y	22	24.416	35.316	.509	2.541	1	H2-1
1189	M457	L3x3x3/16	.090	0	10	.004	0	y	23	24.416	35.316	.509	2.541	1	H2-1
1190	M466	L3x3x3/16	.090	0	6	.004	0	y	21	24.416	35.316	.509	2.541	1	H2-1
1191	M474	L3x3x3/16	.085	0	6	.004	4.1...	y	22	24.416	35.316	.509	2.541	1	H2-1
1192	M483	L3x3x3/16	.087	0	2	.004	0	y	19	24.416	35.316	.509	2.541	1	H2-1
1193	M491	L3x3x3/16	.085	0	2	.004	0	y	19	24.416	35.316	.509	2.541	1	H2-1
1194	M500	L3x3x3/16	.084	0	14	.004	0	y	24	24.416	35.316	.509	2.541	1	H2-1
1195	M508	L3x3x3/16	.088	0	14	.004	0	y	25	24.416	35.316	.509	2.541	1	H2-1
1196	M530	L3x3x3/16	.116	0	12	.004	0	y	22	24.452	35.316	.509	2.542	1	H2-1
1197	M538	L3x3x3/16	.118	0	8	.004	0	y	23	24.452	35.316	.509	2.542	1	H2-1
1198	M547	L3x3x3/16	.118	0	8	.004	0	y	21	24.452	35.316	.509	2.542	1	H2-1
1199	M555	L3x3x3/16	.113	0	4	.004	4.1...	y	22	24.452	35.316	.509	2.542	1	H2-1
1200	M564	L3x3x3/16	.116	0	4	.004	0	y	19	24.452	35.316	.509	2.542	1	H2-1
1201	M572	L3x3x3/16	.115	0	16	.004	0	y	19	24.452	35.316	.509	2.542	1	H2-1
1202	M581	L3x3x3/16	.112	0	16	.004	0	y	25	24.452	35.316	.509	2.542	1	H2-1
1203	M589	L3x3x3/16	.115	0	12	.004	0	y	25	24.452	35.316	.509	2.542	1	H2-1
1204	M611	L3x3x3/16	.157	0	10	.004	0	y	23	24.488	35.316	.509	2.544	1	H2-1
1205	M619	L3x3x3/16	.159	0	10	.004	0	y	23	24.488	35.316	.509	2.544	1	H2-1
1206	M628	L3x3x3/16	.148	0	6	.004	4.1...	y	21	24.488	35.316	.509	2.544	1	H2-1
1207	M636	L3x3x3/16	.142	0	6	.004	4.1...	y	22	24.488	35.316	.509	2.544	1	H2-1
1208	M645	L3x3x3/16	.155	0	2	.004	0	y	19	24.488	35.316	.509	2.544	1	H2-1
1209	M653	L3x3x3/16	.154	0	2	.004	0	y	19	24.488	35.316	.509	2.544	1	H2-1
1210	M662	L3x3x3/16	.140	0	14	.004	0	y	24	24.488	35.316	.509	2.544	1	H2-1
1211	M670	L3x3x3/16	.146	0	14	.004	0	y	25	24.488	35.316	.509	2.544	1	H2-1
1212	M692	L3x3x3/16	.063	0	5	.005	5.5...	y	26	19.552	35.316	.509	2.349	1	H2-1
1213	M702	L3x3x3/16	.062	0	17	.005	5.5...	y	22	19.552	35.316	.509	2.349	1	H2-1
1214	M713	L3x3x3/16	.037	0	17	.005	0	y	22	19.552	35.316	.509	2.349	1	H2-1
1215	M723	L3x3x3/16	.039	0	13	.005	5.5...	y	22	19.552	35.316	.509	2.349	1	H2-1
1216	M734	L3x3x3/16	.063	0	13	.005	5.5...	y	21	19.552	35.316	.509	2.349	1	H2-1
1217	M744	L3x3x3/16	.064	0	9	.005	5.5...	y	25	19.552	35.316	.509	2.349	1	H2-1
1218	M755	L3x3x3/16	.040	0	9	.005	5.5...	y	24	19.552	35.316	.509	2.349	1	H2-1
1219	M765	L3x3x3/16	.037	0	5	.004	5.5...	y	26	19.552	35.316	.509	2.349	1	H2-1
1220	M5	2L3x4x5/...	.250	12....	21	.008	12....	y	25	33.033	135.432	15.999	3.964	1	H1-1b
1221	M6	2L3x4x5/...	.253	12....	20	.008	12....	y	23	33.033	135.432	15.999	3.964	1	H1-1b
1222	M7	2L3x4x5/...	.255	12....	25	.008	12....	y	25	33.033	135.432	15.999	3.964	1	H1-1b
1223	M8	2L3x4x5/...	.254	12....	26	.008	12....	y	23	33.033	135.432	15.999	3.964	1	H1-1b

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N441	max	38.822	12	456.466	12	31.909	3	0	1	.39	16	0	1
2		min	-31.507	5	-329.757	5	-36.38	10	0	1	-.342	9	0	1
3	N442	max	31.542	17	459.604	8	32.005	3	0	1	.344	13	0	1
4		min	-38.848	8	-328.835	17	-36.546	10	0	1	-.392	4	0	1
5	N443	max	29.481	13	452.698	4	36.53	2	0	1	.294	8	0	1
6		min	-36.389	4	-331.591	13	-31.983	11	0	1	-.249	17	0	1
7	N444	max	36.469	16	451.398	16	36.389	2	0	1	.246	5	0	1
8		min	-29.569	9	-334.454	9	-31.925	11	0	1	-.29	12	0	1
9	Totals:	max	132.331	14	589.803	21	135.548	3						
10		min	-132.331	7	212.267	3	-135.548	10						

Built-Up Double Channels Angles

E6.1 (AISC 13th Edition pg 16.1-37)
2017723.13.TAG0053.07

Code	TIA-222-G
Number of Sections	8
Max Capacity	100%

Existing Member								Modification						Built-Up Member											Member Analysis				
Section	Member	Member Type	Area (in^2)	I_x (in^4)	r_x (in)	r_y (in)	Ka/r_y	Mod Type	Area (in^2)	I_x (in^4)	r_x (in)	r_y (in)	Ka/r_y	Connection Type	I_{x-x} (in^4)	L_b (in)	a (in)	h (in)	Area (in^2)	r_{x-x} (in)	$(KL/r)_o$	r_i (in)	r_{ib} (in)	α	$(KL/r)_m$	$0.75(KL/r)_o$	a/r_i	Design met?	$(KL/r_b)_{max}$	(KL/r)
T10	Inner Supp	C4x7.2	2.13	0.425	0.447	0.447	53.73	C4x7.2	2.13	0.425	0.447	0.447	53.73	bolted	2.630519	71.064	24	1.293	4.260	0.786	90.43	0.447	0.447	1.45	105.19	67.83	53.73	Yes	159.09	105.19
T10	Inner Square	C4x7.2	2.13	0.425	0.447	0.447	53.73	C4x7.2	2.13	0.425	0.447	0.447	53.73	bolted	2.630519	100.5	24	1.293	4.260	0.786	127.89	0.447	0.447	1.45	138.72	95.92	53.73	Yes	224.99	138.72
T10	Inner Tri	C4x7.2	2.13	0.425	0.447	0.447	53.73	C4x7.2	2.13	0.425	0.447	0.447	53.73	bolted	2.630519	100.5	24	1.293	4.260	0.786	127.89	0.447	0.447	1.45	138.72	95.92	53.73	Yes	224.99	138.72
T10	Inner Corner	C4x7.2	2.13	0.425	0.447	0.447	53.73	C4x7.2	2.13	0.425	0.447	0.447	53.73	bolted	2.630519	142.128	24	1.293	4.260	0.786	180.87	0.447	0.447	1.45	188.68	135.65	53.73	Yes	318.18	188.68
T2	Inner Supp	C10x15.3	4.48	2.270	0.712	0.712	33.72	C10x15.3	4.48	2.270	0.712	0.712	33.72	bolted	10.58677	71.064	24	1.643	8.960	1.087	65.38	0.712	0.712	1.15	73.56	49.03	33.72	Yes	99.83	73.56
T2	Inner Square	C10x15.3	4.48	2.270	0.712	0.712	33.72	C10x15.3	4.48	2.270	0.712	0.712	33.72	bolted	10.58677	100.5	24	1.643	8.960	1.087	92.46	0.712	0.712	1.15	98.41	69.34	33.72	Yes	141.19	98.41
T2	Inner Square Brace	C10x15.3	4.48	2.270	0.712	0.712	33.72	C10x15.3	4.48	2.270	0.712	0.712	33.72	bolted	10.58677	100.5	24	1.643	8.960	1.087	92.46	0.712	0.712	1.15	98.41	69.34	33.72	Yes	141.19	98.41
T2	Inner Corner	C10x15.3	4.48	2.270	0.712	0.712	33.72	C10x15.3	4.48	2.270	0.712	0.712	33.72	bolted	10.58677	100.5	24	1.643	8.960	1.087	92.46	0.712	0.712	1.15	98.41	69.34	33.72	Yes	141.19	98.41

Existing Member								Modification						Built-Up Member											Member Analysis				
Section	Member	Member Type	Area (in^2)	I_x (in^4)	r_x (in)	r_y (in)	Ka/r_y	Mod Type	Area (in^2)	I_x (in^4)	r_x (in)	r_y (in)	Ka/r_y	Connection Type	I_{y-y} (in^4)	L_b (in)	a (in)	h (in)	Area (in^2)	r_{y-y} (in)	$(KL/r)_o$	r_i (in)	r_{ib} (in)	α	$(KL/r)_m$	$0.75(KL/r)_o$	a/r_i	Design met?	$(KL/r_b)_{max}$	(KL/r)
T10	Inner Supp	C4x7.2	2.130	4.580	1.466	0.447	16.37	C4x7.2	2.13	4.580	1.466	0.447	16.37	bolted	9.16	71.064	24	0.000	4.2600	1.466	48.46	0.447	1.466	0.00	72.36	36.35	53.73	No	48.46	48.46
T10	Inner Square	C4x7.2	2.130	4.580	1.466	0.447	16.37	C4x7.2	2.13	4.580	1.466	0.447	16.37	bolted	9.16	100.5	24	0.000	4.2600	1.466	68.54	0.447	1.466	0.00	87.09	51.40	53.73	No	68.54	68.54
T10	Inner Tri	C4x7.2	2.130	4.580	1.466	0.447	16.37	C4x7.2	2.13	4.580	1.466	0.447	16.37	bolted	9.16	100.5	24	0.000	4.2600	1.466	68.54	0.447	1.466	0.00	87.09	51.40	53.73	No	68.54	68.54
T10	Inner Corner	C4x7.2	2.130	4.580	1.466	0.447	16.37	C4x7.2	2.13	4.580	1.466	0.447	16.37	bolted	9.16	142.128	24	0.000	4.2600	1.466	96.93	0.447	1.466	0.00	110.82	72.69	53.73	Yes	96.93	110.82
T2	Inner Supp	C10x15.3	4.480	67.300	3.876	0.712	6.19	C10x15.3	4.48	67.300	3.876	0.712	6.19	bolted	134.6	71.064	24	0.000	8.9600	3.876	18.34	0.712	3.876	0.00	38.38	13.75	33.72	No	18.34	18.34
T2	Inner Square	C10x15.3	4.480	67.300	3.876	0.712	6.19	C10x15.3	4.48	67.300	3.876	0.712	6.19	bolted	134.6	100.5	24	0.000	8.9600	3.876	25.93	0.712	3.876	0.00	42.53	19.45	33.72	No	25.93	25.93
T2	Inner Square Brace	C10x15.3	4.480	67.300	3.876	0.712	6.19	C10x15.3	4.48	67.300	3.876	0.712	6.19	bolted	134.6	100.5	24	0.000	8.9600	3.876	25.93	0.712	3.876	0.00	42.53	19.45	33.72	No	25.93	25.93
T2	Inner Corner	C10x15.3	4.480	67.300	3.876	0.712	6.19	C10x15.3	4.48	67.300	3.876	0.712	6.19	bolted	134.6	100.5	24	0.000	8.9600	3.876	25.93	0.712	3.876	0.00	42.53	19.45	33.72	No	25.93	25.93

Member Summary				Compression Analysis				Tension Analysis					
Section	Member	Original Member	Modification	k	P_n (k)	ϕPn (k)	Rating	P_n (k)	A_n (in^2)	U	A_e (in^2)	ϕPn (k)	Rating
T10	Inner Supp	C4x7.2	C4x7.2	1.16	2.90	77.08	3.8%	2.85	7.56	1.00	7.56	276.05	1.0%
T10	Inner Square	C4x7.2	C4x7.2	1.08	3.67	50.01	7.3%	2.03	7.56	1.00	7.56	138.02	1.5%
T10	Inner Tri	C4x7.2	C4x7.2	1.08	0.00	50.01	0.0%	0.00	7.56	1.00	7.56	138.02	0.0%
T10	Inner Corner	C4x7.2	C4x7.2	1.14	5.58	27.03	20.6%	3.68	7.56	1.00	7.56	138.02	2.7%
T2	Inner Supp	C10x15.3	C10x15.3	1.13	0.21	218.35	0.1%	1.06	16.50	1.00	16.50	290.30	0.4%
T2	Inner Square	C10x15.3	C10x15.3	1.06	0.41	174.35	0.2%	0.14	16.50	1.00	16.50	290.30	0.0%
T2	Inner Square Brace	C10x15.3	C10x15.3	1.06	0.00	174.35	0.0%	0.00	16.50	1.00	16.50	290.30	0.0%
T2	Inner Corner	C10x15.3	C10x15.3	1.06	0.00	174.35	0.0%	1.05	16.50	1.00	16.50	290.30	0.4%

Bridge/Transition Stiffener Check						
End	Unbraced Section of Existing Leg Member				BUM	Crushing
Dist (in)	F_y (ksi)	F_{cr} (ksi)	P_n (k)	Pn/Ω (k)	ϕPn (k)	Control?

Project #: 2017723.13.TAG0053.07

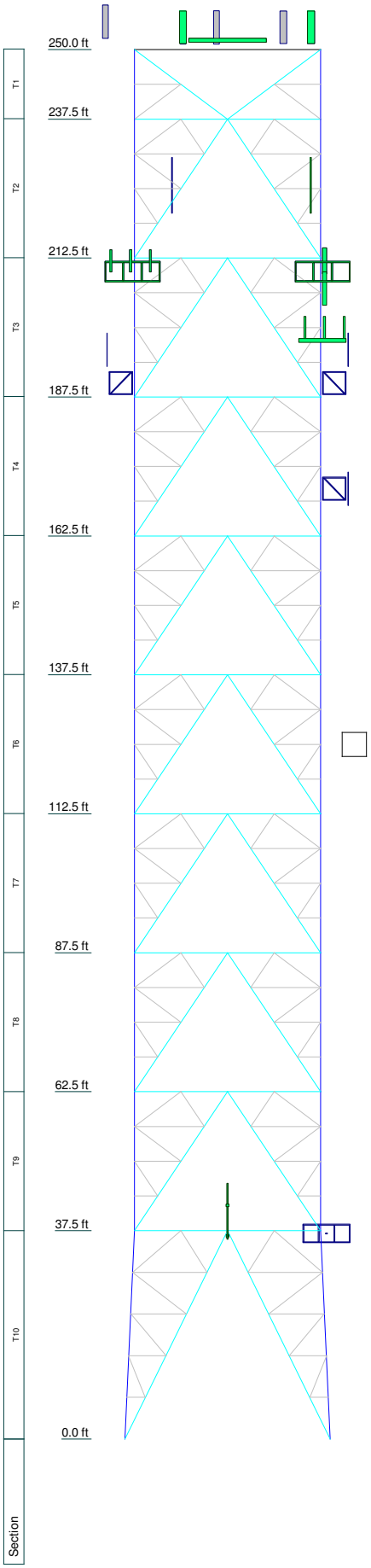
Bolt Checks

Date: 12/6/2016

Section #	Elevation	Component Type	Bolt Grade	Bolt Size (in)	# of Bolts	Maximum Load (k)	Maximum Load per Bolt (k)	Allowable Load per Bolt (k)	Ratio	Allowable Ratio	% Capacity	Criteria
T1	250	Leg	A307	0.75	12	16.013	1.334	14.91	0.089	1.000	8.9%	Bolt Tension
		Leg Outer	A307	0.75	3	2.806	0.935	8.836	0.106	1.000	10.6%	Bolt Shear
		Diagonal	A307	0.75	2	5.458	2.729	17.892	0.153	1.000	15.3%	Bolt Shear
		Diagonal Outer	A307	0.75	2	1.997	0.998	17.892	0.056	1.000	5.6%	Bolt Shear
		Horizontal Outer	A307	0.75	2	1.517	0.758	8.946	0.085	1.000	8.5%	Bolt Shear
		Inner Supp	A307	0.75	2	2.768	1.384	8.946	0.155	1.000	15.5%	Bolt Shear
T2	237.5	Leg	A307	0.75	16	25.057	3.132	17.892	0.175	1.000	17.5%	Bolt DS
		Diagonal	A307	0.75	4	14.564	3.641	17.892	0.203	1.000	20.3%	Bolt Shear
		Horizontal	A307	0.75	4	2.821	0.705	17.892	0.039	1.000	3.9%	Bolt Shear
T3	212.5	Leg	A307	0.75	16	50.944	6.368	17.892	0.356	1.000	35.6%	Bolt DS
		Horizontal	A307	0.75	3	11.182	3.727	17.892	0.208	1.000	20.8%	Bolt Shear
		Diagonal	A307	0.75	4	20.107	5.027	17.892	0.281	1.000	28.1%	Bolt Shear
		Inner Corner	A307	0.75	2	3.494	1.747	16.114	0.108	1.000	10.8%	Member Block Shear
T4	187.5	Leg	A307	0.75	22	69.128	6.284	17.892	0.351	1.000	35.1%	Bolt DS
		Horizontal	A307	0.75	3	13.239	4.413	17.892	0.247	1.000	24.7%	Bolt Shear
		Diagonal	A307	0.75	5	26.433	5.287	17.892	0.295	1.000	29.5%	Bolt Shear
		Inner Corner	A307	0.75	2	3.326	1.663	16.114	0.103	1.000	10.3%	Member Block Shear
T5	162.5	Leg	A307	1	22	96.206	8.746	30.963	0.282	1.000	28.2%	Bolt DS
		Horizontal	A307	0.75	3	16.276	5.425	17.892	0.303	1.000	30.3%	Bolt Shear
		Diagonal	A307	0.75	5	32.783	6.557	17.892	0.366	1.000	36.6%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	2.107	1.054	8.567	0.123	1.000	12.3%	Member Block Shear
		Redundant Diagonal	A307	0.75	2	1.818	0.909	8.567	0.106	1.000	10.6%	Member Block Shear
		Inner Square	A307	0.75	2	3.486	1.743	16.114	0.108	1.000	10.8%	Member Block Shear
		Inner Corner	A307	0.75	2	4.05	2.025	16.114	0.126	1.000	12.6%	Member Block Shear
T6	137.5	Leg	A307	1	24	136.986	11.416	31.809	0.359	1.000	35.9%	Bolt DS
		Horizontal	A307	0.75	3	19.729	6.576	17.892	0.368	1.000	36.8%	Bolt Shear
		Diagonal	A307	0.75	4	39.006	9.752	17.892	0.545	1.000	54.5%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	2.475	1.238	8.567	0.144	1.000	14.4%	Member Block Shear
		Redundant Diagonal	A307	0.75	2	2.212	1.106	8.567	0.129	1.000	12.9%	Member Block Shear
		Inner Square	A307	0.75	2	3.614	1.807	16.114	0.112	1.000	11.2%	Member Block Shear
		Inner Corner	A307	0.75	2	4.11	2.055	16.114	0.128	1.000	12.8%	Member Block Shear
T7	112.5	Leg	A307	1	24	185.471	15.456	31.809	0.486	1.000	48.6%	Bolt DS
		Horizontal	A307	0.75	4	22.729	5.682	17.892	0.318	1.000	31.8%	Bolt Shear
		Diagonal	A307	0.75	4	44.456	11.114	17.892	0.621	1.000	62.1%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	3.185	1.592	8.567	0.186	1.000	18.6%	Member Block Shear
		Redundant Diagonal	A307	0.75	2	2.898	1.449	8.567	0.169	1.000	16.9%	Member Block Shear
		Inner Square	A307	0.75	2	3.631	1.816	16.114	0.113	1.000	11.3%	Member Block Shear
		Inner Corner	A307	0.75	2	4.119	2.06	16.114	0.128	1.000	12.8%	Member Block Shear
T8	87.5	Leg	A307	1	24	241.098	20.092	31.809	0.632	1.000	63.2%	Bolt DS
		Horizontal	A307	0.75	4	25.983	6.496	17.892	0.363	1.000	36.3%	Bolt Shear
		Diagonal	A307	0.75	5	51.895	10.379	17.892	0.580	1.000	58.0%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	4.183	2.092	8.567	0.244	1.000	24.4%	Member Block Shear
		Redundant Diagonal	A307	0.75	2	3.871	1.936	8.567	0.226	1.000	22.6%	Member Block Shear
		Inner Square	A307	0.75	2	4.139	2.07	16.114	0.128	1.000	12.8%	Member Block Shear
		Inner Corner	A307	0.75	2	4.682	2.341	16.114	0.145	1.000	14.5%	Member Block Shear
T9	62.5	Leg	A307	1	32	304.497	19.031	31.809	0.598	1.000	59.8%	Bolt DS
		Horizontal	A307	0.75	4	28.426	7.106	17.892	0.397	1.000	39.7%	Bolt Shear
		Diagonal	A307	0.75	6	56.793	9.466	17.892	0.529	1.000	52.9%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	5.624	2.812	8.567	0.328	1.000	32.8%	Member Block Shear
		Redundant Diagonal	A307	0.75	2	5.184	2.592	8.567	0.303	1.000	30.3%	Member Block Shear
		Inner Square	A307	0.75	2	4.51	2.255	16.114	0.140	1.000	14.0%	Member Block Shear
		Inner Corner	A307	0.75	2	5.102	2.551	16.114	0.158	1.000	15.8%	Member Block Shear
T10	37.5	Leg	A307	1	40	374.177	18.709	31.809	0.588	1.000	58.8%	Bolt DS
		Horizontal	A307	0.75	4	28.332	7.083	17.892	0.396	1.000	39.6%	Bolt Shear
		Diagonal	A307	0.75	8	72.534	9.067	17.892	0.507	1.000	50.7%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	1.834	0.917	8.567	0.107	1.000	10.7%	Member Block Shear
		Redundant Diagonal 0	A307	0.75	2	10.171	5.086	8.946	0.568	1.000	56.8%	Bolt Shear
		Redundant Horizontal 0	A307	0.75	2	8.207	4.104	8.057	0.509	1.000	50.9%	Member Block Shear
		Inner Girt	A307	0.75	2	2.488	1.244	8.946	0.139	1.000	13.9%	Bolt Shear
		Inner Supp	A307	0.75	2	2.894	1.447	8.946	0.162	1.000	16.2%	Bolt Shear
		Inner Square	A307	0.75	2	3.685	1.842	8.946	0.206	1.000	20.6%	Bolt Shear
		Inner Corner	A307	0.75	2	5.584	2.792	8.946	0.312	1.000	31.2%	Bolt Shear
		Inner Ladder	A307	0.75	2	3.251	1.626	8.946	0.182	1.000	18.2%	Bolt Shear
		Inner Triangle	A307	0.75	2	2.182	1.091	8.946	0.122	1.000	12.2%	Bolt Shear
										Maximum Capacity	63.2%	

APPDENDIX C

Tower Elevation Drawings



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Tower Top Platform	252	RRH 2X60AWS LTE	252
2' Standoff - Round (GPD)	252	RRH 2X60AWS LTE	252
2' Standoff - Round (GPD)	252	DB-T1-6Z-8AB-0Z	252
2' Standoff - Round (GPD)	252	DB-T1-6Z-8AB-0Z	252
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	DB-T1-6Z-8AB-0Z	252
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	Platform	239.5
SBNH-1D6565C w/ Mount Pipe	252	(2) DB980H65E-M w/ 20' Mount Pipe	225.6
HPA-65R-BUU-H8 w/ Mount Pipe	252	(2) DB980H65E-M w/ 20' Mount Pipe	225.6
HPA-65R-BUU-H8 w/ Mount Pipe	252	(2) DB980H65E-M w/ 10' Mount Pipe	225.6
HPA-65R-BUU-H8 w/ Mount Pipe	252	10' x 2.5" Pipe	225.6
RRUS 32 B2	252	10' x 2.5" Pipe	225.6
RRUS 32 B2	252	DB980H65E-M w/ 20' Mount Pipe	225.6
RRUS 32 B2	252	(3) DB844H90E-XY w/Mount Pipe	210
RRUS-11	252	14' T-Frame	210
RRUS-11	252	14' T-Frame	210
RRUS-11	252	AIR21 B4A/B2P w/ mount pipe	210
DTMABP7819VG12A	252	AIR21 B4A/B2P w/ mount pipe	210
DTMABP7819VG12A	252	KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	210
DTMABP7819VG12A	252	KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	210
DC6-48-60-18-8F Surge Suppression Unit	252	RRUS 11 B12	210
DC6-48-60-18-8F Surge Suppression Unit	252	RRUS 11 B12	210
DC6-48-60-18-8F Surge Suppression Unit	252	RRUS 11 B2	210
GPS	252	RRUS 11 B2	210
SBNHH-1D65B w/ Mount Pipe	252	14' T-Frame	210
SBNHH-1D65B w/ Mount Pipe	252	14' T-Frame	210
4' Standoff	252	26"x 26" Flat Panel	210
SBNHH-1D65B w/ Mount Pipe	252	(3) DB844H90E-XY w/Mount Pipe	210
4' Standoff	252	14' T-Frame	198
SBNHH-1D65B w/ Mount Pipe	252	(3) DB844H90E-XY w/Mount Pipe	198
SBNHH-1D65B w/ Mount Pipe	252	5' Standoff	190
LPA-80063/6CF w/ Mount Pipe	252	PG1-NOF-0091	190
LPA-80063/6CF w/ Mount Pipe	252	5' Standoff	190
4' Standoff	252	PG1-NOF-0091	190
LPA-80063/6CF w/ Mount Pipe	252	5' Standoff	171
4' Standoff	252	PG1-DOF-0093	171
LPA-80063/6CF w/ Mount Pipe	252	Catwalk	139.5
LPA-80080/6CF w/ Mount Pipe	252	WL14-69/S	85
LPA-80080/6CF w/ Mount Pipe	252	WL14-69/S	85
RRH2X60-AWS	252	WL7-13	85
RRH2X60-AWS	252	WL14-69/S	85
RRH2X60-AWS	252	WL14-69/S	85
RRH2X60-PCS	252	GPS	42
RRH2X60-PCS	252	14" Omni	41
RRH2X60-PCS	252	2.5' Box Mount	37
RRH 2X60AWS LTE	252	Camera	37
		GPS	36.5
		3' Side Arm	36.5
		Platform	21
		(2) Junction Box (40"x14"x9")	21

MATERIAL STRENGTH

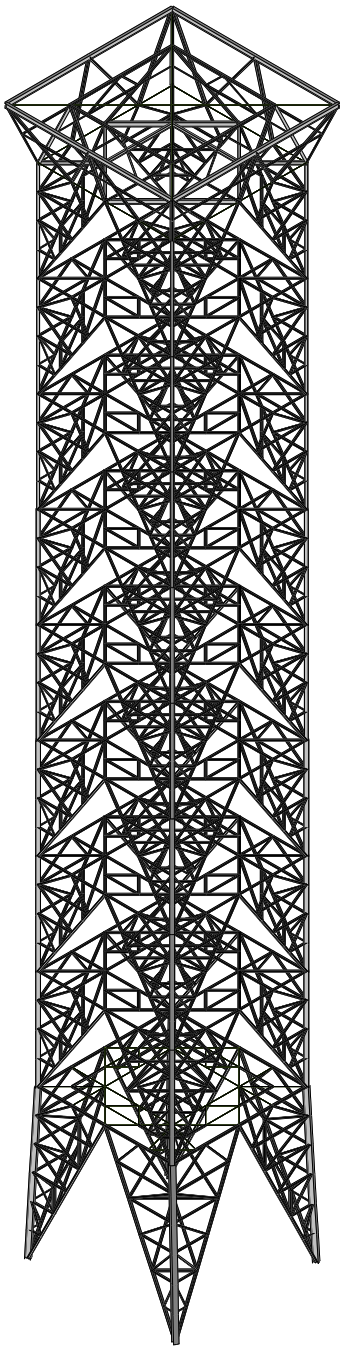
GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

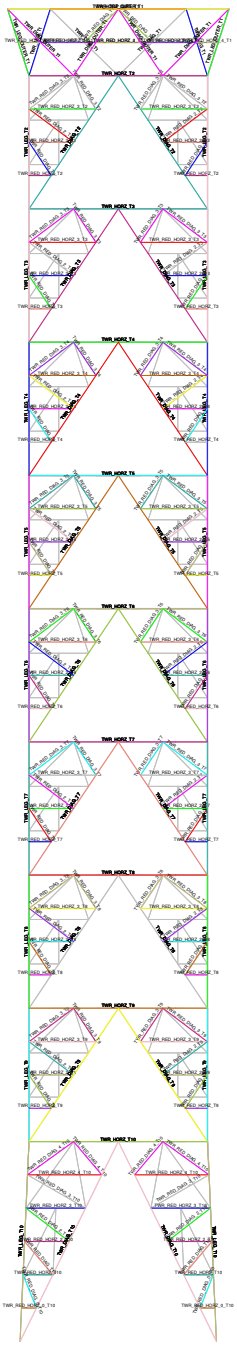
1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 97 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft

GPD Group
520 South Main Street Suite 2531
Akron, Ohio 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: TAG0053 CHESHIRE			
Project: 2017723.13.TAG0053.07			
Client: SAI	Drawn by: tclark	App'd:	
Code: TIA-222-G	Date: 12/06/16	Scale: NTS	
Path: T:\ATandT\TAG0053\14 2017723.13.TAG0053.07 SAI SA\Software Analysis\tnx\TAG0053 - Final.er		Dwg No. E-1	



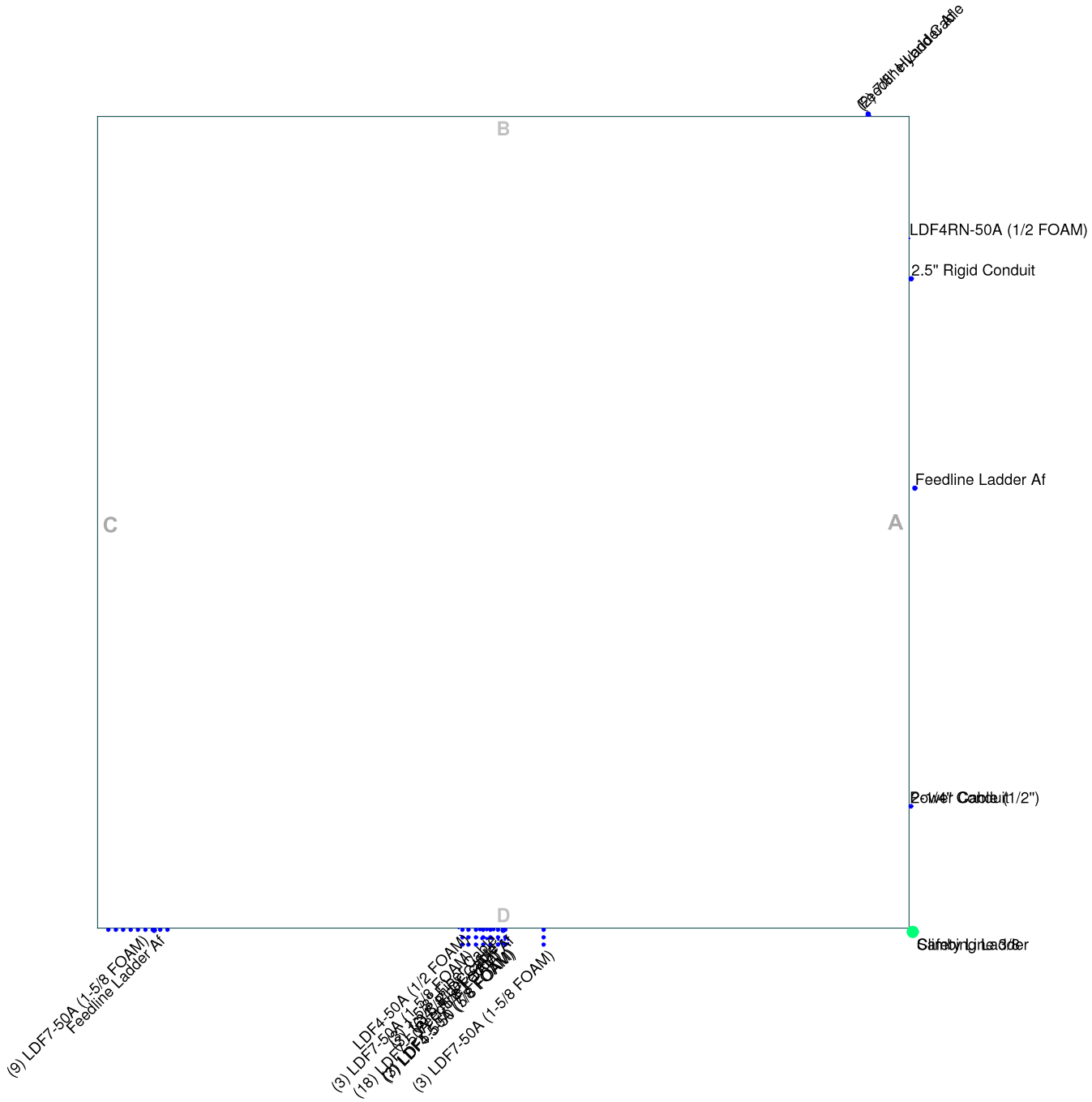
GPD	TAG0053 CHESHIRE	SK - 1
tclark		Dec 6, 2016 at 12:33 PM
2017723.13.TAG0053.07		TAG0053.rt3



GPD	TAG0053 CHESHIRE	SK - 2
tclark		Dec 6, 2016 at 12:34 PM
2017723.13.TAG0053.07		TAG0053.rt3

Feed Line Plan

Round Flat App In Face App Out Face



GPD Group

GPD
520 South Main Street Suite 2531
Akron, Ohio 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: ***TAG0053 CHESHIRE***			
Project: ***2017723.13.TAG0053.07***			
Client: SAI	Drawn by: tclark	App'd:	
Code: TIA-222-G	Date: 12/06/16	Scale: NTS	
Path: T:\ATandT\TAG0053\14 2017723.13.TAG0053.07 SAI SA\Software Analysis\tnx\TAG0053 - Final.er		Dwg No. E-7	

APPDENDIX D

Anchor Rod Analysis

Self-Support Anchor Rod Analysis
TAG0053 CHESHIRE
2017723.13.TAG0053.07

General Info	
Code	TIA-222-G
Modified Anchor Rods	No
Clear Distance > d_b	No
Leg Eccentricity	No
Max Capacity	1.05

Tower Reactions		
Detail Type =	d	
Eta Factor, η =	0.50	
Down Load, P_u =	459.60	kips
Down Load Shear, V_u =	49.68	kips
Uplift, P_u =	334.45	kips
Uplift Shear, V_u =	41.07	kips

Anchor Rods		
Number of Anchor Rods, N =	12	
Anchor Rod Grade =	C-1015	
Anchor Rod Diameter, d_d =	2.25	in
Bolt Circle, BC =		in
Yield, F_y =	0	ksi
Tensile, F_{ub} =	56	ksi

Anchor Rod Results		
$(P_u + V_u/\eta)$	46.6	kips
$\phi * R_{nt} = \phi * F_{ub} * A_n$ =	145.6	kips
Anchor Rod Stress Ratio =	32.0%	OK

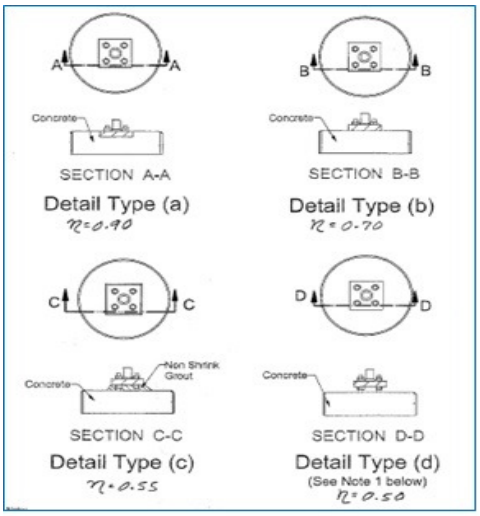


Figure 4-4 of TIA-222-G

APPDENDIX E

Foundation Pedestal Analysis

Concrete Column

Lic. # : KW-06004426
Licensee : GPD ASSOCIATES

Description : --None--

Code References

Calculations per ACI 318-11, IBC 2012, CBC 2013, ASCE 7-10
Load Combinations Used : IBC 2012

General Information

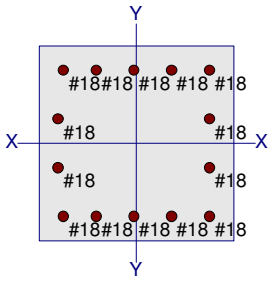
f'c : Concrete 28 day strength	=	3.0 ksi
E =	=	3,122.0 ksi
Density	=	150.0 pcf
β	=	0.850
fy - Main Rebar	=	60.0 ksi
E - Main Rebar	=	29,000.0 ksi
Allow. Reinforcing Limits		*ASTM A615 Bars Used*
Min. Reinf.	=	1.0 %
Max. Reinf.	=	8.0 %

Overall Column Height = 6.20 ft
End Fixity Top Free, Bottom Fixed
Brace condition for deflection (buckling) along columns :
X-X (width) axis :
Unbraced Length for X-X Axis buckling = 6.20 ft, K = 2.10
Y-Y (depth) axis :
Unbraced Length for X-X Axis buckling = 6.20 ft, K = 2.10

Column Cross Section

Column Dimensions : 42.0in Square Column, Column Edge to Rebar Edge Cover = 4.125in

Column Reinforcing : 4 - #18 bars @ corners,, 3.0 - #18 bars top & bottom between corner bars, 2.0 - #18 bars left & right between corner bars



Applied Loads

Entered loads are factored per load combinations specified by user.

Column self weight included : 11,392.5 lbs * Dead Load Factor
AXIAL LOADS . . .
Axial Load at 6.20 ft above base, D = 62.265, W = 240.554 k
BENDING LOADS . . .
Lat. Point Load at 6.20 ft creating Mx-x, W = 38.848 k
Lat. Point Load at 6.20 ft creating My-y, W = 30.965 k

DESIGN SUMMARY

Load Combination +1.20D+0.50Lr+0.50L+W+1.60H
Location of max.above base 6.158 ft

Maximum Stress Ratio **0.135 : 1**
Ratio = (Pu^2+Mu^2)^.5 / (PhiPn^2+PhiMn^2)^.5

Pu =	328.943 k	φ * Pn =	2,456.22 k
Mu-x =	-240.858 k-ft	φ * Mn-x =	-1,842.63 k-ft
Mu-y =	-191.983 k-ft	φ * Mn-y =	1,345.83 k-ft
Mu Angle =	39.0 deg		
Mu at Angle =	308.010 k-ft	φMn at Angle =	2,287.66 k-ft

Pn & Mn values located at Pu-Mu vector intersection with capacity curve

Column Capacities . . .

Pnmax : Nominal Max. Compressive Axial Capacity	7,715.40 k
Pnmin : Nominal Min. Tension Axial Capacity	-3,360.0 k
φ Pn, max : Usable Compressive Axial Capacity	4,012.01 k
φ Pn, min : Usable Tension Axial Capacity	-2,184.0 k

Maximum SERVICE Load Reactions . .

Top along Y-Y	0.0 k	Bottom along Y-Y	30.965 k
Top along X-X	0.0 k	Bottom along X-X	38.848 k

Maximum SERVICE Load Deflections . . .
Along Y-Y 0.006556 in at 6.20 ft above base
for load combination : W Only
Along X-X 0.005226 in at 6.20 ft above base
for load combination : W Only

General Section Information . φ = 0.650 β = 0.850 θ = 0.80
ρ : % Reinforcing 3.175 % Rebar % Ok
Reinforcing Area 56.0 in^2
Concrete Area 1,764.0 in^2

Concrete Column

Lic. # : KW-06004426 — Licensee : GPD ASSOCIATES

Description : --None--

Governing Load Combination Results

Governing Factored Load Combination	Moment X-X	Moment Y-Y	Dist. from base ft	Axial Load Pu k	φ * Pn k	Bending Analysis δx	δx * Mux k-ft	δy	δy * Muy k-ft	Alpha (deg)	δ Mu k-ft	φ Mn k-ft	Utilization Ratio
+1.40D+1.60H			6.16	103.12	4,012.01					0.000			**0.026**
+1.20D+0.50Lr+1.60L+1.60H			6.16	88.39	4,012.01					0.000			**0.022**
+1.20D+1.60L+0.50S+1.60H			6.16	88.39	4,012.01					0.000			**0.022**
+1.20D+1.60Lr+0.50L+1.60H			6.16	88.39	4,012.01					0.000			**0.022**
+1.20D+1.60Lr+0.50W+1.60H	Actual	Actual	6.16	208.67	2,831.81	1.000	-120.43	1.000	-95.99	39.000	154.00	2,105.24	**0.073**
+1.20D+0.50L+1.60S+1.60H			6.16	88.39	4,012.01					0.000			**0.022**
+1.20D+1.60S+0.50W+1.60H	Actual	Actual	6.16	208.67	2,831.81	1.000	-120.43	1.000	-95.99	39.000	154.00	2,105.24	**0.073**
+1.20D+0.50Lr+0.50L+W+1.60H	Actual	Actual	6.16	328.94	2,456.22	1.000	-240.86	1.000	-191.98	39.000	308.01	2,287.66	**0.135**
+1.20D+0.50L+0.50S+W+1.60H	Actual	Actual	6.16	328.94	2,456.22	1.000	-240.86	1.000	-191.98	39.000	308.01	2,287.66	**0.135**
+1.20D+0.50L+0.70S+E+1.60H			6.16	88.39	4,012.01					0.000			**0.022**
+0.90D+W+0.90H	Actual	Actual	6.16	306.85	2,340.54	1.000	-240.86	1.000	-191.98	39.000	308.01	2,334.23	**0.132**
+0.90D+E+0.90H			6.16	66.29	4,012.01					0.000			**0.017**

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	Reaction along X-X Axis @ Base	Reaction along X-X Axis @ Top	Reaction along Y-Y Axis @ Base	Reaction along Y-Y Axis @ Top	Axial Reaction @ Base
+D+H		k		k	73.658 k
+D+L+H		k		k	73.658 k
+D+Lr+H		k		k	73.658 k
+D+S+H		k		k	73.658 k
+D+0.750Lr+0.750L+H		k		k	73.658 k
+D+0.750L+0.750S+H		k		k	73.658 k
+D+0.60W+H	18.579	k	23.309	k	217.990 k
+D+0.70E+H		k		k	73.658 k
+D+0.750Lr+0.750L+0.450W+H	13.934	k	17.482	k	181.907 k
+D+0.750L+0.750S+0.450W+H	13.934	k	17.482	k	181.907 k
+D+0.750L+0.750S+0.5250E+H		k		k	73.658 k
+0.60D+0.60W+0.60H	18.579	k	23.309	k	188.527 k
+0.60D+0.70E+0.60H		k		k	44.195 k
D Only		k		k	73.658 k
Lr Only		k		k	k
L Only		k		k	k
S Only		k		k	k
W Only	30.965	k	38.848	k	240.554 k
E Only		k		k	k
H Only		k		k	k

Maximum Moments

Note: Only non-zero reactions are listed.

Load Combination	Moment About X-X Axis @ Base	Moment About X-X Axis @ Top	Moment About Y-Y Axis @ Base	Moment About Y-Y Axis @ Top
+D+H		k-ft		k-ft
+D+L+H		k-ft		k-ft
+D+Lr+H		k-ft		k-ft
+D+S+H		k-ft		k-ft
+D+0.750Lr+0.750L+H		k-ft		k-ft
+D+0.750L+0.750S+H		k-ft		k-ft
+D+0.60W+H		115.190 k-ft		144.515 k-ft
+D+0.70E+H		k-ft		k-ft
+D+0.750Lr+0.750L+0.450W+H		86.392 k-ft		108.386 k-ft
+D+0.750L+0.750S+0.450W+H		86.392 k-ft		108.386 k-ft
+D+0.750L+0.750S+0.5250E+H		k-ft		k-ft
+0.60D+0.60W+0.60H		115.190 k-ft		144.515 k-ft
+0.60D+0.70E+0.60H		k-ft		k-ft
D Only		k-ft		k-ft
Lr Only		k-ft		k-ft
L Only		k-ft		k-ft
S Only		k-ft		k-ft
W Only		191.983 k-ft		240.858 k-ft

Concrete Column

File = T:\ATandT\TAG0053\142017~1\CALCUL~1\tag0053.ec6
ENERCALC, INC. 1983-2016, Build:6.16.6.7, Ver:6.16.6.7

Lic. # : KW-06004426 **Licensee : GPD ASSOCIATES**

Description : --None--

Maximum Moments

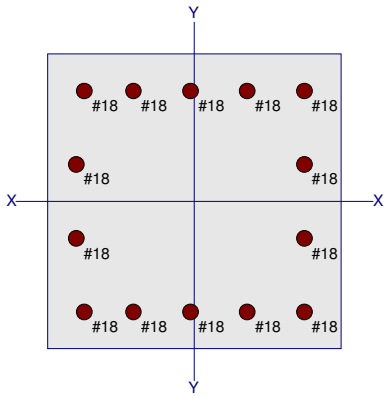
Note: Only non-zero reactions are listed.

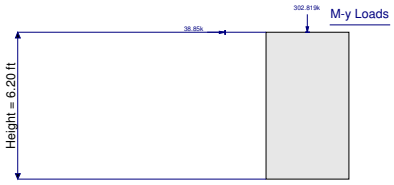
Load Combination	Moment About X-X Axis @ Base	Moment About X-X Axis @ Top	Moment About Y-Y Axis @ Base	Moment About Y-Y Axis @ Top
E Only	k-ft			k-ft
H Only	k-ft			k-ft

Maximum Deflections for Load Combinations

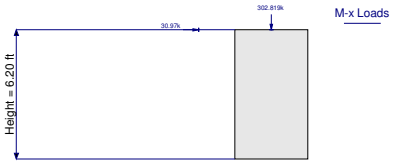
Load Combination	Max. X-X Deflection		Distance		Max. Y-Y Deflection		Distance	
+D+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+L+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+Lr+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+S+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+0.750Lr+0.750L+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+0.750L+0.750S+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+0.60W+H	0.0031	in	6.200	ft	0.004	in	6.200	ft
+D+0.70E+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+D+0.750Lr+0.750L+0.450W+H	0.0024	in	6.200	ft	0.003	in	6.200	ft
+D+0.750L+0.750S+0.450W+H	0.0024	in	6.200	ft	0.003	in	6.200	ft
+D+0.750L+0.750S+0.5250E+H	0.0000	in	0.000	ft	0.000	in	0.000	ft
+0.60D+0.60W+0.60H	0.0031	in	6.200	ft	0.004	in	6.200	ft
+0.60D+0.70E+0.60H	0.0000	in	0.000	ft	0.000	in	0.000	ft
D Only	0.0000	in	0.000	ft	0.000	in	0.000	ft
Lr Only	0.0000	in	0.000	ft	0.000	in	0.000	ft
L Only	0.0000	in	0.000	ft	0.000	in	0.000	ft
S Only	0.0000	in	0.000	ft	0.000	in	0.000	ft
W Only	0.0052	in	6.200	ft	0.007	in	6.200	ft
E Only	0.0000	in	0.000	ft	0.000	in	0.000	ft
H Only	0.0000	in	0.000	ft	0.000	in	0.000	ft

Sketches





Looking along X-X Axis



Looking along Y-Y Axis

Interaction Diagrams

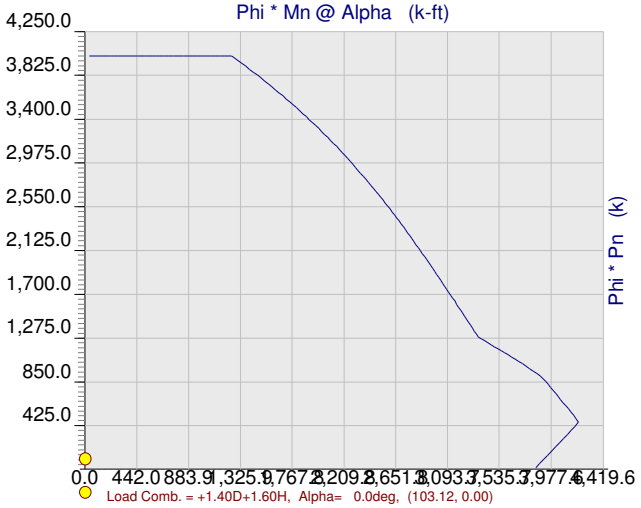
Concrete Column

File = T:\ATandT\TAG0053\142017~1\CALCUL~1\tag0053.ec6
ENERCALC, INC. 1983-2016, Build:6.16.6.7, Ver:6.16.6.7

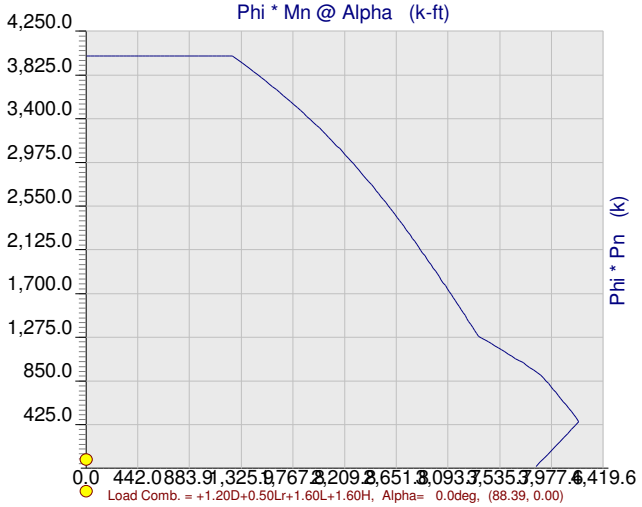
Lic. # : KW-06004426 **Licensee : GPD ASSOCIATES**

Description : --None--

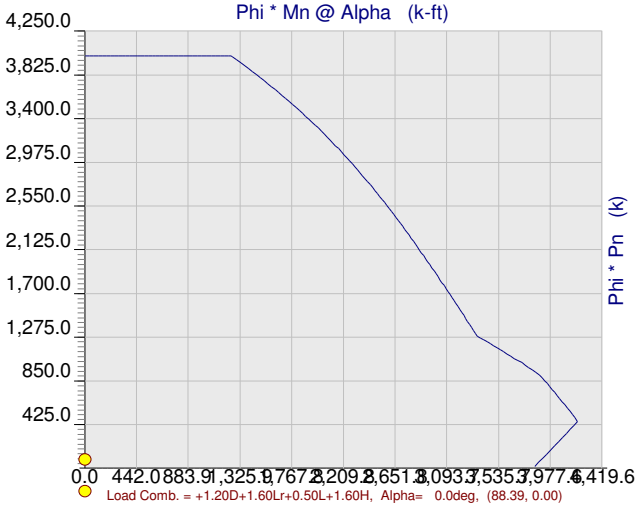
Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



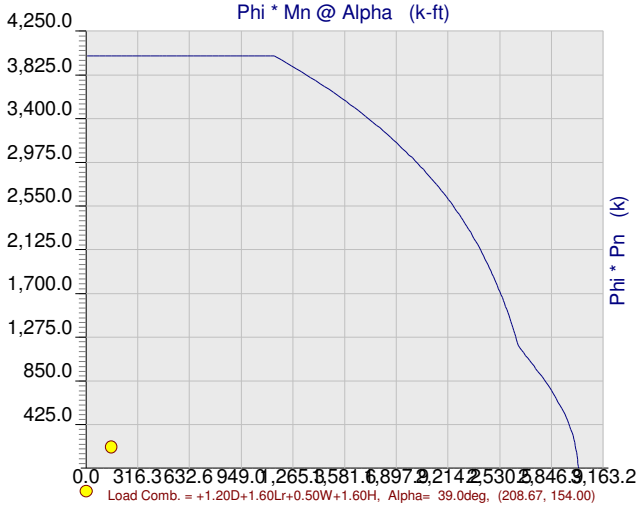
Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



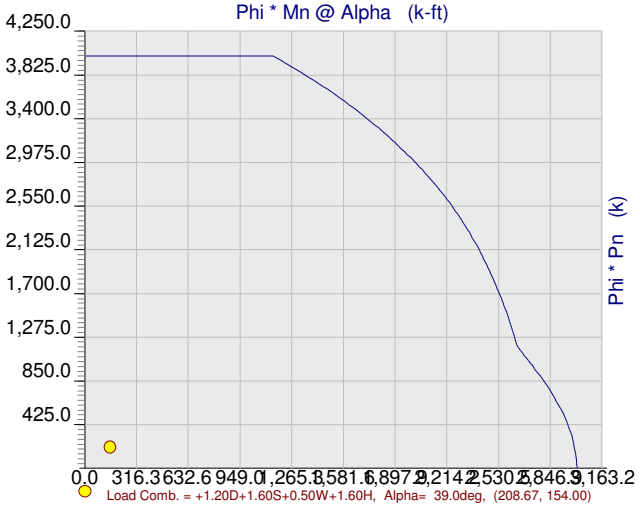
Concrete Column

File = T:\ATandT\TAG0053\142017~1\CALCUL~1\tag0053.ec6
ENERCALC, INC. 1983-2016, Build:6.16.6.7, Ver:6.16.6.7

Lic. # : KW-06004426 **Licensee : GPD ASSOCIATES**

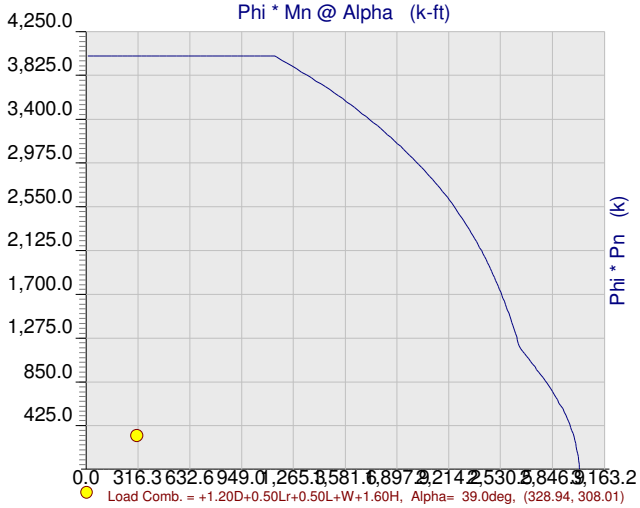
Description : --None--

Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



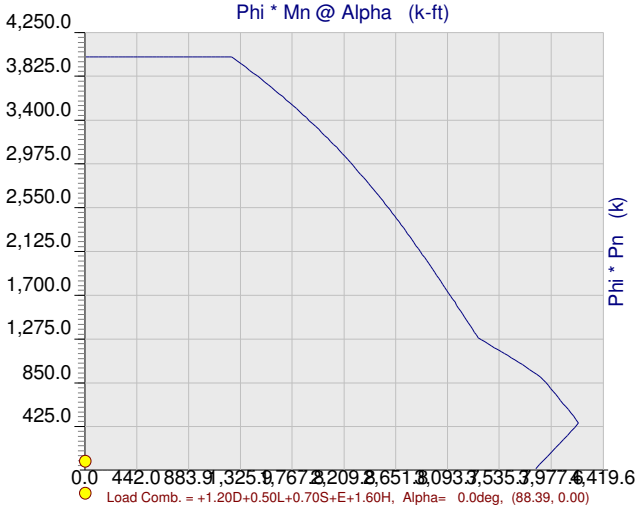
Load Comb. = +1.20D+1.60S+0.50W+1.60H, Alpha= 39.0deg, (208.67, 154.00)

Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



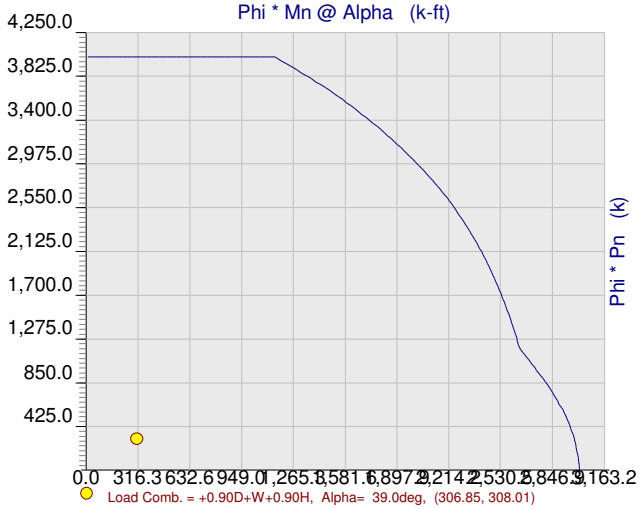
Load Comb. = +1.20D+0.50Lr+0.50L+W+1.60H, Alpha= 39.0deg, (328.94, 308.01)

Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



Load Comb. = +1.20D+0.50L+0.70S+E+1.60H, Alpha= 0.0deg, (88.39, 0.00)

Concrete Column P-M Interaction Diagram
Phi * Mn @ Alpha (k-ft)



Load Comb. = +0.90D+W+0.90H, Alpha= 39.0deg, (306.85, 308.01)

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2013.

Town of Cheshire

The bedding plant capital of Connecticut

Information on the Property Records for the Municipality of Cheshire was last updated on 1/6/2017.

Parcel Information

Location:	751 HIGGINS RD	Property Use:	Industrial	Primary Use:	Light Industrial
Unique ID:	00712600	Map Block Lot:	69 53	Acres:	19.80
Zone:	R-40	Volume / Page:	0148/0566	Developers Map / Lot:	285128
Census:	3434				

Value Information

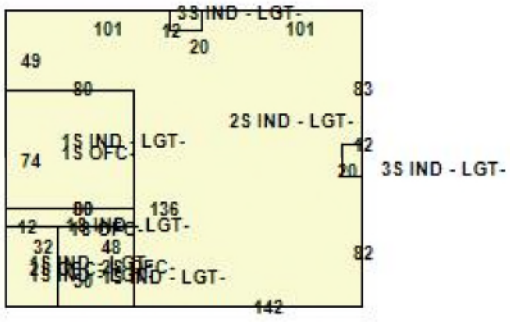
	Appraised Value	70% Assessed Value
Land	434,893	304,430
Buildings	2,489,370	1,742,560

	Appraised Value	70% Assessed Value
Detached Outbuildings	29,959	20,970
Total	2,954,222	2,067,960

Owner's Information

Owner's Data
AMER TEL & TEL CO AT&T PROPERTY TAX UNIT P O BOX 7207 BEDMINSTER NJ 07921

Building 1



Category:	Industrial	Use:	Light Industrial	Stories:	2.00
Above Grade:	88,238	Below Grade:	0	Below Grade Finish:	0
Construction:	Average	Year Built:	1968	Heating:	
Fuel:		Cooling Percent:	100%	Siding:	Pre-Cast Concrete/B. V. Solid
Roof Material:	Asphalt	Beds/Units:	0		

Special Features

Attached Components

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Fencing	1968			2,400
Fencing	1968			600
Fencing	1968			1,560
Paving	1968			43,000

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2013.

Town of Cheshire

The bedding plant capital of Connecticut

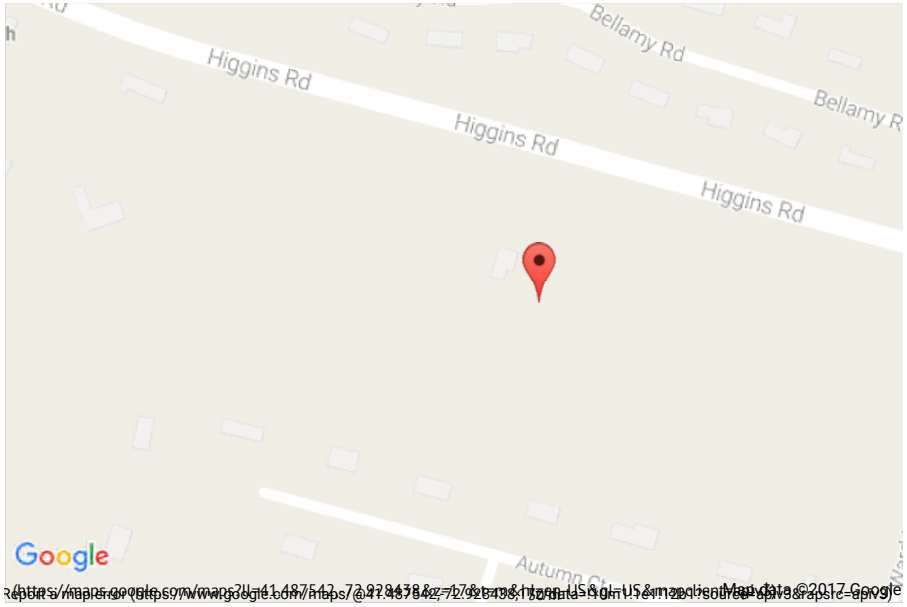
Information on the Property Records for the Municipality of Cheshire was last updated on 1/6/2017.

Property Summary Information

Parcel Data And Values | Building | Outbuildings | Google Map

Google Map

Unique Id:	00712600
Location:	751 HIGGINS RI
MBL:	69 53
Primary Use:	Light Industrial
Zone:	R-40
Acres:	19.80
Appraised Value:	$2,954,222
Assessed Value:	$2,067,960



Mark Roberts

From: Kehoss, David <dkehoss@cheshirect.org>
Sent: Wednesday, January 04, 2017 11:48 AM
To: Mark Roberts
Cc: Voelker, William
Subject: RE: AT&T Antenna Project at Higgins Rd Tower

Mark

We check archives and the earliest file we have is a 1982 special permit for parking lot expansion. I reviewed with Bill Voelker Town Planner who determined the antenna work proposed on the tower itself will not need any additional permitting through this zoning office.

84 South Main Street, Cheshire CT 06410
203.271.6670 phone / 203.271.6688 fax
www.cheshirect.org

http://cheshire.mapxpress.net/
Dave Kehoss
CZEO
Cheshire Planning and Zoning Dept.
Hrs. Mon thru Thurs 830 to 230
Any and all emails are subject to freedom of information

From: Mark Roberts [mailto:mark.roberts@qcdevelopment.net]
Sent: Wednesday, January 04, 2017 7:11 AM
To: Kehoss, David
Subject: AT&T Antenna Project at Higgins Rd Tower
Importance: High

Hello David – in follow-up to our phone conversation yesterday, please let me know if you are able to find an original local zoning approval for this tower, which I believe was originally constructed around 1965.

The scope of work for this AT&T upgrade project is to swap three (3) antennas and add three (3) remote radio heads (RRU) on the tower. There is no ground work associated with this project.

Please let me know if you have any further questions.

Thanks for your help.

Mark Roberts
QC Development
PO Box 916
Storrs, CT 06268
Mark.Roberts@QCDevelopment.net
860-670-9068