

REQUEST FOR QUOTATION

RFQ Issue Date: May 8, 2024
RFQ No: 18-634-24 MET Tower Maintenance & Repairs
Quotation Due Date: Wednesday, May 29, 2024, before 11:00 AM AKDT

PURCHASING OFFICE

Department of Environmental Conservation
555 Cordova Street
Anchorage, Alaska 99501

VENDOR NOTICE (This is NOT a Purchase Order)

This is an informal quotation that will not be read at public opening. The information may be publicly reviewed after award. The terms and conditions should be reviewed and understood before preparing a quotation. The quotation shall be the best net price, FOB destination, to include all delivery charges, but exclude applicable taxes. **Return the quotation by the above time and date to the email address below.** Please reference the Procurement Officer's name and the RFQ number.

LOCATION OF WORK:

3288 Hurst Road
North Pole, AK 99705

Procurement Officer: Jake Tibbe

Email: DECDA\$PROCUREMENT@alaska.gov

VENDOR QUOTATION

The State of Alaska (SOA), Department of Environmental Conservation (DEC), Division of Air Quality (AQ) is soliciting quotes for contractors to assess the current condition and conduct preventive maintenance & repairs on the Meteorological Tower on Hurst Road near North Pole/Fairbanks, Alaska. See attachments for additional information that includes terms and conditions, insurance requirements, and scope of work.

Attachments:

1. Terms & Conditions (4-pages)
2. Indemnity & Insurance (1-page)
3. Scope of Work (2-pages)
4. Pictures of the two (2) existing towers (3-pages)
 - a. Picture 1 & 2 - Hurst Road Tower
 - b. Picture 3 – 907 Terminal St. Tower
5. Original Met Tower Engineering Schematics (19-pages)
6. Federal Requirements (Debarment, SAMs, Lobbying, Drug-free)

Award shall be made to the lowest responsive and responsible bidder responding to this RFQ.

THIS SECTION MUST BE COMPLETED BY VENDOR

Lump Sum: \$ _____

Company Name	Address	City	State	ZIP Code	Phone Number
Alaska Business License No.	Vendor Tax I.D. No.	Do you qualify for the Alaska Bidders' Preference? [] Yes [] No			
		Do you qualify for the Alaska Veteran Preference? [] Yes [] No			
_____ Signature		_____ Date		_____ Typed Name and Title	

**INSTRUCTIONS TO BIDDERS
TERMS AND CONDITIONS**

1. REQUEST FOR QUOTATION (RFQ) REVIEW: Offerors shall carefully review this RFQ for defects and questionable or objectionable material. Offerors' comments concerning defects and questionable or objectionable material in the RFQ must be made in writing and received by the purchasing authority before the date and time set for receipt of quotes. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective quote, upon which award cannot be made, and the resultant exposure of offerors' prices. Offerors' original comments should be sent to the purchasing authority listed on the front of this RFQ.

2. QUOTATION FORMS: Offerors shall use this and attached forms in submitting quotes. A photocopied quote may be submitted.

3. SUBMISSION: Quotations shall be signed where applicable and received at the designated Purchasing Office no later than as indicated.

4. QUOTE REJECTION: The State reserves the right to reject any or all quotes, combinations of items, or lot(s), and to waive defects or minor informalities.

5. EXTENSION OF PRICES: In case of error in the extension of prices in the quote, the unit prices will govern; in a lot bid, the lot prices will govern. Negligence by the vendor in preparing the quotation confers no right for the withdrawal of the quotation after it has been opened.

6. ALASKA PROCUREMENT CODE: The Procurement Code (AS.36.30) and its Regulations (2 AAC Ch. 12), are made a part of this document as if fully set forth herein. Note: AS.36.30 and 2 AAC Ch. 12 are available at most public libraries and legislative information offices; and both are available for review at Alaska State Purchasing Offices.

7. PRICES: The offeror shall state prices in the units of issue on this RFQ. Prices quoted for commodities must be in U.S. funds and include applicable federal duty, brokerage fees, packaging, and transportation cost to the FOB point so that upon transfer of title the commodity can be utilized without further cost. Prices quoted for services must be quoted in U.S. funds and include applicable federal duty, brokerage fee, packaging, and transportation cost so that the services can be provided without further cost. Prices quoted must be exclusive of federal, state, and local taxes. If the offeror believes that certain taxes are payable by the State, the offeror may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax except the following:

- Coal - Internal Revenue Code of 1986 (IRC), Section 4121 - on the purchase of coal;
- "Gas Guzzler" - IRC, Section 4064 - on the purchase of low m.p.g. automobiles, except that police and other emergency type vehicles are not subject to the tax;
- Air Cargo - IRC, Section 4271 - on the purchase of property transportation services by air;
- Air Passenger - IRC, Section 4261 - on the purchase of passenger transportation services by air carriers;
- Leaking Underground Storage Tank Trust Fund Tax (LUST) - IRC, Section 4081 - on the purchase of Aviation gasoline, Diesel Fuel, Gasoline, and Kerosene.

8. PAYMENT FOR STATE PURCHASES: Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a State agency, will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement which establishes a lower interest rate or precludes the charging of interest.

9. PAYMENT DISCOUNT: Discounts for prompt payment will not be considered in evaluating the price you quote. However, the State shall be entitled to take advantage of any payment discount(s) offered by the vendor provided payment is made within the discount period. Payment discount periods will be computed from the date of receipt of the commodities or services and/or a correct invoice, whichever is later. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice.

10. VENDOR TAX ID NUMBER: If goods or services procured through this RFQ are of a type that is required to be included on a Miscellaneous Tax Statement, as described in the Internal Revenue Code, a valid tax identification number must be provided to the State of Alaska before payment will be made.

11. INDEMNIFICATION: The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

12. SEVERABILITY: If any provision of this contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

13. TITLE: Title passes to the State for each item at FOB destination.

14. FILING A PROTEST: An offeror shall attempt to informally resolve a dispute with the procurement officer regarding a small procurement. If the attempt is unsuccessful, the vendor may protest the solicitation or the award of a small procurement contract under AS 36.30.320. The protest must be filed in writing with the commissioner of the purchasing agency or the commissioner's designee and include the following

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information: (1) the name, address, and telephone number of the protester; (2) the signature of the protester or the protester's representative; (3) identification of the contracting agency and the solicitation or contract at issue; (4) a detailed statement of the legal and factual grounds of the protest, including copies of relevant documents; and (5) the form of relief requested. The protester must file a copy of the protest with the procurement officer for the purchasing agency. Protests will be treated in accordance with AS 36.30.550 and 2 AAC 12.695.

15. COMPLIANCE: In the performance of a contract that results from this RFQ, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; and be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

16. SUITABLE MATERIALS, ETC.: Unless otherwise specified, all materials, supplies or equipment offered by an offeror shall be new, unused, and of the latest edition, version, model or crop and of recent manufacture.

17. SPECIFICATIONS: Unless otherwise specified in the RFQ, product brand names or model numbers are examples of the type and quality of product required, and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

18. FIRM OFFER: For the purpose of award, offers made in accordance with this RFQ must be good and firm for a period of ninety (90) days from the date of quote opening.

19. QUOTE PREPARATION COSTS: The State is not liable for any costs incurred by the offeror in quote preparation.

20. CONSOLIDATION OF AWARDS: Due to high administrative costs associated with processing of purchase orders, a single low quote of \$50 or less may, at the discretion of the State, be awarded to the next low offeror receiving other awards for consolidation purposes. This paragraph is not subject to the protest terms enumerated in "FILING A PROTEST" above.

21. CONTRACT FUNDING: Offerors are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.

22. CONFLICT OF INTEREST: An officer or employee of the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if (1) the officer or employee is an employee of the administrative unit that supervises the award of this contract; or (2) the officer or employee has the power to take or withhold official action so as to affect the award or execution of the contract.

23. ASSIGNMENT(S): Assignment of rights, duties, or payments under a contract resulting from this RFQ is not permitted unless authorized in writing by the procurement officer of the contracting agency. Quotes that are conditioned upon the State's approval of an assignment will be rejected as nonresponsive.

24. SUBCONTRACTOR(S): Within five (5) working days of notice from the state, the apparent low bidder must submit a list of the subcontractors that will be used in the performance of the contract. The list must include the name of each subcontractor and the location of the place of business for each subcontractor and evidence of each subcontractor's valid Alaska business license.

25. FORCE MAJEURE (Impossibility to perform): The parties to a contract resulting from this RFQ are not liable for the consequences of any failure to perform, or default in performing, any of its obligations under the contract, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party. For the purposes of this Agreement, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

26. LATE QUOTES: Late quotes are quotes received after the time and date set for receipt of the quotes. Late quotes will not be accepted.

27. CONTRACT EXTENSION: Unless otherwise provided in this RFQ, the State and the successful offeror/contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.

28. DEFAULT: In case of default by the contractor, for any reason whatsoever, the State of Alaska may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

29. DISPUTES: If a contractor has a claim arising in connection with a contract resulting from this RFQ that it cannot resolve with the State by mutual agreement, it shall pursue a claim, if at all, in accordance with the provisions of AS 36.30.620 – 632.

30. GOVERNING LAW; FORUM SELECTION: A contract resulting from this RFQ is governed by the laws of the State of Alaska. To the extent not otherwise governed by section 29 of these Standard Terms and Conditions, any claim concerning the contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

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31. CONSUMER ELECTRICAL PRODUCT: AS 45.45.910 requires that "...a person may not sell, offer to sell, or otherwise transfer in the course of the person's business a consumer electrical product that is manufactured after August 14, 1990, unless the product is clearly marked as being listed by an approved third party certification program." Electrical consumer products manufactured before August 14, 1990, must either be clearly marked as being third party certified or be marked with a warning label that complies with AS 45.45.910(e). Even exempted electrical products must be marked with the warning label. By signature on this quote the offeror certifies that the product offered is in compliance with the law. A list of approved third party certifiers, warning labels and additional information is available from: Department of Labor, Labor Standards & Safety Division, Mechanical Inspection Section, P.O. Box 107020, Anchorage, Alaska 99510-7020, (907)269-4925.

32. CONTINUING OBLIGATION OF CONTRACTOR: Notwithstanding the expiration date of a contract resulting from this RFQ, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.

33. ORDER DOCUMENTS: Except as specifically allowed under this RFQ, an ordering agency will not sign any vendor contract. The State is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the State under this RFQ. The State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this RFQ.

34. BILLING INSTRUCTIONS: Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order. The ordering agency will make payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.

35. OFFERORS WITH DISABILITIES: The State of Alaska complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to participate in this procurement should contact the procurement officer named on the cover page of this RFQ as soon as possible, but no later than the date and time quotations are due to make any necessary arrangements.

36. COMPLIANCE WITH ADA: By signature of their quote the bidder certifies that they comply with the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the federal government. Services or activities furnished to the general public on behalf of the State must be fully accessible. This is intended to ensure that agencies are in accordance with 28 CFR Part 35 Section 35.130 and that services, programs or activities furnished to the public through a contract do not subject qualified individuals with a disability to discrimination based on the disability.

37. ALASKA BIDDER PREFERENCE: The award of a contract based on a Request for Quotation (RFQ) will be made to the lowest responsive and responsible bidder after an Alaska bidder preference of five percent (5%) has been applied. An "Alaska bidder" is a person who: (1) holds a current Alaska business license; (2) submits a bid for goods, services, or construction under the name as appearing on the person's current Alaska business license; (3) has maintained a place of business within the state staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the bid; (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship and the proprietor is a resident of the state, is a limited liability company organized under AS 10.50 and all members are residents of the state, or is a partnership under AS 32.06 or AS 32.11 and all partners are residents of the state; and, (5) if a joint venture, is composed entirely of ventures that qualify under (1) - (4) of this subsection. AS 36.30.170, AS 36.30.321(a) and AS 36.30.990(2)

38. ALASKA VETERAN PREFERENCE: If a bidder qualifies for the Alaska bidder preference under AS 36.30.321(a) and AS 36.30.990(2) and is a qualifying entity as defined in AS 36.30.321(f), they will be awarded an Alaska veteran preference of five percent (5%). The preference will be given to a (1) sole proprietorship owned by an Alaska veteran; (2) partnership under AS 32.06 or AS 32.11 if a majority of the partners are Alaska veterans; (3) limited liability company organized under AS 10.50 if a majority of the members are Alaska veterans; or (4) corporation that is wholly owned by individuals and a majority of the individuals are Alaska veterans, and may not exceed \$5,000. The bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, the bidder must have sold supplies of the general nature solicited to other state agencies, other governments, or the general public. AS 36.30.321(i)

39. USE OF LOCAL FOREST PRODUCTS: In a project financed by state money in which the use of timber, lumber and manufactured lumber is required, only timber, lumber and manufactured lumber products originating in this state shall be used unless the use of those products has been determined to be impractical, in accordance with AS 36.15.010 and AS 36.30.322.

40. LOCAL AGRICULTURAL AND FISHERIES PRODUCTS PREFERENCE: When agricultural, dairy, timber, lumber, or fisheries products are purchased using state money, a seven percent (7%) preference shall be applied to the price of the products harvested in Alaska, or in the case of fisheries products, the products harvested or processed within the jurisdiction of Alaska, in accordance with AS 36.15.050.

41. ALASKA PRODUCT PREFERENCE: A bidder that designates the use of an Alaska Product which meets the requirements of the RFQ specification and is designated as a Class I, Class II or Class III Alaska Product by the Department of Commerce & Economic Development shall receive a preference in the bid evaluation in accordance with AS 36.30.332 and 3 AAC 92.010.

42. EMPLOYMENT PROGRAM PREFERENCE: If a bidder qualifies for the Alaska bidder preference, under AS 36.30.321(a) and AS 36.30.990(2), and is offering goods or services through an employment program as defined under 36.30.990(12), they will be awarded an Employment Program Preference of fifteen percent (15%) in accordance with AS 36.30.321(b).

43. ALASKANS WITH DISABILITIES PREFERENCE: If a bidder qualifies for the Alaskan bidder's preference under AS 36.30.321(a) and AS 36.30.990(2), and is a qualifying entity as defined AS 36.30.321(d), they will be awarded an Alaskans with Disabilities Preference of ten percent

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(10%) in accordance with AS 36.30.321(d). A bidder may not receive both an Employment Program Preference and an Alaskans with Disabilities Preference.

44. PREFERENCE QUALIFICATION LETTER: Regarding preferences 42 and 43 above, the Division of Vocational Rehabilitation in the Department of Labor and Workforce Development maintains lists of Alaskan: [1] employment programs that qualify for preference and [2] individuals who qualify for preference as Alaskan's with disabilities. In accordance with AS 36.30.321(i), in order to qualify for one of these preferences, a bidder must add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, a bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.

As evidence of an individual's or a business' qualification for a certain preference, the Division of Vocational Rehabilitation will issue a certification letter. To take advantage of the preferences 42 or 43 above, an individual or business must be on the appropriate Division of Vocational Rehabilitation list at the time the quote is opened, and must attach a copy of their certification letter to their quote. The bidder's failure to provide this certification letter with their quote will cause the State to disallow the preference.

APPENDIX B¹
INDEMNITY AND INSURANCE

Article 1. Indemnification

The contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the contracting agency's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

Article 2. Insurance

Without limiting contractor's indemnification, it is agreed that contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the contracting officer prior to beginning work and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under AS 21.

2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$1,000,000 combined single limit per claim.

2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$1,000,000 combined single limit per claim.



**State of Alaska, Department of Environmental Conservation,
Division of Air Quality**

RFQ 18-634-24 for MET Tower Maintenance & Repairs

The State of Alaska (SOA), Department of Environmental Conservation (DEC), Division of Air Quality (AQ) is soliciting quotes for contractors to provide all labor, transportation, and materials to assess the current condition and conduct preventive maintenance & repairs on the existing Meteorological Tower on Hurst Road in Fairbanks, Alaska. An assessment of a 2nd existing tower in the area is also a part of this solicitation. Final Completion Date: September 30, 2024.

A. Scope of Work

1. Tower maintenance & Repair needs (Hurst Road):
 - a) Overall inspection of US Tower HDX572MDPL 72-foot telescoping tower and detailed notes of any needed future repairs or maintenance.
 - b) Lubrication of any necessary points, pulleys, chain, reel, gears, sprockets, and similar areas.
 - c) Replacement of gear lube with a lubricant that will flow in arctic conditions.
 - d) Check and replace the bulb/beacon.
 - e) Adjust the automatic lowering stop to prevent the 10m sensor crossbar from striking the lower section of the tower.
 - f) Inspect the cable/wire rope, replace if indicated.
2. Additional Notes:
 - a) The tower does not fully collapse into itself, because a crossbar is mounted on the 2nd section at approximately 32-feet above ground level when fully extended.
 - b) The towers have not been serviced since they were originally installed roughly 12 years ago.
3. Additional Work: Tower assessment (907 Terminal St.):
 - a) Inspect a 2nd smaller manually operated telescopic 10-meter tower in Fairbanks. Provide a detailed report of any needed maintenance or repairs.
 - b) Location: 907 Terminal Street, Fairbanks, Alaska 99701

B. On-site Visit

1. An on-site visit can be scheduled with the Project Manager via email:
tj.brado@alaska.gov
2. Please note that any questions pertaining to this solicitation must be submitted in writing to the procurement officer:
DECDAProcurement@alaska.gov

The following submittal may be required after the time of bid:

- Experience and Qualifications: Describe the relevant experience of the firm in the execution of at least three (3) other similar projects with Alaska in the last ten (10) years. Provide references with contact information for these successful projects. Summarize level of project success in quality, schedule, and record of keeping repair and maintenance costs within project budget.









Structural Analysis Report

Structural Analysis: Self-Supporting Triangular Crank-Up Tower

Tower Model: HDX-572

Design Code: IBC 2006 (TIA/EIA-222-F)

Basic Wind Velocity: 90 mph 3 second gust, 76 mph fastest mile
Ice: None

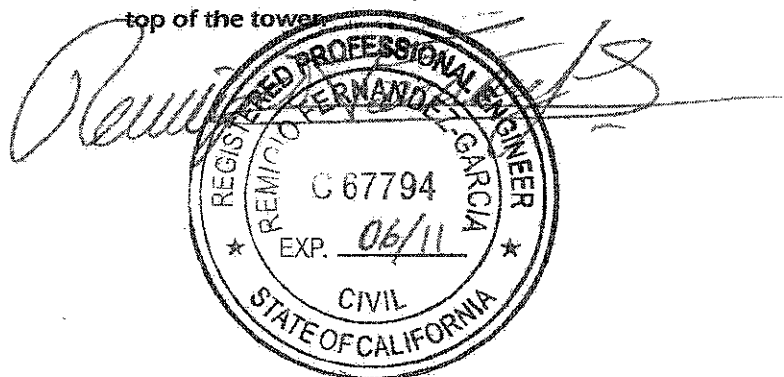
Exposure C

Max. Allowable Antenna Wind Load (lbs):	194	
Max. Allowable Antenna Weight (lbs):	350	
Max. Allowable Antenna Wind Area (sq. ft.):	11.0	(All Round Members)
Max. Allowable Antenna Wind Area (sq. ft.):	6.3	(All Flat Members)

Exposure B

Max. Allowable Antenna Wind Load (lbs):	249	
Max. Allowable Antenna Wind Area (sq. ft.):	14.1	(All Round Members)
Max. Allowable Antenna Wind Area (sq. ft.):	8.1	(All Flat Members)

Note: The maximum antenna values shown above include the antenna, rotator, and any other items placed at the top of the tower. For purposes of these calculations the antenna was placed 1 ft. above the top of the tower.



Date Prepared: 8/21/2009
Prepared By: Remigio Fernandez P.E.

Sheet 1 of 19

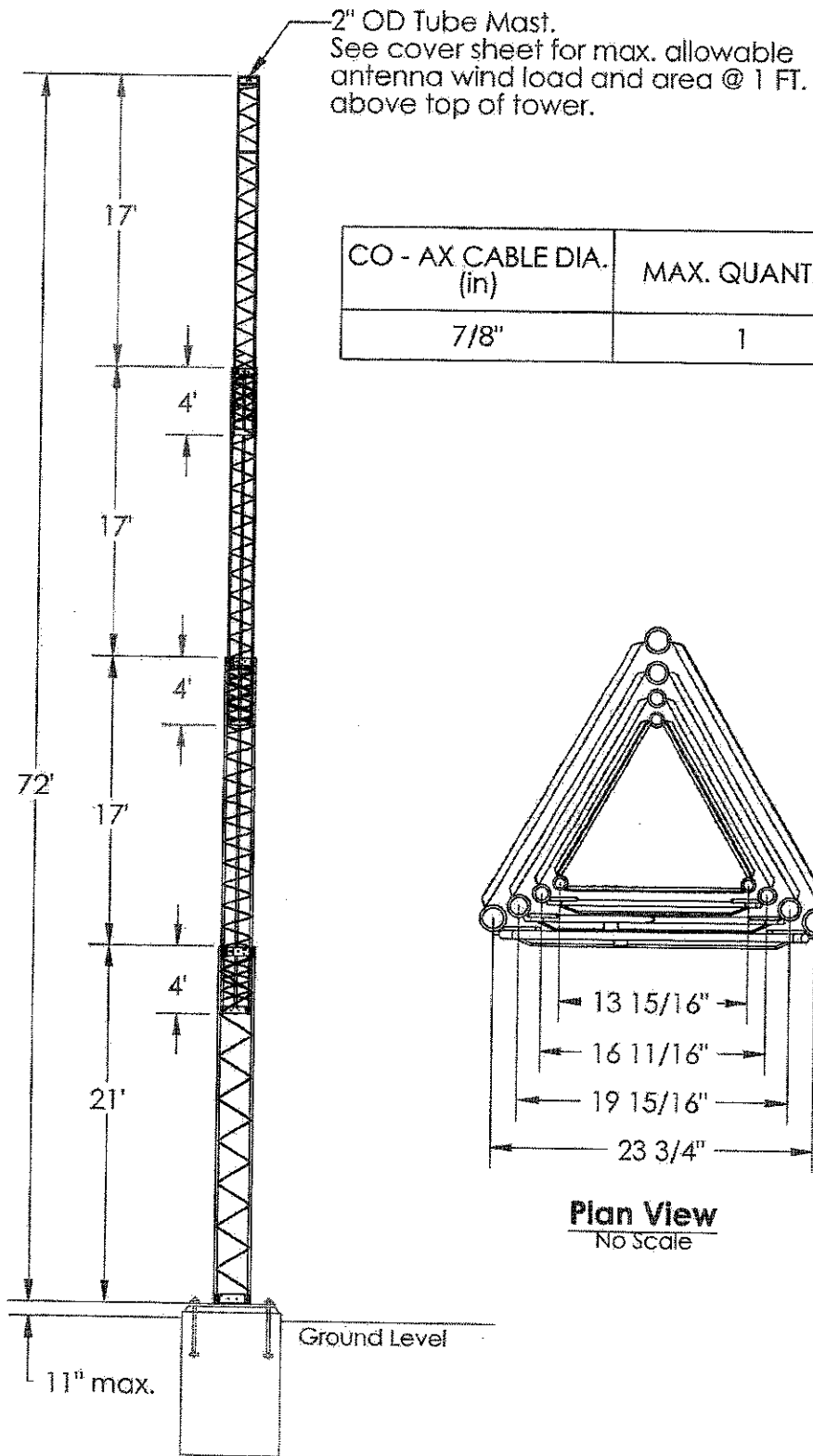
1099 W. Ropes Ave - Woodlake, CA 93285 - Ph: 559-564-6000

RF/MC 12/21/09

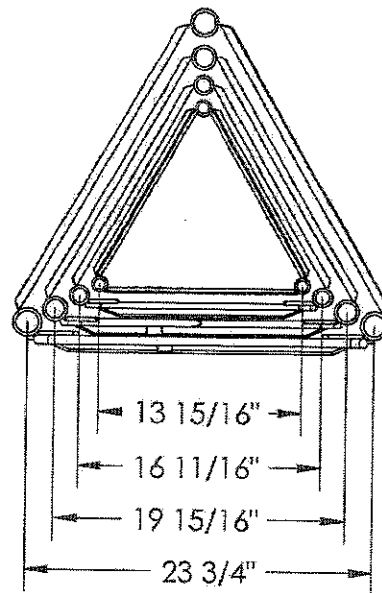


HDX-572 TOWER ELEVATION

SECTION NO.	NO. 8 BASE	NO. 7	NO. 6	NO. 5 TOP
LEG SIZE	PIPE 1.9" OD X 0.2" WALL	PIPE 1.66" OD X 0.191" WALL	PIPE 1.315" OD X 0.179" WALL	PIPE 1.05" OD X 0.154" WALL
DIAGONAL SIZE	5/8" SOLID ROD	1/2" SOLID ROD	7/16" SOLID ROD	3/8" SOLID ROD



CO - AX CABLE DIA. (in)	MAX. QUANTITY
7/8"	1



Plan View
No Scale

Elevation View
No Scale



General Notes:

Tower Model: HDX-572

1. All work shall be in conformance with the requirements of the "International Building Code - 2006" and "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures TIA/EIA-222-F", by the Telecommunications Industry Association.
2. The 2006 International Building Code requires the use TIA/EIA-222-F for tower design. TIA/EIA requires the use of the American Institute of Steel Construction, Specification for Structural Steel Buildings, June 1, 1989. (AISC 9th Edition). Consequently, all steel design was performed using the AISC 9th Ed.
3. All concrete shall have a minimum compressive strength of 2500 psi at 28 days unless noted otherwise. All concrete shall conform to the requirements of the International Building Code and referenced edition of ACI 318. Slump shall not exceed 4-1/2 inches.
4. Reinforcing steel shall be intermediate grade deformed bars conforming to ASTM A-615. No. 4 bars and smaller shall be Grade 40, No. 5 bars and larger shall be Grade 60. All reinforcing details, placement etc. shall conform to the requirements of the International Building Code and ACI 318. No welding allowed.
5. All reinforcing steel, anchor bolts, dowels and other inserts etc. shall be securely anchored in place, in the required positions, prior to pouring concrete.
6. Steel fabrication and erection shall conform to the requirements of the AISC Manual of Steel Construction and the Electronic Industries Association (as referenced in note 1 & 2 above).
7. All welding shall be performed by AWS certified welders for each type of weld used. (Using the GMAW (spray arc) welding process with ER70S-6 welding wire.
8. All tower section lift cables & guy cables shall be 7 x 19 Aircraft cable with the following minimum strengths:

<u>Cable diameter (in)</u>	<u>Minimum Strength (lbs)</u>
3/16	4200
1/4	7000
5/16	9800
3/8	14400
7/16	17600
1/2	22800

9. This tower analysis is based the antenna being installed at a height of one foot above the top of the tower. The wind load of the antenna(s) shall not exceed the load shown in these calculations. The Owner of the tower shall assume full liability for verification of the antenna loading.
10. This tower is designed to be used in its fully extended position.
11. The design of the hoist system is not with in the scope of these calculations and shall be designed by others.
12. This tower has not been designed to meet any twist or sway criteria.
13. The Owner shall verify that the quantity and size of waveguide / Coax cables match the values used in these calculations.
14. The engineering and design of the antennas are not with-in the scope of these calculations.
15. Installations on hills, escarpments and other special wind areas is not with-in the scope of these calculations.
16. US Tower Corp. recommends that the installation of this tower and its foundation be performed by a Professional, licensed Contractor with experience installing these types of structures.
17. The Contractor is responsible for conducting all construction in accordance with all Federal, State, OSHA, and Local laws and ordinances. The Contractor is also responsible for checking the site for underground facilities prior to the start of work.
18. US Tower Corp. and it's Engineers shall not be responsible for errors and omissions in the project not in conformance with these calculations and the Codes and Standards referenced here-in.
19. US Tower Corp. and it's Engineers accept no responsibility for field inspection during construction nor for the method of construction.
20. The Owner shall assume full responsibility & liability for the periodic inspection of all tower section lift cables & guy cables. Any cable with any sign of distress or excessive stretch shall be replaced immediately.
21. The information contained in these calculations is the property of US Tower Corp. and shall only be used to obtain an installation permit. Any other use shall be authorized by US Tower in writing prior to utilizing the information contained herein.

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Code & Material Specifications

Tower Model: HDX-572

Governing Codes, Stresses, and Materials (Min.)

<p>International Building Code TIA/EIA-222-F AISC Specification for Steel Bldgs ACI 318</p>	<p>2006 Edition (Occ. Cat. II)</p> <p>AISC 9th Edition 2005 Edition</p>
<p>Wind Loading (Governed by the TIA/EIA standard so used fastest mile speed in the calculations.)</p>	<p>Basic Wind Speed 90 mph, 3 second gust 76 mph, fastest mile (Exposure C Terrain)</p>
<p>Structural Steel (All plates, bars, angles)</p>	<p>ASTM A36 (F-y = 36 ksi) (Min. F-y for plates - 42 ksi)</p>
<p>Structural Pipe</p>	<p>ASTM A53 Gd. B, A500 Gd. B (F-y = 50 ksi for tower legs)</p>
<p>Structural Tubing (HSS)</p>	<p>ASTM A500 Gd. B (F-y = 46 ksi)</p>
<p>Welding</p>	<p>AWS D1.1-04 GMAW w/ ER70S-6 wire</p>
<p>Hot-Dip Galvanizing Hardware</p>	<p>ASTM A123 ASTM A153</p>
<p>Bolts: Tower & Accessories</p>	<p>ASTM A325</p>
<p>Reinforced Concrete</p>	<p>2500 psi strength @ 28 days</p>
<p>Reinforcing Steel</p>	<p>ASTM A615 Gd. 40 for #4 & smaller dia. Gd. 60 for #5 & larger dia.</p>
<p>Anchor Rods</p>	<p>ASTM F1554 Gd. 36 or ASTM A-36</p>
<p>Foundation & Soils Lateral Bearing Pressure</p>	<p>1500 psf Bearing (TL = DL+LL) 100 psf/ft of depth</p>



Tower Section Properties

Code: EIA-222-F
All units are in lbs. and inches U.O.N.
Ice:

Note: If a tower section is not in the tower being designed then input 0 for section length and top & bottom lap lengths.

Density: (pcf)
Tower Height: (ft) 72

Tower Model: HDX-572

Tower section No.:	3	4	5	6	7	8	9	10
Lgth. of Section (ft):	0	0	21	21	21	21	0	0
Face width (C.L.):	8.95	11.47	13.94	16.68	19.94	23.725	28.25	34.25
Leg dia.:	1.05	1.05	1.05	1.315	1.66	1.9	2.375	2.875
Leg Thkn's: Spec.	0.154	0.154	0.154	0.179	0.191	0.2	0.218	0.276
Leg Thkn's: Design	0.143	0.143	0.143	0.166	0.178	0.186	0.203	0.257
Leg F-y:	50000	50000	50000	50000	50000	50000	50000	50000
Web dia.:	0.375	0.375	0.375	0.4375	0.5	0.625	0.75	0.875
Web F-y:	36000	36000	36000	36000	36000	38000	36000	36000
Web spacing: (leg unsupported length)	15	15	15	15	15	30	30	30
Web "phi":	37.3	28.37	22.55	18.46	14.15	30.35	26.12	19.8
Web clear width:	7.90	10.42	12.89	15.37	18.28	21.83	25.88	31.38
Web L:	9.93	11.84	13.96	16.20	18.85	25.29	28.82	33.35
No. of diagonal webs:	0	0	40	46	46	20	0	0
Top Lap (ft):	0	0	0	4	4	4	0	0
Bottom Lap (ft):	0	0	4	4	4	0	0	0
No. of additional lap diagonal webs:	0	0	7	13	13	4	0	0
Top plate depth:	4	4	5	4	6	8	8	8
Bot plate depth:	2.5	2.5	3	6	5	8	8	8
Plate Thkn's:	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375

Yellow = No Ice Condition

Green = With Ice Condition

Projected Areas Outside Lap Areas:

Section L (ft) Used:	0	0	17	13	13	17	0	0
Section PA (sqft/ft):	0.000	0.000	0.451	0.484	0.605	0.826	0.000	0.000
Section PA (sqft/ft):	0.000	0.000	0.451	0.484	0.605	0.826	0.000	0.000

Projected Areas at Laps:

Lap PA (sqft/ft):	Lap 3+4:	0.000	0.000	Lap 6+7:	1.968	1.968	Lap 9+10:	0.000
	Lap 4+5:	0.000	0.000	Lap 7+8:	2.365	2.365		0.000
	Lap 5+6:	1.295	1.295	Lap 8+9:	0.000	0.000		

Weight:

Legs:	0	0	93	137	189	229	0	0
Webs:	0	0	63	113	170	146	0	0
Anchors:	0	0	36	53	70	121	0	0
Misc.:	0	0	19	30	43	50	0	0
Total weight:	0	0	211	334	472	546	0	0
Total weight:	0	0	211	334	472	546	0	0

Note:

- Program assumes that all lap areas have x-braced webs in all tower sections. This will result in slightly conservative design values if x-braces are not in the lap area.



Tower Loading - Shear & Moments

Tower Model: HDX-572

Design per EIA-222-F

Wind velocity (mph): 76

Tower Section	Projected Area	Analysis height (ft)	z height (ft)	K-z	G-h	q-z (basic)	No ICE Condition		
							w (plf)	Shear (lbs)	Moment (ft-lbs)
Mast	0.670	73	73	1.255	1.187	14.79	14.8	15	15
3	0.000	72	72.5	1.252	1.187	14.79	0.0	15	30
3&4	0.000	72	72	1.250	1.187	14.79	0.0	15	30
4	0.000	72	72	1.250	1.187	14.79	0.0	15	30
4&5	0.000	72	72	1.250	1.187	14.79	0.0	15	30
5	0.538	55	63.5	1.206	1.187	14.79	11.4	208	1926
5&6	1.382	51	53	1.145	1.187	14.79	27.8	319	2982
6	0.571	38	44.5	1.089	1.187	14.79	10.9	461	8057
6&7	2.056	34	36	1.025	1.187	14.79	37.0	609	10199
7	0.692	21	27.5	1.000	1.187	14.79	12.1	767	19146
7&8	2.452	17	19	1.000	1.187	14.79	43.0	939	22560
8	0.914	0.1	8.55	1.000	1.187	14.79	16.0	1210	40724
8&9	0.088	0	0.05	1.000	1.187	14.79	1.5	1210	40845
9	0.000	0	0	1.000	1.187	14.79	0.0	1210	40845
9&10	0.000	0	0	1.000	1.187	14.79	0.0	1210	40845
10	0.000	0	0	1.000	1.187	14.79	0.0	1210	40845

Tower Section Weights: (No Ice)

Section	Weight (lbs)	Lift cable force (lbs)
Antenna	350	
Co-ax Wt:	22	(at top of tower)
3	0	0
4	0	0
5	211	633
6	334	1266
7	472	2567
8	546	4478
9	0	0
10	0	0

Note:

1. $1 \leq G-h \leq 1.25$
2. $1 \leq K-z \leq 2.58$

Co-ax Cable Data:

Cable dia. (in):	0.875	
No. of cables:	1	
C-a:	1.2	Table 3 - EIA
<u>Cable Proj. Area</u>	<u>0.088</u>	<u>(sq.ft. / ft.):</u>
Wght. / Cable (lb/ft):	0.30	
Total Wght (lb):	22	



Lift Cable Analysis

Note: All units are in pounds.

Tower Data:

No. of twr. sections: 4
 Antenna weight (lb): 350
 Ant. mount wt. (lb): 50
 Accessories wt. (lb): 0
 Coax cable wt. (lb): 22

Tower Section:	Section Wt. (lb):	Vert. Component of Guy Cables (lb):
5	211	0
6	334	0
7	472	0
8	546	0
9	0	0
10	0	0

Pulley Frame - Tower Section: 5

F-v: 422 (Force on Section)

Pulley Frame - Tower Section: 6

Cable dia (in): 0.25
 Cable MBS: 7000
 No. of faces w/cable: 1
 Sum F-v: 1266 (Force on Section)
 CF-tot: 633 (At Anchor in above section)
 CF-face: 633 (At Anchor in above section)
Cable Safety Factor: 11.06

Pulley Frame - Tower Section: 9

Cable dia (in): 0.25
 Cable MBS: 7000
 No. of faces w/cable: 1
 Bottom locked out? 1=y, 2=no: 2
 Sum F-v: NA (Force on Section)
 CF-tot: NA (At Anchor in above section)
 CF-face: NA (At Anchor in above section)
Cable Safety Factor: NA

Pulley Frame - Tower Section: 7

Cable dia (in): 0.25
 Cable MBS: 7000
 No. of faces w/cable: 1
 Bottom locked out? 1=y, 2=no: 2
 Sum F-v: 2567 (Force on Section)
 CF-tot: 1600 (At Anchor in above section)
 CF-face: 1600 (At Anchor in above section)
Cable Safety Factor: 4.38

Pulley Frame - Tower Section: 10

Cable dia (in): 0.25
 Cable MBS: 7000
 No. of faces w/cable: 1
 Sum F-v: NA (Force on Section)
 CF-tot: NA (At Anchor in above section)
 CF-face: NA (At Anchor in above section)
Cable Safety Factor: NA

Pulley Frame - Tower Section: 8

Cable dia (in): 0.25
 Cable MBS: 7000
 No. of faces w/cable: 3
 Sum F-v: 4478 (Force on Section)
 CF-tot: 3039 (At Anchor in above section)
 CF-face: 1013 (At Anchor in above section)
Cable Safety Factor: 6.91



Max. Allowable Antenna Area
Based on Leg Compressive Strength

Tower Model: HDX-572

Reference "Tower Section Property" sheets for section data.

Tower Section	Analysis Height (ft)	KL/r	F-a (psi)	Allow. 'P' (lbs)	Actual 'P' (lbs)	Allow. Mom. ft-lb	Actual Mom. ft-lb	P-antenna (lbs)
3	72	41.6	34136	13927	46	8859	30	4415
4	72	41.6	34136	13927	36	11354	30	5662
5	55	41.6	34136	13927	2126	13799	1926	625
6	38	32.9	35709	21449	7116	25311	8057	479
7	21	25.6	36903	30527	14161	42697	19146	444
8	0.1	44.3	33614	33666	25278	55086	40724	194
8	0		0	0	0		0	10000
9	0	35.0	35344	48901	20035	99694	40845	10000
9	0		0	0	0		0	10000
10	0	29.0	36356	76761	16525	189732	40845	10000
10	0		0				0	10000

Allow. Antenna Wind Load (lb): 194
 Allow. Antenna Area (sq. ft.): 6.8

NOTE:

1. Allow. Moment = 0.866 * (face width / 12)(allow. axial load - lift cable force / 3)
2. Allow. Antenna Wind Load = (allow. mom. - actual mom.) / (antenna hgt - analysis hgt.)
3. Allow. Antenna Area = allow. ant. wind load / (1.3 * K-z * G-h * q-z)
4. P-antenna column - the value of 10000 means that this tower section was not used on this tower.
5. The tower height is shown in analysis height until you get down to the actual first tower section used in this tower.



Max. Allowable Antenna Area
Based on Webs - Outside Lap Areas

Tower Model: HDX-572

Reference "Tower Section Property" sheets for section data.

Tower Section	Analysis Height (ft)	Web 'L' (in)	KL/r	F-a (psi)	Allow. 'P' (lbs)	Actual 'P' (lbs)	Allow. F-h (lbs)	Actual Shr (lbs)	P-antenna (lbs)
3	55	11.25	96.0	13606	1503	11	1195	15	2056
4	55	13.04	111.2	11677	1290	10	1135	15	1951
5	55	15.09	128.8	12002	1326	130	1224	208	1912
6	38	17.58	128.6	12036	1809	281	1716	461	2511
7	21	20.56	131.6	11495	2257	457	2189	767	3023
8	0.1	27.49	140.8	10049	3083	810	2660	1210	3398
8	0		140.8	10049	3083				
9	0	31.46	134.2	11049	4881	778	4383	1210	10000
9	0		134.2	11049	4881				
10	0	36.40	133.1	11235	6756	743	6356	1210	10000
10	0		133.1	11235	6756				

Allow. Antenna Wind Load (lb): 1912
Allow. Antenna Area (sq. ft.): 66.8

NOTE:

1. Allow. F-h = allow. P * cos(phi), = Allow. shear in one face of tower.
2. Allow. Antenna Wind Load = 2 * cos(30) * allow. F-h - actual shear.
3. Allow. Antenna Area = allow. ant. wind load / (1.3 * K-z * G-h * q-z)
4. P-antenna column - the value of 10000 means that this tower section was not used on this tower.
5. The tower height is shown in analysis height until you get down to the actual first tower section used in this tower.



Max. Allowable Antenna Area
Based on Webs in Lap Areas

Tower Model: HDX-572

Reference "Tower Section Property" sheets for section data.

Tower Section	Analysis Height (ft)	Web 'L' (in)	KL/r	F-a (psi)	Allow. 'P' (lbs)	Actual 'P' (lbs)	Allow. Mom ft-lb	Actual Mom ft-lb	P-antenna (lbs)
3	72	11.25	96.0	17966	3968	0	21812	30	10891
4	72	13.04	111.2	15337	1694	5	10267	30	5119
5	55	15.09	96.6	17868	3947	151	24420	1926	1184
6	38	17.58	96.5	17891	5379	613	33502	8057	707
7	21	20.56	98.7	17518	6879	1425	43145	19146	453
8	0.1	27.49	105.6	16344	10029	3406	55115	40724	10000
8	0								
9	0	31.46	100.7	17185	15184	3283	89613	40845	10000
9	0								
10	0	36.40	99.8	17327	20838	#DIV/0!	0	40845	10000
10	0								

Allow. Antenna Wind Load (lb): 453
Allow. Antenna Area (sq. ft.): 15.8

NOTE:

1. Allow. Moment = allow. P * cos(phi) * 8 * cos(30).
2. Allow. Antenna Wind Load = (allow. mom. - act. mom.) / (antenna hgt. - analysis hgt.).
3. Allow. Antenna Area = allow. ant. wind load / (1.3 * K-z * G-h * q-z)
4. P-antenna column - the value of 10000 means that this tower section was not used on this tower or the tower section is the base section.)
5. The tower height is shown in analysis height until you get down to the actual first tower section used in this tower.

Maximum Antenna Wind Load and Wind Area:

(Ref. this sheet and the previous 2 sheets.)

Allow. antenna Wind Load (lb): 194
 Allow. antenna Area (sq. ft.): 6.8 (w/ appurtenance force coefficient = 1.3)
 Allow. antenna Area (sq. ft.): 6.3 (w/ appurtenance force coefficient = 1.4, i.e. all flat members)
 Allow. antenna Area (sq. ft.): 11.0 (w/ appurtenance force coefficient = 0.8, i.e. all round members)



Tower Section No. 5 - Analysis

Tower Model: HDX-572

Shear (lb):	403	Moment (ft-lb):	5619
Lift Cable Force (lb):	633	Panel Height (in):	15
Face Width (in):	13.94	Lap length (ft):	4
		Lap X Braced? Y=1, N=2	1

Web Analysis:

Dia. (in):	0.375
F-y (psi):	36000
Area(in ²):	0.110
L (in):	15.09
r (in):	0.094
K:	0.8
KL/r:	128.8

C-c:	126.1
Actual f-a (psi):	2279
Allow. F-a (psi):	12002

<u>Web CSI:</u>	<u>0.19</u>
Weld size (in):	0.188
Weld L (in):	0.5
Act. weld 'F' (lb/in):	504
Allow. weld 'F' (lb/in):	3722
<u>Weld CSI:</u>	<u>0.14</u>

Web Analysis - Lap Area

Dia. (in):	0.375
F-y (psi):	36000
Area (in ²):	0.110
L (in):	15.09
r (in):	0.094
K:	0.6
KL/r:	96.6

C-c:	126.1
Actual f-a (psi):	5115
Allow. F-a (psi):	17868

<u>Web CSI:</u>	<u>0.29</u>
Weld size (in):	0.188
Weld L (in):	0.5
Act. weld 'F' (lb/in):	1130
Allow weld 'F' (lb/in):	3722
<u>Weld CSI:</u>	<u>0.30</u>

Lap shear (lbs): 1405

Leg Analysis:

Dia. (in):	1.05
Thk. (in):	0.14322
F-y (psi):	50000
Area(in ²):	0.408
L (in):	15
r (in):	0.325
K:	0.9
KL/r:	41.6

C-c:	107.0
Leg Comp. load (lb):	5796
Actual f-a (psi):	14206
Allow F-a (psi):	34136

<u>Leg CSI:</u>	<u>0.42</u>
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Tower Section No. 6 - Analysis

Tower Model: HDX-572

Shear (lb):	656	Moment (ft-lb):	15054
Lift Cable Force (lb):	1266	Panel Height (in):	15
Face Width (in):	16.68	Lap length (ft):	4
		Lap X Braced? Y=1, N=2	1

<u>Web Analysis:</u>		<u>Web Analysis - Lap Area</u>		Lap shear (lbs):	3763
Dia. (in):	0.4375	Dia. (in):	0.4375		
F-y (psi):	36000	F-y (psi):	36000		
Area(in ²):	0.150	Area (in ²):	0.150		
L (in):	17.58	L (in):	17.58		
r (in):	0.109	r (in):	0.109		
K:	0.8	K:	0.6		
KL/r:	128.6	KL/r	96.5		

C-c:	126.1	C-c:	126.1
Actual f-a (psi):	2655	Actual f-a (psi):	8946
Allow. F-a (psi):	12036	Allow. F-a (psi):	17891
<u>Web CSI:</u>	<u>0.22</u>	<u>Web CSI:</u>	<u>0.50</u>
Weld size (in):	0.25	Weld size (in):	0.25
Weld L (in):	0.625	Weld L (in):	0.625
Act. weld 'F' (lb/in):	639	Act. weld 'F' (lb/in):	2152
Allow. weld 'F' (lb/in):	4950	Allow. weld 'F' (lb/in):	4950
<u>Weld CSI:</u>	<u>0.13</u>	<u>Weld CSI:</u>	<u>0.43</u>

Leg Analysis:

Dia. (in):	1.315
Thk. (in):	0.16647
F-y (psi):	50000
Area(in ²):	0.601
L (in):	15
r (in):	0.410
K:	0.9
KL/r:	32.9

C-c:	107.0
Leg Comp. load (lb):	12928
Actual f-a (psi):	21523
Allow F-a (psi):	35709
<u>Leg CSI:</u>	<u>0.60</u>



Tower Section No. 7 - Analysis

Tower Model: HDX-572

Shear (lb):	962	Moment (ft-lb):	29447
Lift Cable Force (lb):	2567	Panel Height (in):	15
Face Width (in):	19.94	Lap length (ft):	4
		Lap X Braced? Y=1, N=2	1

Web Analysis:

Dia. (in):	0.5
F-y (psi):	36000
Area(in ²):	0.196
L (in):	20.56
r (in):	0.125
K:	0.8
KL/r:	131.6

C-c:	126.1
Actual f-a (psi):	2916
Allow. F-a (psi):	11495

Web CSI: 0.25

Weld size (in):	0.25
Weld L (in):	0.625
Act. weld 'f' (lb/in):	916
Allow. weld 'F' (lb/in):	4950

Weld CSI: 0.19

Web Analysis - Lap Area

Dia. (in):	0.5
F-y (psi):	36000
Area (in ²):	0.196
L (in):	20.56
r (in):	0.125
K:	0.8
KL/r:	98.7

C-c:	126.1
Actual f-a (psi):	12620
Allow. F-a (psi):	17518

Web CSI: 0.72

Weld size (in):	0.25
Weld L (in):	0.625
Act. weld 'f' (lb/in):	3965
Allow weld 'F' (lb/in):	4950

Weld CSI: 0.80

Lap shear (lbs): 7362

Leg Analysis:

Dia. (in):	1.66
Thk. (in):	0.17763
F-y (psi):	50000
Area(in ²):	0.827
L (in):	15
r (in):	0.528
K:	0.9
KL/r:	25.6

C-c:	107.0
Leg Comp. load (lb):	21319
Actual f-a (psi):	25772
Allow F-a (psi):	36903

Leg CSI: 0.70



Tower Section No. 8 - Analysis

Tower Model: HDX-572

Shear (lb):	1405	Moment (ft-lb):	55086
Lift Cable Force (lb):	4478	Panel Height (in):	30
Face Width (in):	23.725	Lap length (ft):	4
		Lap X Braced? Y=1, N=2	1

Web Analysis:

Dia. (in):	0.625
F-y (psi):	36000
Area(in ²):	0.307
L (in):	27.49
r (in):	0.156
K:	0.8
KL/r:	140.8

C-c:	126.1
Actual f-a (psi):	3063
Allow. F-a (psi):	10049

<u>Web CSI:</u>	<u>0.30</u>
Weld size (in):	0.25
Weld L (in):	0.625
Act. weld 'F' (lb/in):	1504
Allow. weld 'F' (lb/in):	4950
<u>Weld CSI:</u>	<u>0.30</u>

Web Analysis - Lap Area

Dia. (in):	0.625
F-y (psi):	36000
Area (in ²):	0.307
L (in):	27.49
r (in):	0.156
K:	0.6
KL/r:	105.6

C-c:	126.1
Actual f-a (psi):	9558
Allow. F-a (psi):	16344

<u>Web CSI:</u>	<u>0.58</u>
Weld size (in):	0.25
Weld L (in):	0.625
Act. weld 'F' (lb/in):	4692
Allow weld 'F' (lb/in):	4950
<u>Weld CSI:</u>	<u>0.95</u>

Lap shear (lbs): 7362

Leg Analysis:

Dia. (in):	1.9
Thk. (in):	0.186
F-y (psi):	50000
Area(in ²):	1.002
L (in):	30
r (in):	0.610
K:	0.9
KL/r:	44.3

C-c:	107.0
Leg Comp. load (lb):	33666
Actual f-a (psi):	33614
Allow F-a (psi):	33614

<u>Leg CSI:</u>	<u>1.00</u>
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Tower Base Connection

Base Connection:

#8 Base Section

HDX-572

Shear (lbs): 1405
 Moment (ft-lbs): 55086
 Lift Cable force (lbs): 4478
 Face width (in): 23.725

Leg Comp. (lbs): 33666
 Leg Tension (lbs): 30681
 Leg O.D. (in): 1.9

Tab Plate to Leg:

Plate width (in): 2.5
 Plate height (in): 13
 Plate Thkn. (in): 0.375

C.L. bolt to leg (in): 1.25
 Bolt dia. (in): 0.75 (A325N)
 No. of bolts: 6
 Dist. between bolts: 2

Bolt force (lbs): 7712
 Allow. bolt shr. (lbs): 12370
 Br'g check OK
 Bolt CSI: 0.62

Weld tab to leg: Weld size (in): 0.188
 Moment (in-lbs): 74066
 Weld S-x (in²): 56.333
 Weld stress (lbs/in): 1858
 Allow Stress (lbs/in): 3722

Weld CSI: 0.50

4x4x1/2 Angle to Base:

F-y (psi): 42000
 S-x (in³): 1.97
 Area (in²): 3.75

KL/r: 3
 F-a (psi): 33384
 P-allow (lb): 125191
 Moment (in-lbs): 56603

Bolt ecc. (in): 1.57
 Shear ecc. (in): 8
 Distance from first bolt to base plate: 3

F-b (psi): 33600
 Angle CSI: 0.93

Weld tab to base: Weld size (in): 0.375
 Weld S-x (in²): 13.330
 Weld stress (lbs/in): 4341
 Allow Stress (lbs/in): 7425

Moment (in-lbs): 51916
 Weld CSI: 0.58

Base Plate Assembly:

Top Plate:	Bot. Plate:
W (in): 6.000	W (in): 5.750
L (in): 6.000	L (in): 5.750
Thkn. (in): 0.500	Thkn. (in): 0.500

Concrete bearing: f-c (psi): 2000
 f-p (psi): 1018
 F-p (psi): 1867 CSI: 0.55

Combined Plate Properties:

Top Plate:	Bot. Plate:	Centroid:	0.505
Area: 3.0000	Area: 2.8750	I (in ⁴):	0.489
Y-bar (in): 0.7500	Y-bar (in): 0.2500	C (in):	0.505

Moment - from comp (in-lbs): 24198
 f-b (psi): 24984
 F-b (psi): 36000
 CSI: 0.69

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Anchor Bolt Anchorage

Tower Model: HDX-572

ACI 318-05 App. D. Tension Anchorage Calculations - Cast in Place Straight Anchors

All units are pounds and inches unless noted otherwise. Date: 12/22/2009

Anchor Description: 2-1" dia. F1554 Std. 85 anchor rods

Concrete f'c (psi): 2800
Embedment: 21
Is this in a moderate or high seismic area? (Yes = 0.75, No = 1.0) ACI D.3.3 doesn't require this if loads don't include seismic. Factored Req'd Tens. Load (lb): 40,442 (LRFD value)

20.71 If embedment x 1.5 is >= 3 of the edge distances then use h-ef = the largest of the 3 edge distances / 1.5 App. D. Section D5.2.3.
Edge Distances:
c-#1: 24.08
c-#2: 34.89
c-#3: 18.44
c-#4: 41.56
No. of Anchors n: 2
Anchor dia: 1
No. of threads l/in: 8
Anchor fy (psi): 38500
Anchor fu (psi): 53000
phi: 0.75
phi = 0.85 if material used is not ductile

Concrete Breakout Input (Tension):
A-Ncc: 3659.5
A-Nc: 3267.0
ecc: 0.0525
Adjf-ec-N: 0.998
Adjf-ec-N: 0.967
Adjf-c-N: 1.25
phi: 0.7
Use 0.75 if supplemental reinforcement is provided
Use 0.70 is supplemental reinforcement is not provided
Concrete Pullout Input:
A-head: 1.581
Area of anchor bolt head (Input 0 if plate washer is used)
Width of plate washer at embed end of anchor
Length of plate washer at embed end of anchor
Area of plate washer minus rod area
(Plate thkn's must be >= 0.5 * bolt dia.)
Assumed cracked at service load levels
Can use 1.4 if is uncracked
Can use 0.75 if supplemental reinforcement is provided
Can use 0.70 is supplemental reinforcement is not provided

Steel Strength of Anchor in Tension (ACI D5.4)
A-se: 0.806
Effective anchor area (in^2)
N-se: 70266
Concrete Breakout Strength of Anchor in Tension (ACI D5.2)
N-b: 113053
ACI D5.2.2
N-cbg: 115485

Anchor Pullout Strength (ACI D6.3)
N-p: 30020
N-pn: 84056
Concrete Side-Face Blowout, Tension
N-sbg: 121137
Note: If Cat 1 is > 0.4 lb-ef than blowout does not occur.
Anchor Design Strength - LRFD
Steel: 62700
Breakout: 80829
Pullout: 59839
Blowout: 84796
(Note: If supplemental reinforcement is provided then the concrete strength limit does not apply, App. D D.4.2.1.)

LRFD Design Strength: 52700 Lbs
ASD Design Strength: 37643 Lbs
Design Controlled By: Steel Tension
Min. center to center of anchor spacing (in): 4
Min. edge distance is same as min. cover per ACI 7.7. ACI D.8.1
Notes:
1. For normal weight concrete only.
2. Anchors shall be either a headed bolt or have nuts and a bearing plate at the embed end as indicated above.
3. ACI Section D.5.2.3 is not included in this spreadsheet. (i.e. End of wall applications are not covered.)
4. If the design is controlled by concrete failure (i.e. non-ductile failure) then the Design Strengths controlled by concrete must be at least 2.5 times the factored forces transmitted by the attachment. (2006 IBC 1903.1.16) Alternatively, the steel anchor or the attachment that the anchor is connecting to the structure shall be designed so that the attachment will undergo ductile yielding at a load level corresponding to anchor forces no greater than the design strength of the anchors determined above. If "Steel Tension" controlled above then the connection is considered ductile and no further adjustments etc. are required. (Also see note 6.)
5. Any supplemental reinforcing shall have fy = 60,000 psi min.
6. Per ACI D.3.3 if anchor design does not include seismic loads then the design does not have to be controlled by steel ductility.



Foundation Design

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Tower Model: HDX-572

Tower Reactions:

Moment (ft-lbs): 55086
 Shear (lbs): 1405
 Lift Cable Force (lbs): 4478
 Modification Factor: 1.3
 (Req'd by EIA-F 3.1.16.1)
 Tower Face Width(in): 23.725
 Distance from ground
 to top of concrete (ft): 0.667
 Square ft'g width (ft): 5.5
 Footing depth (ft): 7.5

H (ft): 39.87
 S-1: 500
 (Increased S1 by 2x per IBC 1804.3.1 for isolated footing not adversely affected by 1/2" motion at ground surface.)
 A: 1.099
Depth req'd (ft): 7.5

Foundation Design Reactions:

Moment (ft-lbs): 72830
 Shear (lbs): 1827
 Lift Cable Force (lbs): 5821
 Concrete f-c' (psi): 2500

Soil Design Parameters:

Allow. Lateral bearing (psf/ft): 100
 Allow. Soil bearing (psf): 1500
 Design is for non-constrained condition per IBC reqmt's.
Allow. bearing (psf): 3450 Increased 20% for ea.
Act. bearing (psf): 1273 ft. of depth

Max. Moment in Footing (ft-lbs): 82090

Check concrete tensile stress: (neglect outer 2" of footing)

S-x (in³): 39721
 f-t (psi): 40
 F-t (psi): 138
CSI: 0.29

CSI is < 1.0 therefore reinforcing is not req'd. Use minimal reinforcing.
 rho: 0.0018
 A-s req'd (sq. in.): 7.84
 Rebar dia (in): 0.875
 No. of bars provided: 16
 A-s provided (sq. in.): 9.62 OK

Anchor Bolt Anchorage Design Load:

Anchorage Tension Design Force (lbs): 40482 (LRFD level force)
 (See Anchor Bolt Anchorage page for anchorage design)

Summary:

Use foundation 5.5 ft. square by 7.5 ft. deep (below undisturbed soil).
 Reinforce foundation with 16 #7 vertical bars (total) with #3 ties at 12" on center, and 3 ties in the top 5".
 Use bundles of 2 vertical bars at each corner of the foundation and at the middle of each face of the fdn.
 Use 1" dia. ASTM F1554 Gd. 36 or ASTM A-36 galvanized anchor bolts, 27" long.
 Total of 6 anchor rods, two near each tower leg with a minimum embedment of 21". Use heavy hex nuts.



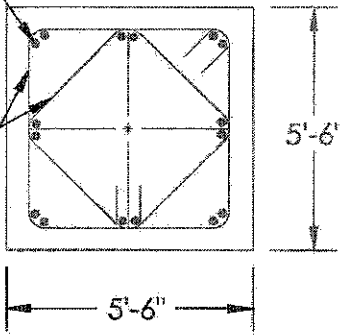
HDX-572 FOUNDATION

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SHALL NOT BE USED OR REPRODUCED OR ITS CONTENTS DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE PRIOR WRITTEN CONSENT OF US TOWER CORPORATION.

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- ① 16 - #7 Vertical Bars (2 bar bundles)

- ② #3 Ties @ 12" O.C. (max)
- ③ 3 in Top 5"



Plan View - Reinforcing
No Scale

Foundation has been designed to accommodate the following loads:

Overturing Moment = 55.09 ft - kips
Base Shear = 1.41 kips
Structure Weight = 4.48 kips

Soil and Concrete Design Parameters.

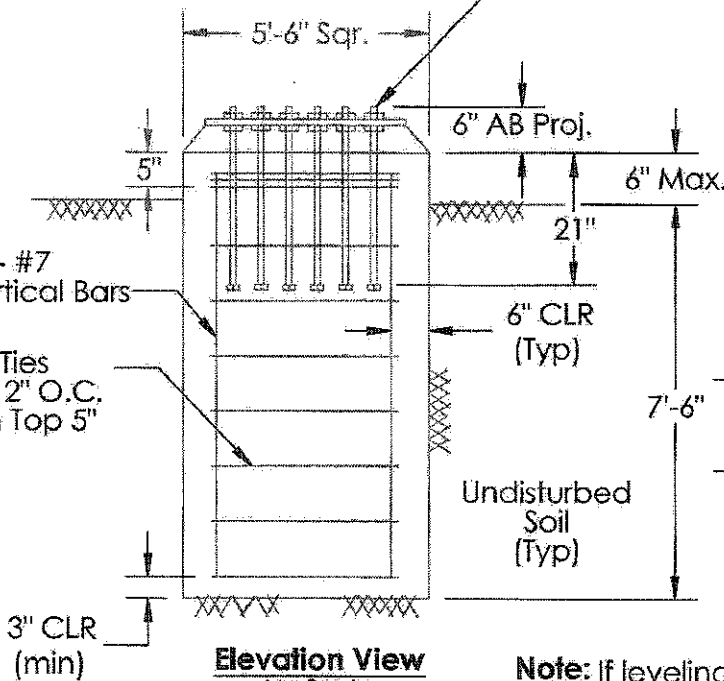
Allowable Foundation Pressure 1500 psf
(Increases based on depth)

Lateral Bearing Pressure 100 psf/ft
(Increases based on depth)

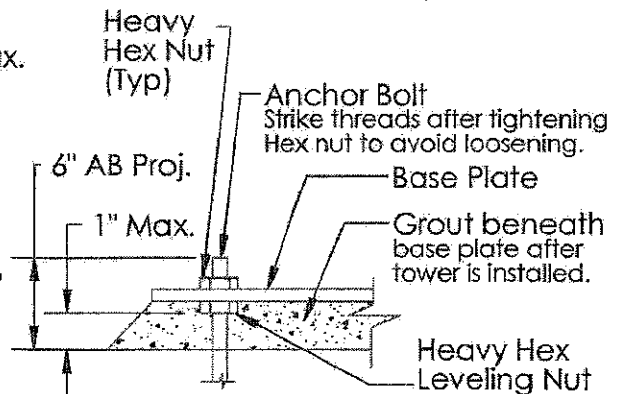
Concrete $f_c' = 2500$ psi min. @ 28 days.

1" \varnothing x 27" ASTM F1554 GD. 36 or ASTM A-36 headed anchor bolt, (6 total), w/21" min. embedment.

- ① 16 - #7 Vertical Bars
- ② #3 Ties @ 12" O.C.
- ③ 3 in Top 5"



Elevation View
No Scale



Grouting Detail

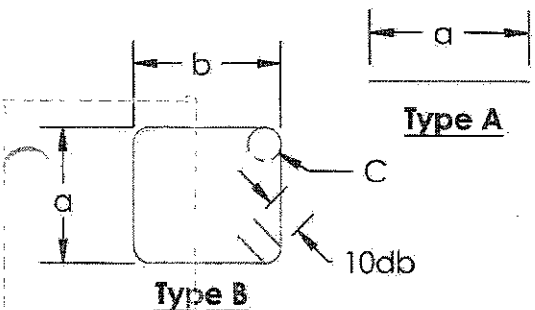
Extreme care should be taken to assure that all leveling nuts are level with respect to each other prior to installation of tower.

Note: If leveling nuts are not used, grout is not required, and reduce AB projection to 4".

Reinforcement Material List

Sym	Type	Bar Size	Dimensions				Qty
			a	b	c	10db	
①	A	#7	7' - 6" *	—	—	—	16
②	B	#3	4' - 6" *	4' - 6" *	2"	3.75"	11
③	B	#3	3' - 2" *	3' - 2" *	2"	3.75"	11

* = Nominal dimension



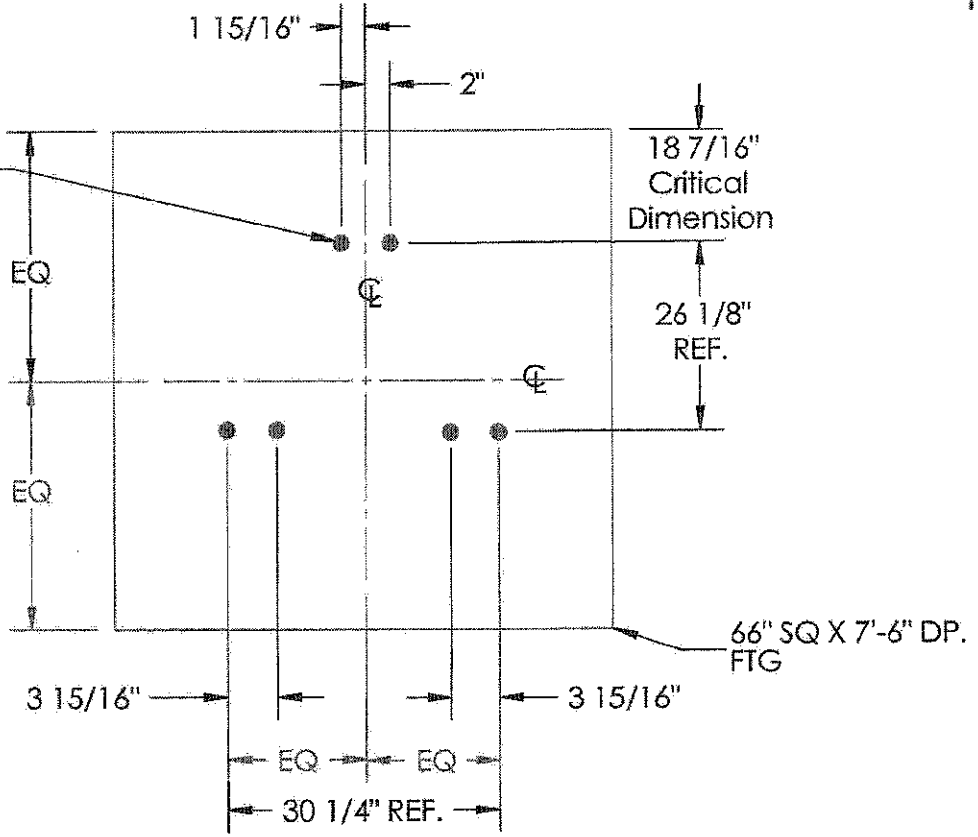


HDX-572 FOUNDATION

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1" Ø X 27" Long
Anchor Bolt (TYP. OF 6)
See previous sheet.



Plan View - Anchor Bolt Layout
No Scale

"REF" dimensions are provided for reference only. Use the tower base plate assembly to locate anchor bolts.

Foundation Notes:

- All concrete shall have a minimum compressive strength of 2500 psi at 28 days unless noted otherwise. All concrete shall conform to the requirements of the International Building Code and the referenced edition of ACI 318. Slump shall not exceed 4-1/2 inches.
- Reinforcing steel shall be intermediate grade deformed bars conforming to ASTM A-615. No. 4 bars and smaller shall be Grade 40, No. 5 bars and larger shall be Grade 60. All reinforcing details, placement etc. shall conform to the requirements of the International Building Code and ACI 318. No welding allowed.
- All reinforcing steel, anchor bolts, dowels and other inserts etc. shall be securely anchored in place, in the required positions, prior to pouring concrete.
- The owner is responsible for verifying the soil at the site provides a minimum safety factor of 2.0 for the soil parameters used for this design.
- The allowable lateral soil bearing value was doubled as allowed per 2006 IBC section 1805.1 for isolated foundations not adversely affected by a 0.5" motion at the ground surface due to short term lateral loads.
- The foundation design does not consider the effects of ground water.
- The contractor is responsible for safe excavations in accordance with all Federal & Local laws and ordinances and OSHA requirements.
- The contractor is responsible for the correct placement of all anchor bolts. US Tower recommends that the anchor bolts be placed using the tower base plate assembly provided with the tower. (The base plate assembly can be provided before the tower if desired.)
- The foundation shall be one continuous pour such that cold joints do not develop. The contractor is responsible for verifying adequate concrete coverage is provided for all reinforcement to avoid the potential for rebar corrosion. Concrete shall be consolidated using vibratory methods.
- The top of the footing shall be troweled level and smooth (or have a broom finish if preferred) in the area of the tower. Water shall be directed away from the tower base and anchor bolts outside of the tower area.
- See General Notes sheet (earlier in calcs) for additional information & requirements.

**ATTACHMENT 6- Certification Regarding Debarment, Suspension,
Ineligibility and Voluntary Exclusion Lower Tier Covered
Transactions**

**(BEFORE COMPLETING CERTIFICATION, READ THE INSTRUCTIONS ON
THE FOLLOWING PAGE WHICH ARE AN INTEGRAL PART OF THE
CERTIFICATION)**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98, Section 98.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211).

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this bid, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

- (2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this Proposal.

Print Name and Title of Authorized Representative

Signature Date

Provide either the DUNS Number _____ or the Cage Code _____

Instructions for Certification

1. By signing and submitting this Proposal, the prospective recipient of Federal assistance funds is providing the certification as set out below.
2. The certification in this class is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department of Labor (DOL) may pursue available remedies, including suspension and/or debarment.
3. The prospective recipient of Federal assistance funds shall provide immediate written notice to the person to whom this Proposal is submitted if at any time the prospective recipient of Federal assistance funds learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "Proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective recipient of Federal assistance funds agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the DOL.
6. The prospective recipient of Federal assistance funds further agrees by submitting this Proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may but is not required to check the List of Parties Excluded from Procurement or Non-procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the DOL may pursue available remedies, including suspension and/or debarment.

Attachment 7: System for Award Management (SAM) Helpful Information

<https://www.sam.gov/SAM/>

Federal regulations require vendors to be registered in the System for Award Management (SAM) in order to receive awards and payments on federal contracts. (FAR 52.204-7). SAM is a composite procurement system that replaces several government legacy systems, including the Central Contractor Registry (CCR) and serves as a common source of vendor data for government agencies. Registration in SAM is free, and extensive help files are available on the site to assist you with the registration process. SAM registration provides your company the added benefit of being visible to federal, state, and local agencies, as well as other contractors, searching for the products and services your company has to offer.

SAM is maintained by the General Services Administration, but personalized assistance with registration and other government procurement related matters is available through the nationwide network of Procurement Technical Assistance Centers or “PTACs”. To find the PTAC office nearest you, visit the national PTAC website at <http://www.aptac-us.org>. You can also find a listing of PTAC offices by state on the Defense Logistics Agency small business website at the following URL: <http://www.dla.mil/smallbusiness/pages/ptap.aspx>.

In Alaska, contact the Alaska Procurement Technical Assistance Center via their website at <http://www.ptacalaska.org>, or by calling (907) 274-7232 in Anchorage, or via their statewide toll-free number at 1(800) 478-7232. Alaska PTAC staff will assist you with your SAM registration and can answer any other questions you have regarding federal, state, or local procurement opportunities and requirements.

Vendors registered in SAM:

Please provide your business name, Data Universal Numbering System (DUNS®) number, Tax ID, and DoD issued CAGE code to enable us to pull your information for our records.

Vendors NOT registered in SAM:

You will first need to obtain a DUNS® number from Dun & Bradstreet (DnB) before registering. A DUNS® number is required for SAM registration and is free for vendors pursuing federal contracts. You can apply for a DUNS® number online through the DnB website at <http://www.dnb.com>; or by using the webform located at <https://fedgov.dnb.com/webform>

Issuance and activation of a DUNS® number is usually completed within 24 hours. If you need assistance with obtaining a DUNS® number, please contact your local PTAC office.

**28 CFR 69-APPENDIX A TO PART 69
CERTIFICATION REGARDING LOBBYING**

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

CERTIFIED BY: (type or print)

TITLE:

(signature)

(date)

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

<p>1. Type of Federal Action: a. contract _____ b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance</p>	<p>2. Status of Federal Action: a. bid/offer/application _____ b. initial award c. post-award</p>	<p>3. Report Type: a. initial filing _____ b. material change</p> <p>For material change only: Year _____ quarter _____ Date of last report _____</p>
<p>4. Name and Address of Reporting Entity: _____ Prime _____ Subawardee Tier _____, if Known:</p> <p>Congressional District, if known:</p>	<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p> <p>Congressional District, if known:</p>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description:</p> <p>CFDA Number, <i>if applicable</i>: _____</p>	
<p>8. Federal Action Number, if known:</p>	<p>9. Award Amount, if known:</p> <p>\$ _____</p>	
<p>10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i></p>	<p>b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i></p>	
<p>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: _____</p> <p>Print Name: _____</p> <p>Title: _____</p> <p>Telephone No.: _____ Date: _____</p>	
<p>Federal Use Only</p>	<p>Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)</p>	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503

ATTACHMENT 8
28 CFR Part 67-Certification Regarding Drug-Free Workplace Requirements

This certification is required by the regulations that the grantee certifies that it will or will continue to provide a drug-free workplace by.

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about—

- (1) The dangers of drug abuse in the workplace;
- (2) The grantee's policy of maintaining a drug-free workplace;
- (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
- (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—

- (1) Abide by the terms of the statement; and
- (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within ten calendar days after receiving notice under paragraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under paragraph (d)(2), with respect to any employee who is so convicted—

- (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

Place of Performance (Street address, city, county, state, zip code)

Check _____ if there are workplaces on file that are not identified here.

Print Name and Title of Authorized Representative

Signature

Date