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**Foundation for Tower Antenna
Salem NH Fire Department
Sealed Bid #2019-032
Town of Salem, NH**

November 2019

SALEM PURCHASING
Christine Wholley Purchasing Agent
603-890-2090 fax 603-890-2091
Cawholley@salemnh.gov

Chris Dillon, Town Manager
Prepared for and in coordination with the
Town of Salem NH Fire Department
Jeffrey Emanuelson, Fire Marshall
603-890-2035
jemanuelson@salemnh.gov

**SALEM, NEW HAMPSHIRE
COMPETITIVE SEALED BIDS FOR
Foundation for South Fire Station Antenna
November 2019-032**

It is the intent of the Town of Salem, New Hampshire to engage the services of a qualified firm to provide the Town with the following products(s) or services to be purchased: **“Antenna Tower foundation”**

Bids shall be submitted on the enclosed bid sheet (if applicable) to the listed minimum specifications. If you find these specifications to be unreasonably restrictive, please contact Fire Marshall Jeffrey Emanuelson immediately for clarification or alternative specifications. If no exception is noted, the specifications as written will be considered acceptable

Sealed bids must contain (1) one original **and** (1) one copy, and be received no later than **December 5, 2019, before 11:00am** from interested firms, to be eligible for consideration by the town. Each bid must be submitted in a sealed envelope which is clearly marked: **“Bid #2019-032 “Tower Antenna Foundation”**, at Salem Town Hall, **Attention: Christine Wholley, Purchasing Agent**, and delivered to the Building Department, upstairs, at the following address:

Salem Town Hall
ATTN: Christine Wholley
33 Geremonty Drive
Salem NH 03079

Upon receipt, all sealed bids and correspondence relating to this ITB, shall be date and time stamped. All sealed bids received will be considered confidential and not available for public review until after the bid opening on December 5, 2019 at 11:00am. Late bids will not be considered.

Please visit our website to download a copy of Bid #2019-032 at www.townofsalemnh.org Finance-Purchasing/bids-proposals. Copies will not be faxed or emailed. Qualified Firms requiring additional information or clarification relative to the contents of the bid may direct inquiries to Christine Wholley, Purchasing Agent, at 603-890-2090 or cawholley@salemnh.gov Monday-Wednesday 8:30am-1:00pm.

The Town reserves the right to reject any or all bids or any part thereof, to waive any informality in the bidding, and to accept the bid considered to be in the best interest of the Town. The Town also reserves the right to conduct reasonable negotiations with low bidders and sole bidders. Failure to submit all information may disqualify a bid.



Town of Salem, New Hampshire
Purchasing Department
33 Geremonty Drive
Salem, New Hampshire 03079
PH (603) 890-2090 FAX (603) 890-2091

Notice To Qualified Firms

- *Do not alter bid documents in any way.**
- *All bid documents must be filled out to be considered.**

If you wish to offer comments, additional information or alternate bids, please do below or on a separate sheet and attach it to the bid sheet.

- _____
- _____
- _____
- _____

The purpose of the attached specifications is to define minimum requirements only. They are not meant to be restrictive. All manufacturers meeting or surpassing these minimum specifications are invited to submit a bid/proposal.

Please don't hesitate to call me if you need any additional information.
Christine Wholley, Purchasing Agent (603) 890-2090

For questions or clarification on specifications please contact
Fire Marshall Jeff Emanuelson (603) 890-2035

The Town of Salem reserves the right to reject any and all sealed bids/proposals that it deems non-conforming to the specifications enclosed. All information must be filled out correctly for consideration.

DO NOT FAX BIDS, THEY WILL NOT BE ACCEPTED.



BID SPECIFICATIONS (PAGES 4-7)

The Proposal must meet or exceed the specifications listed.

- Antenna Tower Foundation Trench approx... 75' to tower base, 30" deep.
- Excavate to a depth of 7'3", 11'x11' wide, compacted and sloped accordingly
- Add 3" of crushed stone, form footing to spec 9'6"x9'6"x8"
- Install 2 rows of ¾" #6 rebar, with 32 L bends of ¾" #6 rebar
- Secure L bends in box and pour concrete to spec 18" thick
- Strip footings and begin rebar layout to spec:
 - 12 rows of ½" #4 rebar 6" on center
 - ½" hook rods on opposite sides 4'6" wide with straight rods connecting hook rods.
 - Top 2 rows need to be 2" on center, with a minimum of 3" clearance to top of base
 - Build forms from top of footing 5'6" tall, 5'x5' diameter
 - Brace forms and backfill install 1-1/2" high tensile tie rods x 60" long with 9-1/2" bolt projection with template
 - Pour base with concrete to spec
 - Use non-ferrous and non-shrink grout with a minimum compressive strength of 5,000psi, tapered at a 45* angle

90FT W060 AWSS TOWER

TOWER KIT NUMBER	DESIGNATOR	S. H40-20803 D90					
MATERIALS							
LEG	SR 1 3/4	SR 1 3/4	SR 1 1/2	SR 1 1/4	SR 1	SR 1	SR 1
HORIZONTAL	SR 0 3/4	SR 0 3/4	SR 0 3/4	SR 0 3/4	SR 0 3/4	SR 0 3/4	SR 0 3/4
DIAGONAL	SR 0 7/8	SR 0 3/4	SR 0 3/4	SR 0 3/8	SR 0 3/8	SR 0 3/8	SR 0 3/8
SECTION WT. (lb)	SR 0	SR 0	SR 0	SR 0	SR 0	SR 0	SR 0
DIAGONAL BOLTS							
SIDE BOLTS							

Modelo: 350W

$$\frac{EL}{c-c} = 1.50$$
$$\frac{EL}{c-c} = \frac{80.000}{1.50}$$
$$\frac{EL}{e-e} = 1.50$$
$$\frac{EL}{e-e} = 1.50$$
$$\frac{EL}{c-c} = 50.00'$$
$$\frac{EL}{e-c} = \frac{40.940}{2.00}$$
$$\frac{EL}{e-c} = \frac{30.000}{2.20} = 13.64$$
$$\frac{EL}{E-C} = \frac{20.00}{2.60}$$
$$\frac{EL - 19.00'}{FS = 2.15}$$
$$\frac{EL - Q'}{C - 100}$$

LEG. FOUNDATION 1995

Max. Downward = 50.12 (Kjps)
Max. Uplift = 48.00 (Kjps)
Max. Shear = 1.82 (Kjps)

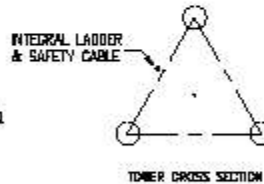
GLOBAL FOUNDATION LISTS

Max. Axial = 3.72 (Kips)
Max. CTM = 128.41 (Kip-in)
Max. Shear = 2.47 (Kips)

ANTENNA LOADING CHART								
No.	Description	Qty	SW (m)	SW (ft)	Altitude (TH)	TX Line Description	Qty	Status
1	60L54-V60	1	30.7	100.7	0	LD45P-S6A	1	I
2	1142-SN	1	24.4	80	0	LD45P-S6A	1	I
3	1142-SN	1	24.4	80	120	LD45P-S6A	1	I

STATUS: E-EXISTING, F-FUTURE, I-INITIAL, P-PROPOSED

REFER TO SUPERTITAN ALL-WELD
INSTALL MANUAL FOR COMPLETE
INSTALLATION DETAILS



TOWER COORDINATES
LATITUDE: 42 45' 38.39" N
LONGITUDE: 71 11' 52.08" W

REV.	REV. BY:	CHK. BY:	DESCRIPTION	DATE

NOTES:

DESIGN STANDARD:	EA-202-D
BASIC 3 SEC. GUST WIND SPEED:	100.0 (mph)
BASIC 3 SEC. GUST WIND SPEED WITH ICE:	80.0 (mph)
SERVICE WIND SPEED:	80.0 (mph)
BASIC ICE THICKNESS:	1.00 (in)
TOPOGRAPHIC CATEGORY:	1
EXPOSURE CATEGORY:	C
IMPORTANCE CLASS:	2
MAX WIND ROTATION AT:	80.0 (mph) - 0.000

CONFIDENTIAL: ALL INTELLECTUAL PROPERTY RIGHTS HEREIN ARE THE PROPERTY OF TRILON TSE Inc. ALL DUPLICATION, REDUPLICATION, DISCLOSURE OR USE IS PROHIBITED WITHOUT WRITTEN CONSENT OF TRILON TSE Inc.



CUSTOMER: TESSCO	SITE: ROCKINGHAM COUNTY, NH	NTS
DATE: 02 OCT 19	BY: WS	CHK: APP:

TITLE:	DRAWING NO.
90FT W060 SUPERTITAN AWSS	154533.PROFILE

90' W060 SUPER TITAN WELD (5.640.0060.090)

MAX. ALLOWABLE ANTENNA LOADING (EIA-222-G)

IMPORTANCE CLASS 1		IMPORTANCE CLASS 2	
WIND: 90mph	WIND: 110mph	WIND: 90mph	WIND: 130mph
WIND: 110mph	WIND: 130mph	WIND: 110mph	WIND: 130mph

NOTES:

1. IMPORTANCE CLASS 1 BASED ON 30mph SERVICE WIND SPEED, 0" OF RADIAL ICING. LOAD IS CENTRALLY BALANCED ABOVE TOWER TOP, NO Tx LINES CONSIDERED.
2. IMPORTANCE CLASS 2 BASED ON 40mph SERVICE WIND SPEED, 0.75" OF RADIAL ICING. LOAD IS CENTRALLY BALANCED ABOVE TOWER TOP, NO Tx LINES CONSIDERED.

MAX. ALLOWABLE ANTENNA LOADING (CSA S37-01)

IMPORTANCE CLASS 1	
WIND: 350 Pa	WIND: 450 Pa
WIND: 450 Pa	WIND: 550 Pa

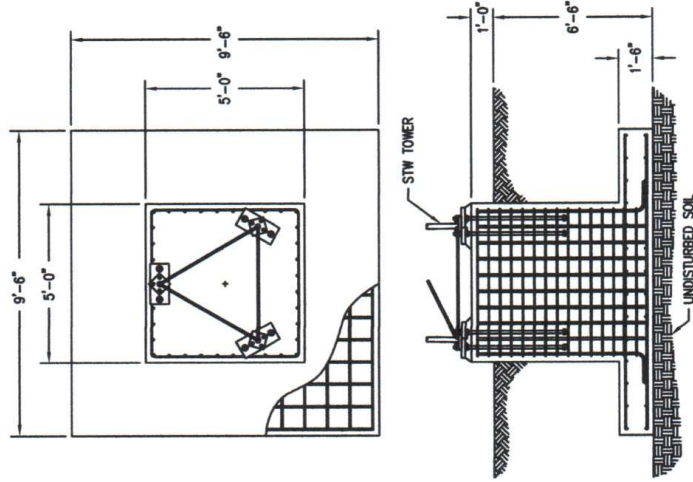
NOTES:

1. CSA S37-01 CLASS 1.
2. BASED ON 25mm OF RADIAL ICE ACCUMULATION. LOAD IS CENTRALLY BALANCED ABOVE TOWER TOP, NO Tx LINES CONSIDERED.

ELEV. 90.0' [27.4M]	4.640.0001.000	AWSS SECTION 1
WIDTH: 18' c/c		
ELEV. 80.0' [24.4M]	4.640.0001.000	AWSS SECTION 1
WIDTH: 18' c/c		
ELEV. 70.0' [21.3M]	4.640.0001.000	AWSS SECTION 1
WIDTH: 18' c/c		
ELEV. 60.0' [18.3M]	4.640.0002.000	AWSS SECTION 2
WIDTH: 18' c/c		
ELEV. 50.0' [15.2M]	4.640.0003.000	AWSS SECTION 3
WIDTH: 21' c/c		
ELEV. 40.0' [12.2M]	4.640.0004.000	AWSS SECTION 4R
WIDTH: 24' c/c		
ELEV. 30.0' [9.1M]	4.640.0005.000	AWSS SECTION 5
WIDTH: 27' c/c		
ELEV. 20.0' [6.1M]	4.640.0006.000	AWSS SECTION 6
WIDTH: 30' c/c		
ELEV. 10.0' [3.0M]	4.640.0007.000	AWSS SECTION 7R
WIDTH: 33' c/c		
ELEV. 0.0' [0.0M]		FOUNDATION KIT AND TEMPLATE INCLUDED IN TOWER KIT
WIDTH: 36' c/c		

NOTES:

FOUNDATION DETAIL (NORMAL DRY SOIL)




Tylon
 CONFIRMING ALL RIGHTS RESERVED BY THE INTELLECTUAL PROPERTY RIGHTS OF Tylon INC. ALL INTELLECTUAL PROPERTY RIGHTS ARE RESERVED BY Tylon INC. WITHOUT WRITTEN PERMISSION OF Tylon INC.

DRAWING NO. 640.0060.090
 SCALE: 25x.000
 DATE: 18 SEP 12
 REV: 01
 CHK: APP:

CUSTOMER: SITE: SCALE: 25x.000
 DATE: 18 SEP 12 REV: 01 CHK: APP:

TITLE: 90' W060 STW PROFILE



BID SPECIFICATIONS (Pages 4-7)

• Proposal Submitted by (Business Name)

• Title of person authorized to sign proposals

• Name of person authorized to sign proposals (printed)

• Signature of person authorized to sign proposals

• Business Phone _____ Business Fax _____

• Business Address _____ Date _____

• Business Email _____

• Business Type _____ (Individual, Partnership, Corporation etc.)



Specifications Exception Form

In the interest of fairness and sound business practice, it is mandatory that you state any exceptions taken by you to our specifications.

It should not be the responsibility of the Town of Salem to ferret out information concerning the materials, which you intend to furnish.

If your bid/proposal does not meet all our specifications you must state it in the space provided below.

If your bid does not meet our specifications, and your exceptions are not listed above or in space provided, the Town of Salem may claim forfeiture on your bid, if submitted.

Signed _____
I DO meet specifications

Signed _____
I DO NOT meet specifications as listed in this bid, exceptions are in space provided.

Failure to submit this form with your Bid/Proposal response may result in your Bid/Proposal being rejected as unresponsive.



Town of SALEM N.H.

Antenna Foundation for SFD

Form of Agreement

THIS AGREEMENT, made this ____ day of _____ by and between the Town of Salem New Hampshire, hereinafter called "**Owner**" and _____, doing business as (an individual) or (a partnership) or (a corporation) hereinafter called "**Contractor**".

THE CONTRACTOR will supply products/services after the bid/proposal is formally awarded and the price proposed in the form for general bid will remain firm from the date of the award.

THE CONTRACTOR will furnish all documents, materials, products, supplies, tools, equipment, labor, and any other services necessary for the application to meet or exceed all requirements stated in the specifications.

THE TOWN OF SALEM NH shall pay to the Contractor, in the manner and at such times as set forth in the General Requirements, such amounts as required by the Contract Documents based on the bid items reflected in the bid for the actual final quantities.

Bid/Proposal Award

If during the contract period the successful vendor fails to supply the Town of Salem New Hampshire with the products/services, the Town of Salem NH will purchase this product/service on the open market and the vendor (contractor) will compensate the Town of Salem NH with the difference between the bid price and the price incurred on the open market. If at any time the vendor fails to provide proper services/materials during the contract period, the Town of Salem NH will have the option to terminate the contract at any time without notice. If contract is in good standing and it needs to be cancelled by either party, a thirty (30) days written notice by registered mail addressed to the other party will be required. The undersigned hereby agrees to abide by the terms and conditions stated in this form of agreement.

Title _____

Signature _____

Company _____

Address _____

Email _____



***Purchasing Department
33 Geremonty Drive
Salem, New Hampshire 03079
PH (603) 890-2090 FAX (603) 890-2091***

Insurance Requirements

A current Insurance certificate must be provided prior to commencing any work on this project, in the following amounts:

Comprehensive General Liability	
Combined single limit	\$ 1,000,000.00
Workmen's Compensation	
& Employers Legal Liability	\$ 500,000 per accident

The Contractor shall procure and maintain for the duration of this project Workmen's Compensation Insurance as required by State Law for all of his employees that are engaging in any work at the site of the project whether direct employees or subcontracting associates.

Non-Collusion Statement

The Undersigned certifies under penalties of perjury that this bid in all respects is bonafide, fair and made without collusion or fraud with any other person. As used in this paragraph, the "PERSON" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

Title _____
Signature _____ Company _____



Town of Salem, New Hampshire

***Purchasing Department
33 Geremonty Drive
Salem, New Hampshire 03079
PH (603) 890-2090 FAX (603) 890-2091***

No Bid Questionnaire

Reference: Sealed Bid-2019-032

If you choose not to bid, please complete the questionnaire below and return it with your response by the bid opening date. Your assistance in helping us to analyze no bid rationale is very much appreciated. Thank You.

* * * * No Bid Questionnaire * * * *

A no bid is submitted in reply to the Town of Salem, NH invitation for bids for (enter requirement description): _____

Dated _____, for the following reasons:

_____ Item not supplied by our company.

_____ Bid Specification (Give reason(s) e.g., too restricted, not clear etc.)

_____ Profit Margin too low

_____ Past experience with the Town of Salem (give specific's e.g. payment delay, bid process, admin problems, etc. _____)

_____ Insufficient time allowed to prepare and respond to bid request.

_____ Bid requirements too large ____ or too small ____ for our company.

_____ Priority of other business opportunities limits time.

_____ Other reason(s) Please Specify: _____

Company Name _____

Address _____

Phone _____

(Signature)

(Name & Title)

GENERAL TERMS AND CONDITIONS

Preparation of Bids/Proposals. Proposals shall be submitted on the forms provided and must be signed by the bidder or his/her authorized representative. The person signing the proposal shall initial any corrections to entries made on the attached forms.

Vendors must provide pricing on all items appearing on the bid forms unless specific directions in the advertisement, on the bid form or in the special provisions allowed for partial bids. Failure to provide pricing on all items may disqualify the bid. Alternative bids will be considered, unless otherwise stated, only if the alternate is described completely, including, but not limited to, sample, if requested and specifications sufficient so that a comparison to the request can be made.

Any questions or inquiries must be submitted in writing, and must be received by the Purchasing Department no later than seven (7) calendar days before the request for proposal due date to be considered. Any changes to the request for proposal will be provided to all bidders of record.

The name of manufacturer, trade name, or catalog number mentioned in this request for bid description is for the purpose of designating a minimum standard of quality and type. Such references are not intended to be restrictive, although specified color, type of material and specified measurements may be mandatory.

Proposals will be considered for any brand that meets or exceeds the quality of the specifications listed. On all such proposals, the bidder shall specify the product they are proposing and shall supply sufficient data to enable a comparison to be made with the particular brand or manufacturer specified. Failure to submit the above may be sufficient grounds for rejection of the proposal.

Submitting bids/proposals. Proposals must be submitted as directed in the notice to qualified firms, and on the forms provided unless otherwise specified. Proposals must be typewritten or printed in ink. Proposals must be mailed or delivered in person. **Bids/Proposals that are faxed or emailed will not be accepted.**

Withdrawal of Bids/Proposals. Proposals may be withdrawn prior to the opening date and time upon written request of the proposer. Negligence on the part of the proposer in preparing his/her proposal shall not constitute a right to withdraw a proposal subsequent to the proposal opening.

Award of Contract, It is the policy of the Town of Salem NH that contracts are awarded only to the responsible bidders. In order to qualify as responsible, a prospective vendor must meet the following standards as they relate to the request:

- A) Have adequate financial resources for performance or have the ability to obtain such resources as required during performance.
- B) Have the necessary experience, organization, technical and professional qualifications, skills and facilities.
- C) Be able to comply with the proposed or required time of completion or performance schedule; and
- D) Have a demonstrated satisfactory record of performance.
- E) Adhere to the specifications of this bid and provide all documentation required of this bid.

The contract will be awarded to a responsive & responsible bidder based on the qualifications and experience of the bidder, the quality of the equipment/product/material/services to be provided and the support that the bidder offers during the duration of the supply terms.

Pricing, unless otherwise specified all prices listed are firm for the term of the contract. All prices should include all labor and material costs, and any discounts offered.

Delivery, deliveries are to be made only to the department or division indicated on the order and in accordance with accepted commercial practices, without extra charge for packing or containers.

Guarantees & Warranty, All parts and labor related to agreements must be guaranteed and include a warranty. If any work is unable to be guaranteed, the contractor must inform the Town, in writing, prior to the delivery of an item or any work being performed.

Force Majeure, Neither party shall be liable for any inability to perform its' obligations under any subsequent agreement due to war, riot, insurrection, civil commotion, fire, flood, earthquake, storm or any other act of god.

**Request for Taxpayer
Identification Number and Certification**

► Go to www.irs.gov/FormW9 for instructions and the latest information.

**Give Form to the
requester. Do not
send to the IRS.**

Print or type. See Specific Instructions on page 3.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____ <small>Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</small> <input type="checkbox"/> Other (see instructions) ► _____	
	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <small>(Applies to accounts maintained outside the U.S.)</small>	
	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number								
				-				
OR								
Employer identification number								
				-				

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ►	Date ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (Interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What Is Backup Withholding*, later.