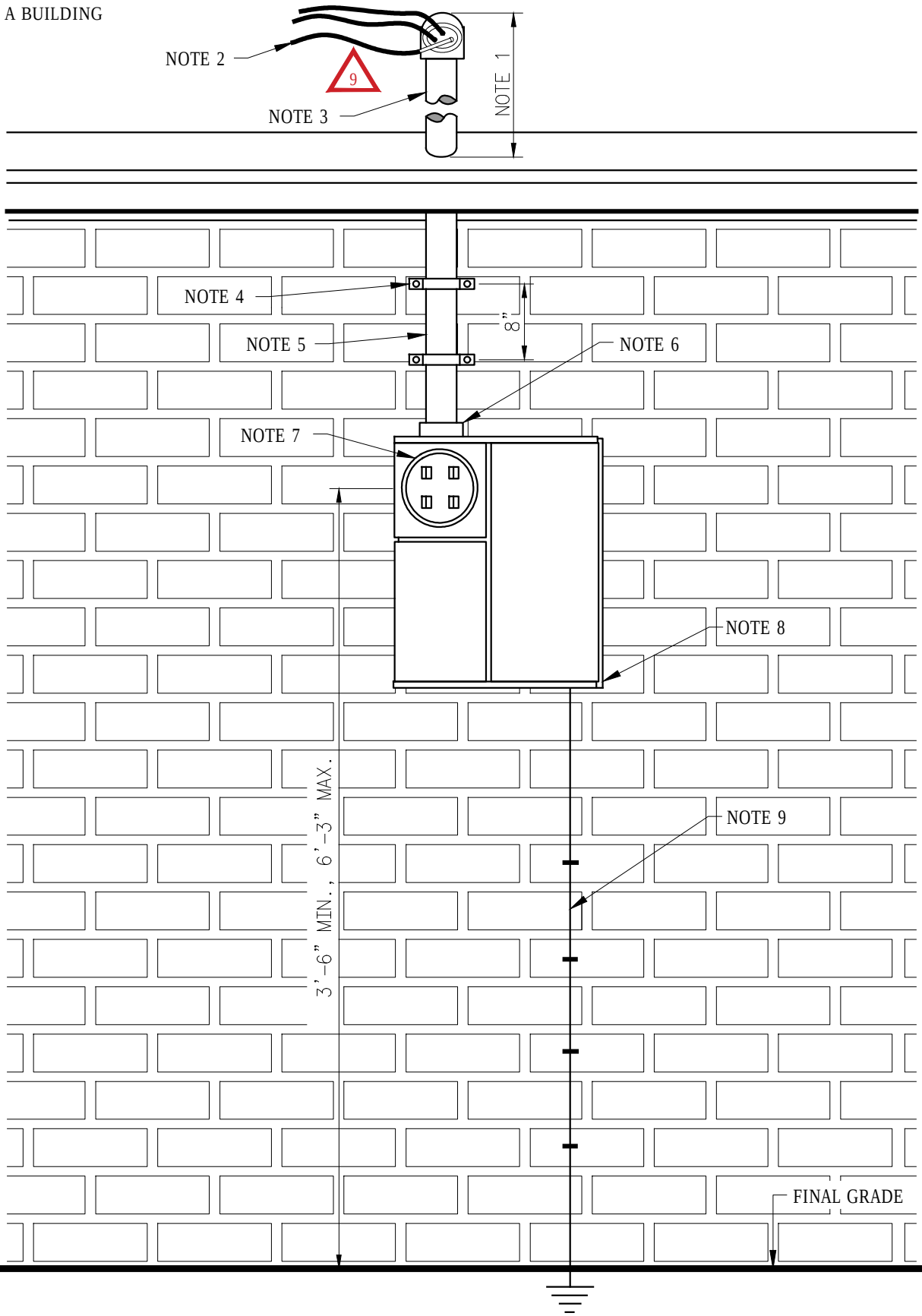
USE: ENTRANCE REQUIREMENTS ON A BUILDING

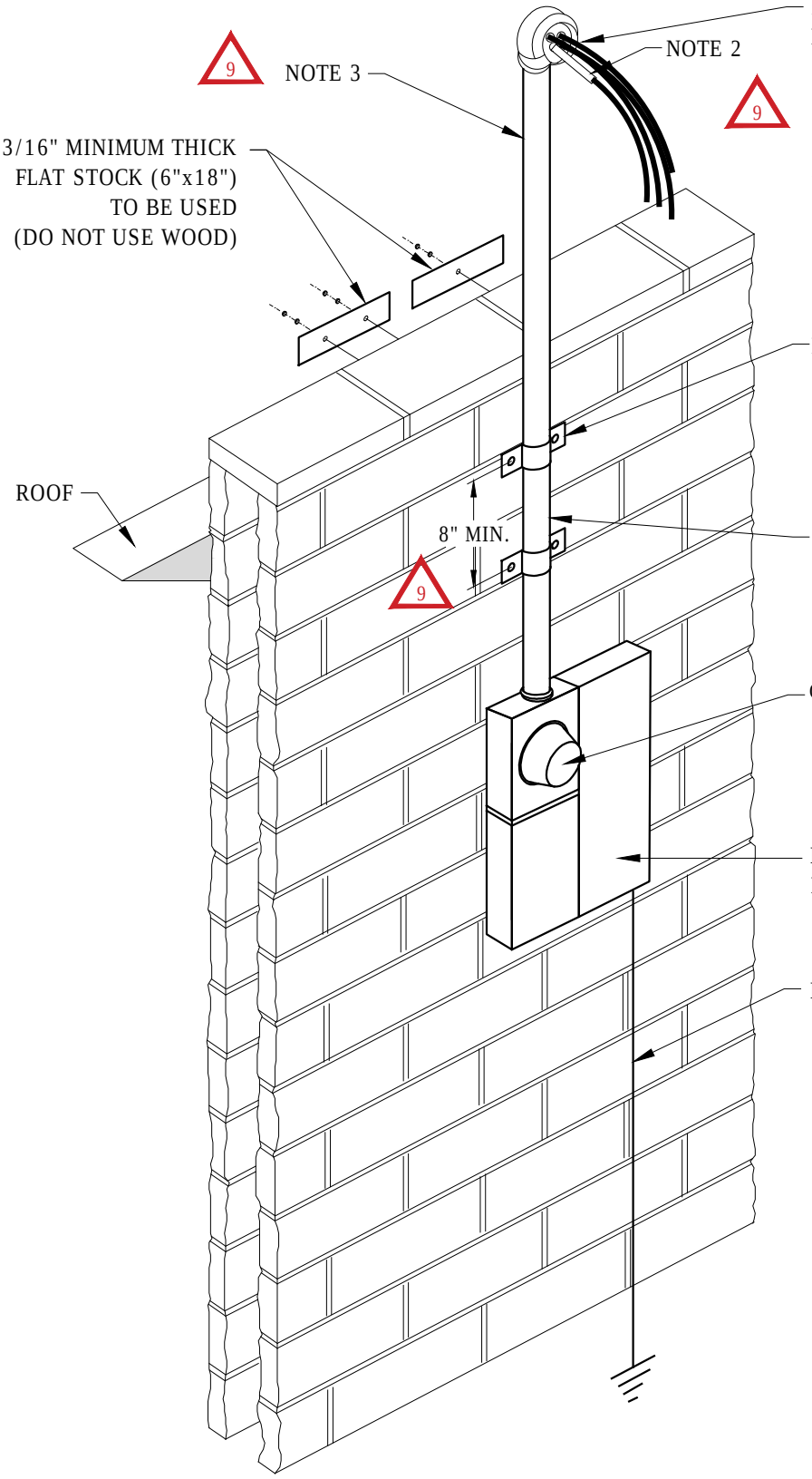
SERVICE ENTRANCE WITH CONDUIT RISER OVERHEAD



TEP Tucson Electric Power / UniSourceEnergy SERVICES SANTA CRUZ COUNTY	INITIATED BY	SC	REVISION NO.	9	SR-305 Pg. 1 of 5
			ESR COMM.	7-19	
	ESR COMM.	12-67	EFFECTIVE DATE	7-19	

USE: PARAPET WALL INSTALLATION

SERVICE ENTRANCE WITH CONDUIT RISER OVERHEAD



POINT OF ATTACHMENT TO BE 18 INCHES MINIMUM ABOVE TOP OF WALL, SERVICE HEAD 24 INCH MAXIMUM ABOVE TOP OF WALL UNLESS RIGIDLY GUYED, (GUY WIRE IS NOT ALLOWED, SEE DETAIL A) THE SERVICE HEAD MAXIMUM HEIGHT WHEN BRACED IS 6 FEET ABOVE THE TOP OF THE ROOF

NOTE 2

9

NOTE 4

9

2 INCH MINIMUM RIGID CONDUIT RISER, ATTACHED TO WALL WITH 1/2 INCH PIPE SPACER AND 1/2 INCH THRU OR SPACE BOLT

℄ METER FACE: 3'-6" MINIMUM, 6'-3" MAXIMUM ABOVE FINAL GRADE

MAIN SWITCH AND/OR DISTRIBUTION PANEL

NOTE 9

USE: Entrance requirements on a building

SERVICE ENTRANCE WITH CONDUIT RISER OVERHEAD

NOTES:

1. A self-supported rigid conduit riser may extend a maximum of 3 feet above the roof if 2 inch diameter conduit is used or 4 feet above the roof if 2 1/2 inch diameter conduit is used. The top of the weatherhead shall be a minimum of 24 inches above the roof. If additional riser height is needed for service conductor clearance as required by applicable electrical codes, the riser shall be rigidly braced or rigidly guyed (guy wire is NOT allowed) from a point within 8 inches of the weatherhead. The maximum height of the weatherhead from the roof is 7 feet. No conduit coupling shall be installed above the roofline.

2. Entrance conductors shall extend at least 24 inches from the conduit or cable weatherhead. The neutral conductor shall be identified with solid white tape for 120-240V and grey tape for 480V from the weatherhead for six (6) inches. When grouping with multiple risers, the entrance conductors shall extend at least 48 inches to allow for permanent connections.

3. A firm point of attachment for Service Provider service wires shall be provided by the customer; for example, a well-anchored rigid conduit mast, a suitable dead-end clevis and bolt arrangement furnished by Service Provider and installed by the customer in masonry walls, or other attachments as field conditions may warrant. Wood masts are no longer acceptable for new or remodeled points of attachment. See Note 11 for height of the attachment point above final grade.

4. Conduit risers must be clamped solidly to the building for adequate support of the service drop cable. Where rafters extend beyond the wall line, the conduit riser shall be firmly braced and/or blocked between the rafters with 2x4 or 2x6 inch lumber. Where no rafters extend beyond the wall line, the conduit risers must be firmly secured to the masonry wall with a minimum of two 2-hole pipe straps located near the top of the wall and spaced no less than 8 inches apart. Conduit straps shall be attached with 1/4 inch minimum toggle bolts or 1/4 inch minimum lag screws in lag shield anchors. Consult Design Services for means of attachment to adobe walls or other masonry.

5. The smallest diameter conduit for entrance risers which support service drop cable shall be 2 inches.

6. If utilized, a meter board 10"x22"x3/4" or larger, treated for outdoor application, shall be fastened securely to the building wall for mounting meter sockets, switches, and other devices necessary for adequate metering and protection. Other mounting arrangements are subject to approval by Design Services.

7. Meters and instrument transformers will be furnished by the Service Provider. Meter sockets are to be purchased, installed and maintained by the customer per SR-400 Series.

8. The customer will provide a service disconnecting device which meets all requirements of the current National Electrical Code. The operation of the device shall be such that the neutral (grounded conductor) is not broken when the device is opened. The operating handle or member should be capable of being sealed either open or closed.

USE: ENTRANCE REQUIREMENTS ON A BUILDING

SERVICE ENTRANCE WITH CONDUIT RISER OVERHEAD

NOTES (CONT'D):

9. The service disconnect shall be effectively grounded in compliance with the applicable requirements of local governmental codes, or National Electrical Code requirements in the absence of local codes.

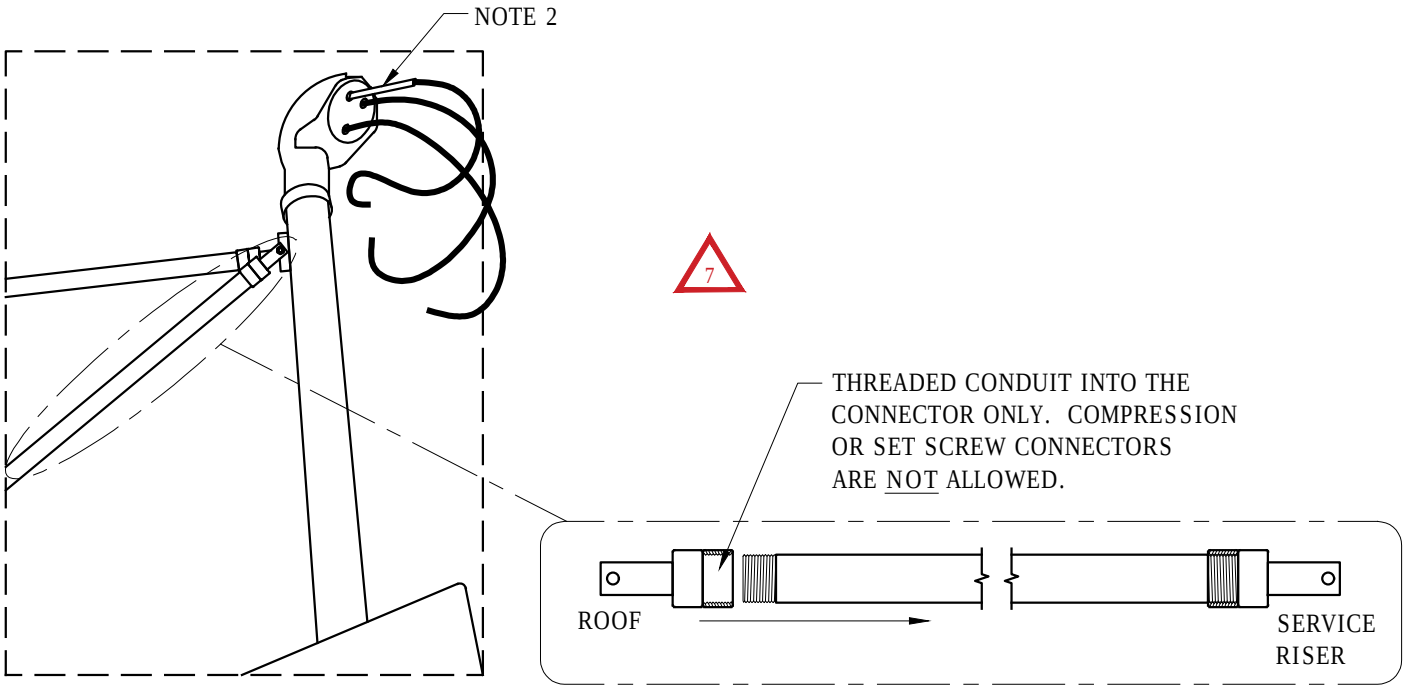
10. Contact the Design Services if building structure is not similar to SR-305, Pages 1 & 2.

11. The point of attachment on the customer's building must be at a sufficient height, to provide the following minimum ground clearances to the Service Provider service drop cable (0-750V).

    A. Over parking lots, service areas, public streets, alleys or driveways open to the public or areas reasonably expected to be subject to equestrian activity, 18 feet.

    B. Over private residential driveways and spaces or ways accessible to pedestrians only, 15 feet. May be reduced to 12 feet for supply conductors limited to 300V to ground and located more than 25 feet measured in any direction from a swimming pool or diving platform.

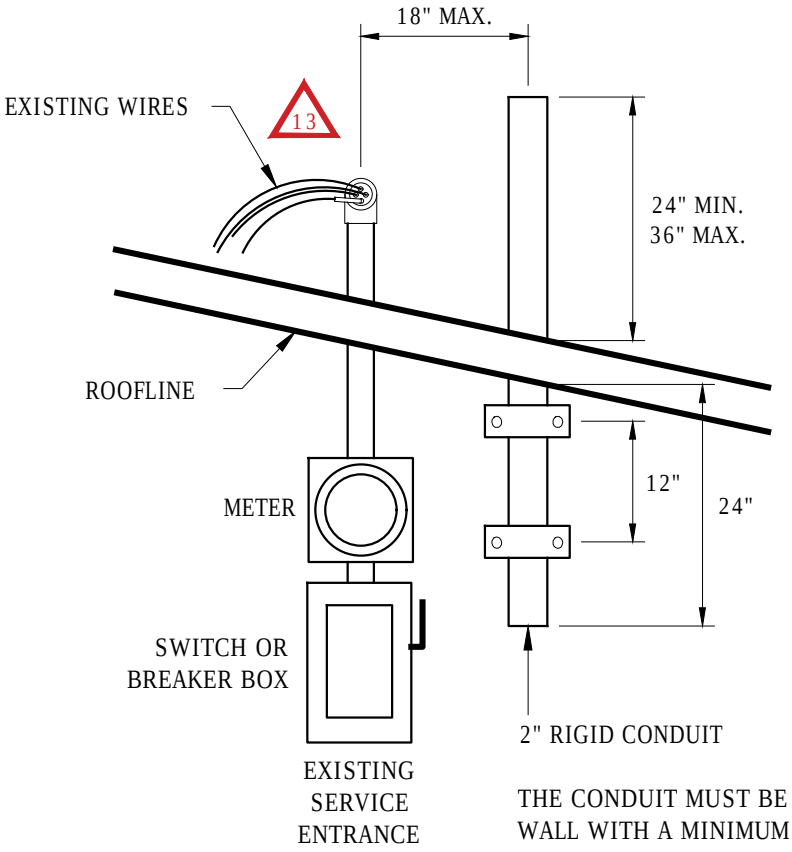
12. If more than one meter socket is installed, the centerline of each meter is to be a minimum of 3'-6" above final grade. Maximum meter height above grade, as measured from meter centerline, is 6'-3".



DETAIL A

USE: REPLACEMENT OF A ROOF MOUNTED POINT OF ATTACHMENT (POA)

SERVICE ATTACHMENT SUPPORT



THE CONDUIT MUST BE FIRMLY SECURED TO THE WALL WITH A MINIMUM OF TWO 2-HOLE PIPE STRAPS ATTACHED WITH 1/4 INCH MINIMUM TOGGLE BOLTS OR 1/4 INCH MINIMUM LAG SCREWS IN LAG SHIELD ANCHORS

NOTES:

1. POA TO BE LOCATED NOT MORE THAN 18 INCHES FROM ELECTRIC SERVICE RISER.
2. WHEN WORK IS COMPLETED, CALL DESIGN SERVICES FOR INSPECTION.
3. IF YOU NEED TO DEVIATE FROM THIS PREFERRED SERVICE INSTALLATION, PLEASE CONSULT WITH DESIGN SERVICES BEFORE INSTALLATION.
4. TEP – AN INSULATED WIRE HOLDER FOR ATTACHMENT OF SERVICE WIRE TO CONDUIT WILL BE PROVIDED.
5. UES SANTA CRUZ – CUSTOMER TO PROVIDE AN INSULATED WIRE HOLDER FOR ATTACHMENT OF SERVICE WIRE TO CONDUIT.