



How to Avoid Delays During the Design Intake Process

The Design Intake Process concisely communicates project submittal requirements and provides the customer visibility into design intake status. To take full advantage of the process and avoid delays/additional costs to your project, ***please make sure that all information is Complete, Accurate, and Consistent between forms and drawings.*** The information requested during Design Intake is used as follows:

- Design Intake Form: Initiates your project into the AE Design Intake Process and allows the customer to track their project throughout Design Intake.
- Non-ESPA Submission Requirements: Provides Austin Energy supporting documentation to properly size, locate, construct, and maintain electrical facilities on your property.
- ESPA Form: Required by Austin Energy to assess the sites' electrical needs, and it is also used as a reference during the Inspection phase of the project.

It is in the best interest of the customer to ensure the completeness and accuracy of all information, specific to each project type indicated on the Design Intake Form, before entering Design Intake. Below are common mistakes found in the non-ESPA Submission Requirements, and common mistakes made when filling out the ESPA Form. Lastly, AE Design requires customers to designate a Single Point of Contact (SPOC) for their project in order to manage information flow between AE Design and all stakeholders on the customer's project team (Project Manager, Contractors, Owner, etc.). ***The SPOC, who can be changed upon customer request throughout the Design process, should be carefully selected as major delays result when communication between AE Design and the SPOC is disrupted for any reason.***

1. Incomplete/Inaccurate Submission Requirements

Table 1. Non-ESPA Submission Mistakes and Corrections

Attachment	Common Mistake	Customer Correction
1. ESPA	Incomplete/Inaccurate	See Table 2 below
2. Current AutoCAD File of Approved Site Plan (or Building Plan for Network)	a. AE Unable to Open	Make sure file is AutoCAD 2016 or earlier.
	b. Old version of the site plan submitted	Verify file is the most current and approved version
	c. Does not meet AE AutoCAD Requirements (1:1 scale TX83-CF Coordinates, XREFs, etc.)	See AutoCAD requirements on Design Intake Form, or see AE Design Criteria Manual Section 1.4.2.6, 1.14.2.1, & 1.16.0.
	d. Does not show electrical infrastructure (i.e, poles, pad mounted transformers, meters)	Clearly designate all electric utilities on the drawing
	g. Does not show other site utilities	Clearly designate all utilities on the drawing
	h. Insufficient Clearance/Access to electric utilities	See AE Design Criteria Manual (Section 1.10, etc.)
	Streetlights removed and not replaced	Streetlights can only be replaced, not removed
	i. Network Only: Vault does not meet minimum size requirement (or an AE approved design)	See Network Design and Engineering Vault Packet
3. Riser Diagram	a. Inconsistent with ESPA Form	Verify Disconnect/Enclosure size
	b. Does not include Load Schedule	Load Schedules are highly recommended to size transformers and wire, as insufficient load data often results in oversizing equipment and higher costs to the customer.
4. 911 Address Form	Inconsistent with ESPA Form	Use address as shown on official 911 Service Address Form.
5. Layouts for UNO or Great Streets (Network Only)	Lack of coordination with ATD prior to providing UNO/Great Streets design to AE	Work with Austin Transportation Department (ATD) prior to submittal to AE.

2. ESPA Form

Table 2. ESPA Mistakes and Corrections

A. Incomplete ESPA Form		
ESPA Section	Common Mistake	Customer Correction
Section I, II, & III	Incomplete section(s) on the ESPA Form	All fields in Section I, II, and III should be completely filled out.
	Only one ESPA form for multiple main disconnects or distribution enclosures	One ESPA must be filled out for each main disconnect or distribution enclosure
B. Inaccurate ESPA Form		
ESPA Section	Common Mistake	Customer Correction
Section I	Wrong Service Area selected	See AE Contact Map at http://www.austinenergy.com/
Section II.b	Invalid 911 Service Address	Use address as shown on official 911 Service Address Form. Also, all ESPAs need to have the unique identifier number on the addressing line for multi-building sites (multiple ESPAs are required). See Page 3 for more information. Temporary/Construction power: The property address includes ½ identifier address for all commercial temporary and (or) construction power loops (unless transformer will be used for permanent service).
Section III.a	Service Type: Selecting the wrong service type.	See examples of service types on Page 4.
Section III.c	Network: Specify wrong service conductor	Only copper conductors are acceptable with a maximum size of 500 kcmil. No parallel conductors are permitted for services rated 400 amps or less.
	Total NEC Calculated Load: Inputting a Non-NEC diversified load	The only diversification should be according to the NEC.
	Service Wire Type, Size, & Quantity: Service wire too large	The maximum allowable service wire size for underground service is 750 kcmil, and 500 kcmil (in 3" conduit) for single phase installations
	Service Wire Type, Size, & Quantity: Too many service wires	Only one circuit of customer secondary service conductor can be installed per conduit (three phase transformers can only accommodate 10-4" service wire conduits)
	Service Length: Excessive service length	Underground/Sec. Riser - Max length of 150 ft. Overhead - Max length of 75 ft.

911 Service Address Information

To verify that your existing address is valid, go to <https://www.austintexas.gov/gis/propertyprofile/>.

If this is a new service you must get your address from City Addressing/Permitting (505 Barton Springs Rd). 911 Addressing Service within the City of Austin or Travis County can be contacted by phone or email at (512) 974-2797 or addressing@austintexas.gov. Once an address is assigned to your property, you will be provided with a "City Service Address Validation" form. Changing an address further into the process could result in more fees and delays.

Below is an example of a 911 Service Address Form for an apartment complex.


City of Austin
911 ADDRESSING
CITY SERVICE ADDRESS VALIDATION
Email: addressing@austintexas.gov Phone: (512) 974-2797 Fax: (512) 974-3337
911 Addressing Website: <http://austintexas.gov/911addressing>
Date: December 17, 2018

bldg 1 phase 1

The Following Is A Valid Address:

Address : [REDACTED]

Building(s) :

Unit(s) : 105, 107, 109 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 127, 128, 130, 131, 132, 133, 134 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 202, 204, 205, 206, 208, 209, 211, 212, 213, 214, 215, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 238, 239, 240, 241 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 301, 302, 303, 304, 305, 306, 307, 308, 309 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342 343, 344, 345, 347, 349, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 403, 404, 405, 406, 407, 408, 409 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 468, 469, 472, 473, 474, 480, 481, 482, 483, 484, 485, 510, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 584, 585

*Please contact the United States Postal Service or go to www.usps.com for the correct zip code for this address.

Legal Description:

Subdivision :
Block ID :
Lot ID :
Geographic ID: 0202160242
Property ID : 190083

Jurisdiction: AUSTIN FULL PURPOSE

Verify your jurisdiction with our new Jurisdictions Web Map:
<http://www.austintexas.gov/qis/JurisdictionsWebMap/>

County: TRAVIS

Parent Address Place Id: 5626582

Comments:

Note: It is essential for delivery of 911 Emergency Services that a pedestrian access to the front door of an ADU be provided from the street, which the ADU address has been assigned.

The address form shows all of the apartment units associated with the site. There were multiple ESPAs for the site, so the customer highlighted which units were associated for each ESPA (the building is noted on the top right of the page, and the units are boxed in the main body).

Service Type Examples

Overhead Service Example

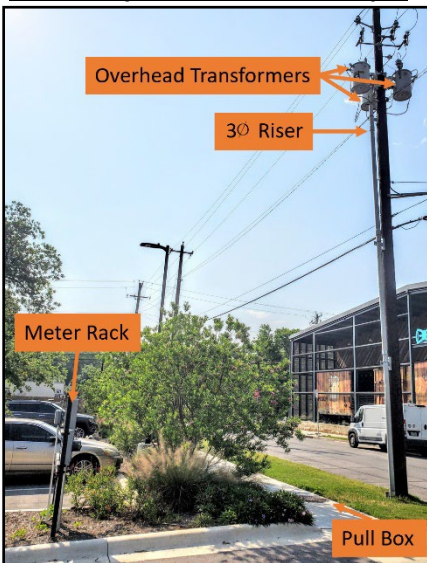


Overhead Service

If available in your area, Overhead Service is the least expensive of the three service types and generally requires less coordination between AE Construction and customer contractors.

See the AE Design Criteria Manual for more information on maximum demand for overhead commercial and residential services, and for clearance and accessibility requirements.

Secondary Riser Service Example



Secondary Riser Service

If overhead lines are available in the area, a Secondary Riser Service is an aesthetically pleasing option for customers. More communication is generally required between AE Construction and customer contractors for this service type.

See the AE Design Criteria Manual for more information on maximum demand for secondary riser services. The service may need to be upgraded to an Underground Service if the customer load is too large. See also clearance and accessibility requirements.

Underground Service Example



Underground Service

Underground service is generally the most expensive option for customers and is required for large loads that cannot be fed from AE's overhead transformers. Customers will need to provide space for a transformer pad (along with required clearances), an easement, and sufficient road access to the underground equipment.

See the AE Design Criteria Manual for more information on maximum demand for underground services. The service may need to be upgraded to a Primary Metered service if the customer load is too large.

ESPA Section III Examples

New Subdivision

III. Electrical Information			
Refer to the appropriate table in the Austin Energy Criteria Manual for available electric services.			
(a) Type of Service Requested: ☐ Overhead Service ☐ Secondary Riser ☒ Underground Service <u>Downtown Network Options:</u> ☐ Network Transformer Vault ☐ Network Underground Secondary		(b) Service Voltage Requested: ☒ 120/240 V, 1 ϕ 3-Wire ☐ 120/240 V, 3 ϕ 4-Wire (Overhead or secondary riser only) ☐ 120/208V, 3 ϕ 4-Wire ☐ 120/208V, 1 ϕ 3-Wire (Network Only) ☐ 277/480 V, 3 ϕ 4-Wire ☐ 7200/12470 V (Primary Meter)	
		(c) Additional Service & Electrical Load Information: Building Use (Residential, Warehouse, Restaurant, Retail, Office, Mixed Use, etc.): FT ² /Average Unit: 1,500 # Units: 300 Total Building FT ² : Fuel Type: ☐ All Electric ☒ Gas & Electric Total NEC-Calculated Load: Service Wire Type, Size, & Quantity: Service Length:	
(d) Main Disconnect (1st interrupting device) or Distribution Enclosure size (total of all meters): ☒ 200 Amps ☐ 600 Amps ☐ 1600 Amps ☐ 350 Amps ☐ 800 Amps ☐ 2000 Amps ☐ 400 Amps ☐ 1200 Amps ☐ Other Note: Austin Energy may size equipment based on empirical data and not necessarily per the main disconnect size.		(e) New Meter Size(s): 1. Meter Can Size 200 (amps) x # Meters 300 2. Meter Can Size (amps) x # Meters 3. Meter Can Size (amps) x # Meters 4. Meter Can Size (amps) x # Meters (For multiple meters attach a list of unit #'s.) Number of existing meters: 0 Total number of meters after job is complete: 300	
		(f) Meter Enclosure(s): Click here for list of approved mfg #'s. Click here for modular metering specifications. AE Metering Questions; Ph: 512-505-7045	

Austin Energy expects the following for all subdivisions:

- Fuel Type selected
- Number of homes and average ft²
- Meter Can sizes of 200 amps (200 amp is now the smallest available meter size)
- # Meters matches the # of units
- Three-phase loads requested, if required (lift stations)

New Apartment Complex

III. Electrical Information			
Refer to the appropriate table in the Austin Energy Criteria Manual for available electric services.			
(a) Type of Service Requested: ☐ Overhead Service ☐ Secondary Riser ☒ Underground Service <u>Downtown Network Options:</u> ☐ Network Transformer Vault ☐ Network Underground Secondary		(b) Service Voltage Requested: ☐ 120/240 V, 1 ϕ 3-Wire ☐ 120/240 V, 3 ϕ 4-Wire (Overhead or secondary riser only) ☒ 120/208V, 3 ϕ 4-Wire ☐ 120/208V, 1 ϕ 3-Wire (Network Only) ☐ 277/480 V, 3 ϕ 4-Wire ☐ 7200/12470 V (Primary Meter)	
		(c) Additional Service & Electrical Load Information: Building Use (Residential, Warehouse, Restaurant, Retail, Office, Mixed Use, etc.): Residential FT ² /Average Unit: 850 # Units: 45+1 Total Building FT ² : 39000 Fuel Type: ☐ All Electric ☒ Gas & Electric Total NEC-Calculated Load: 1,150 kVA Service Wire Type, Size, & Quantity: 4 Sets of 4-500 AL THW Service Length: 25 ft.	
(d) Main Disconnect (1st interrupting device) or Distribution Enclosure size (total of all meters): ☐ 200 Amps ☐ 600 Amps ☐ 1600 Amps ☐ 350 Amps ☐ 800 Amps ☐ 2000 Amps ☐ 400 Amps ☒ 1200 Amps ☐ Other Note: Austin Energy may size equipment based on empirical data and not necessarily per the main disconnect size.		(e) New Meter Size(s): 1. Meter Can Size 200 (amps) x # Meters 46 2. Meter Can Size (amps) x # Meters 3. Meter Can Size (amps) x # Meters 4. Meter Can Size (amps) x # Meters (For multiple meters attach a list of unit #'s.) Number of existing meters: Total number of meters after job is complete: 46	
		(f) Meter Enclosure(s): Click here for list of approved mfg #'s. Click here for modular metering specifications. AE Metering Questions; Ph: 512-505-7045	

Austin Energy expects the following for all apartment complexes:

- An ESPA for each main disconnect/distribution enclosure
- All fields complete
- Total NEC Calculated Load to be less than the Main Disconnect/Enclosure
- 3 Phase Service: wire smaller than 750 kcmil, 10 runs or less of service wire, 4" conduit (Single Phase Service: wire smaller than 500 kcmil and a minimum 3" conduit)
- Square footage/Unit x # Units = Total Building square footage (total may also include Clubhouse, etc.)
- Meter Can sizes of 200 amps (200 amp is now the smallest available meter size)
- # Meters matches the # of units

Revision	Date	Revision by	Comments
1.0	7/14/20	J. Contreras	New Document