

Annex C: Coordination Study Checklist

Department of Planning & Development Review, Bureau of Permits and Inspections 900 East Broad Street, Room 108 Richmond, Virginia 23219 Office: (804) 646-4169

https://www.rva.gov/planning-development-review/permits-and-inspections

It is highly recommended to have an approved coordination study prior to installing service equipment.

The following information is required for submitting a Coordination Study to the City of Richmond, Room 108:

- 1) Completed, Signed/Sealed Coordination Study
- 2) Completed Coordination Study Checklist
- 3) (if applicable) When the coordination study is done by an engineer other than the engineer of record, the engineer of record shall review the coordination study and provide a letter, signed and sealed, to the City of Richmond certifying the construction documents adhere to the coordination study. If any changes need to be done to the construction documents, the engineer of record shall submit those plans to the City for review.
- 4) (if applicable) For all 'time current curves' that overlap, provide all manufacturers data for paired-coordinated overcurrent protection devices. Clearly label all paired-coordinated overcurrent devices.

All documents shall be submitted through the City's online Portal through the projects "Plan" number (not permit number). Email the plan reviewer once files have been uploaded.

For projects with new and existing overcurrent devices

All new devices shall coordinate with the existing overcurrent protection device above and below the new device(s).

For projects with all new overcurrent devices (Check all that apply)

Coordination study one-line diagrams shall show only the devices that require coordination. Do not show devices that are not going to be coordinated.

For all overcurrent protection devices required to be coordinated, provide overcurrent protection device(s) manufacturer's information below on the coordination study emergency and normal one-line diagrams:

- Manufacturer's Type
- Manufacturer's Device Number/Name
- Manufacturer's Frame and Trip Size

Make sure the coordination study one-line matches the approved electrical plans. If not the approved plans must be revised to match the coordination study.

Provide maximum fault current, for **normal** and **emergency** power, located at each piece of equipment on the normal and emergency one-line diagrams.

Coordination shall be done from normal power supply and emergency (generator/UPS/etc.) supply, down to the branch circuit overcurrent protection devices. If for any panel there are different size and/or type branch overcurrent protection devices, a separate time-current curve is required for each type of overcurrent protection device.

When submitting coordination study for City review, check all items in one of the options below that applies to the project.

Option #1 - Total Selective Coordination

Provide total selective coordination showing no overlapping curves in the Time Current Curves.

Option #2 - Coordination to 0.01 Seconds

Coordination study coordinates to 0.01 seconds.

For all time current curves that overlap, provide all manufacturers data for paired-coordinated overcurrent protection devices. Clearly label all paired-coordinated overcurrent devices.

Option #3 - Coordination to 0.1 Seconds [For Hospitals only, see NEC Article 517.30(G)]

Coordination study coordinates to 0.1 seconds.

For all time current curves that overlap, provide all manufacturers data for paired-coordinated overcurrent protection devices. Clearly label all paired-coordinated overcurrent devices.