What level of plan detail is required at a quadrant?

It is possible to prepare different plan levels at the same intersection.

Plan Level 1
Surveys not needed. Designer selects ramp types and estimates quantities on a field visit. Refer to ADA PDG (Project Design Guide).

Plan Level 2
Up-to-date topo with total station accuracy needed. Designer prepares 20-scale Intersection Detail with ramp types. Refer to ADA PDG (Project Design Guide) for plan formatting requirements.

Plan Level 3
Up-to-date topo with total station accuracy and constraining tie-in elevations needed. Refer to ADA PDG (Project Design Guide) for plan formatting requirements.
CURB RAMPS PLAN LEVEL 2 SURVEY NEEDS:
For Plan Level 2, the Designer needs to communicate \((x,y)\) locations of the new curb ramps and push button stations and show all surface utilities in the plan. Though ‘z’ elevations will not be included in the final plan, the Designer needs this information to analyze ramp slopes. Total station accuracy is imperative for ADA work. The Designer needs the locations and elevations of the following in order to determine the proper ramp types and locations:

- Longitudinal edge(s) of inplace walk and transverse joint locations
- Rural (grass) or concrete medians
- Gutter flow lines
  - At pork chop islands, survey gutter flow line for the full perimeter.
- Both edges of connecting private steps, doorways, or private sidewalk where it meets inplace walk (or use line-distance offset)
- Surface utilities and streetscape features
  - Survey center of these features and note their size/diameter
  - When it’s not possible to capture the center, take 2-4 shots (or use line-distance offset) and note size/diameter of these features. Examples: Signal and light bases and cabinets.
  - See below for signal base survey detail (edges of base and top of T-base). This information is needed to determine push button placement height.
- Sign posts
- Landscaping
- Crosswalk striping
- Loop detectors
- Right-of-way lines if the construction limits may fall close to or outside of existing ROW

A surveyed distance of approximately 50 ft from the PT is usually sufficient. Distance needed from back of walk depends on the environment (generally 10 ft urban; 20 ft suburban or rural).
CURB RAMPS PLAN LEVEL 3 SURVEY NEEDS:

The difference between a Plan Level 2 and Plan Level 3 is that elevations at ramp tie-in points (examples: private steps, private sidewalk, doorways) are considered critical constraints. The survey needs are the same as Plan Level 2 except that tie-in elevations and dimensions are included. Total station accuracy is imperative for ADA work. Where steps are a constraining tie-in point, the height and tread width are important to accessibility.

- Tie-in elevations at entrance
- Height and tread width of bottom step

If curb flow lines may move, a road surface topo is needed to make sure the new flow lines do not result in ponding on the road surface.

Topo the road surface at 5, 10, and 15 feet out from the inplace curb and gutter and around the crowns.