

Practice Problem – Section E

PROBLEM STATEMENT:

Prepare a grading plan to create a water quality pond to capture runoff from a parking lot and roadway.

REQUIRED:

- Grade drainage swales from each of the three (3) curb breaks to the bottom of the water quality pond at a maximum longitudinal slope of 5%.
- Create a water quality pond with a flat bottom. Maximize the water quality pond bottom area to capture and infiltrate the parking lot and roadway runoff.
- The water quality pond shall be 2 ½' below the lowest curb cut elevation at its lowest point.
- Direct all stormwater runoff from the curb breaks away from the existing trees and into the water quality pond.
- Except for the water quality pond and swales, gradient on unpaved surfaces shall be 1% minimum and 4:1 (25%) maximum.
- Show and label all proposed 1' contours and meet existing contours within the contract limit lines.
- No additional retaining walls or drainage structures are permitted.
- Save the existing trees. Do not grade within the dripline of the trees.

E-3

March 2010

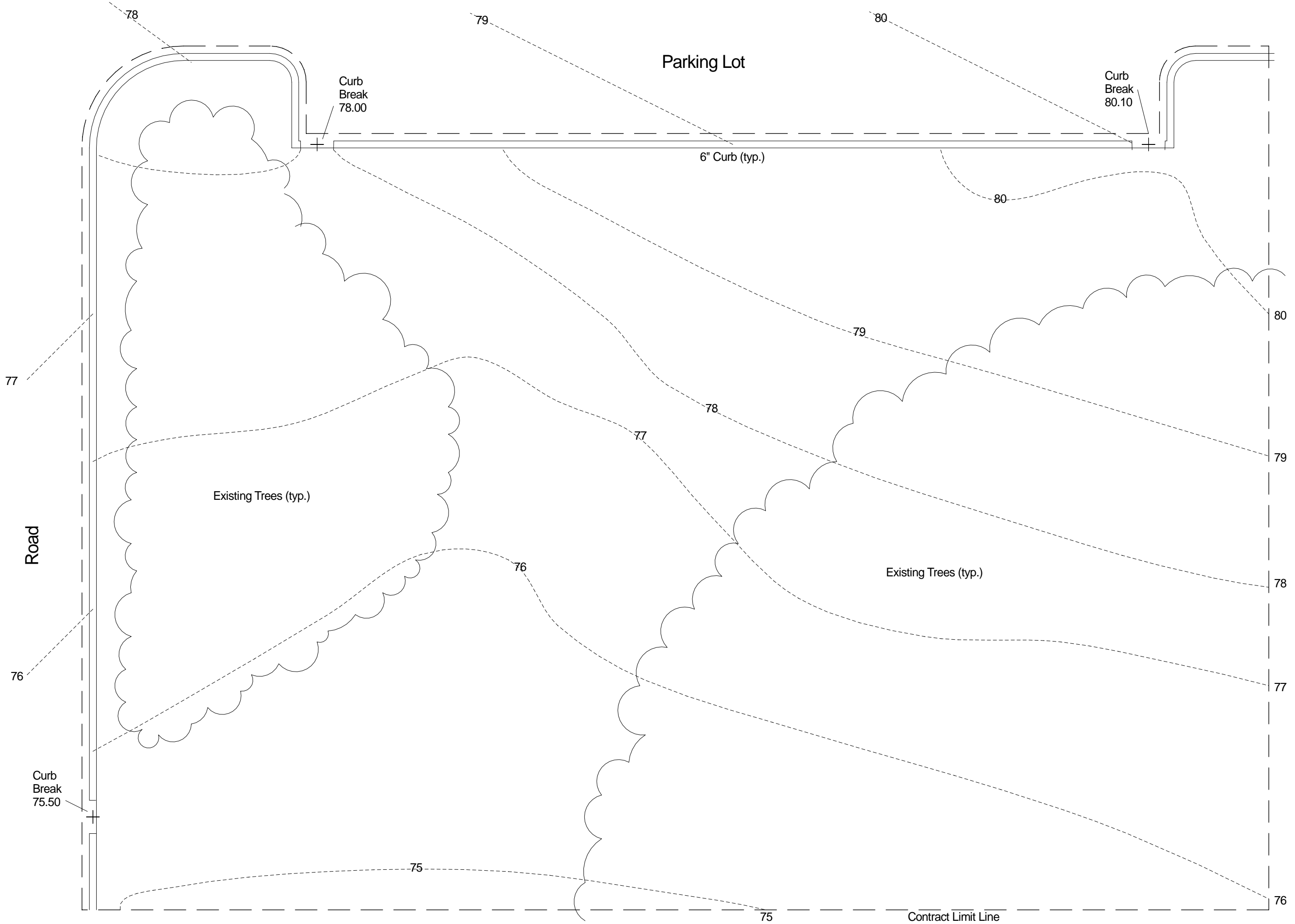
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Candidate I.D.

Landscape Architect Registration Examination

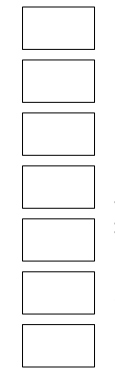
Grading, Drainage and
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E-3

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North

Scale: 1"=20'