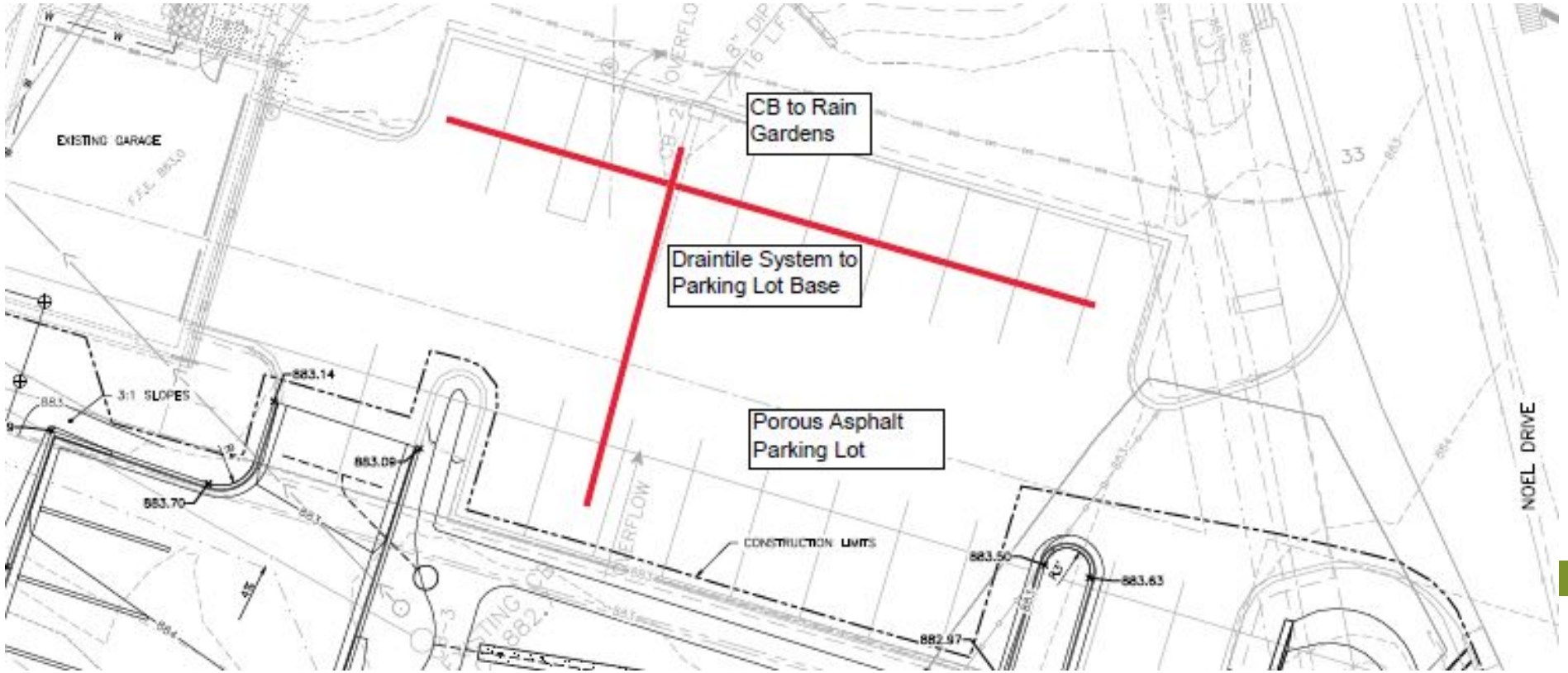
BARR

RWMWD Office Parking Lot

Porous Asphalt Rehabilitation and Retrofit Options

Parking Lot Overview

- Installed in 2005, porous asphalt parking lot has 4’ deep course rock base with draintile system
- Overflow CB goes to rain garden
- Asphalt section 3” thick



Permeability Loss

- Despite very thorough maintenance, puddles persist in certain areas for several hours after rain fall events.

Retrofit Options

- Option 1: Create permeable pathways to the pavement base
  - Core drill 3″ – 4″ holes in clogged areas
  - Add free draining material such as course stone to lead water below
  - Pros: Low cost
  - Cons: Cored holes would require maintenance; replenishment of material
- Option 2: Do nothing
  - Puddling likely to grow slowly; water currently making it to storage base or nearby rain gardens
  - Pros: Free!
  - Cons: Lower demonstration value; wet socks if you're not careful

Retrofit Options

- Option 3: Partial test milling of the surface asphalt
  - Using a cold planer, mill of ½" of asphalt surface
  - Pros: Low cost, interesting experiment
  - Cons: May not remove the clogging sediments, could cause uneven pavement
- Option 4: Repave with new porous asphalt
  - Partially or entirely replace porous asphalt parking
  - Pros: Maintain demonstration feature
  - Cons: Potential for clogging again in the future

Retrofit Options

- Option 5: Install alternative permeable paving BMP
  - Replace porous asphalt with permeable pavers in the parking bays; traditional asphalt in the drive lane
  - Pros: Permeable pavers less likely to clog over time
  - Cons: Expensive ($75,000 - $90,000)