# National, State Partnership Leads to **Parking Lot Success Story**

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By Ken Justice, NRMCA Senior Director, Local Paving

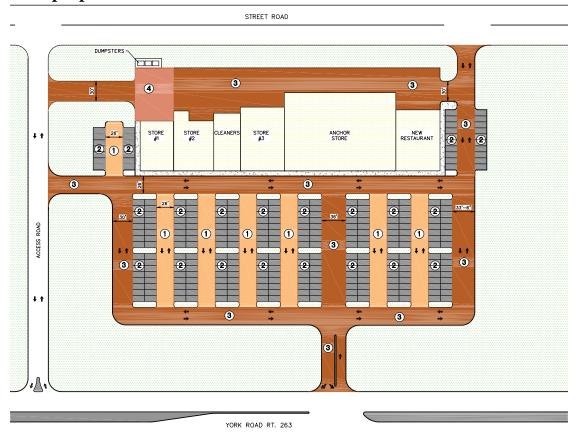
RMCA's Design Assistance Program (DAP) is a free service that helps our members overcome the biggest obstacle to market growth: a lack of familiarity with concrete paving among designers and specifiers. DAP provides detailed recommendations for specific concrete parking lot design, including CAD jointing recommendations along with the opportunity for design consultation. DAP recommendations are provided for conventional, pervious, RCC and concrete overlay parking lots to ensure quality results for specifiers new to concrete paving. Specifiers may participate in the program on their own, but the best way to utilize these free services is through or from the suggestion of contractors.

Using this formula, one of our promotional partners has taken DAP to a new level. Theron Tobolski, assistant executive director for the Illinois Ready Mixed Concrete Association, had an idea. He saw a trend in his state of under-designed asphalt pavements in parking lots while at the same time overdesigned concrete pavements in parking lots. Because of this discrepancy, many engineers and decision makers were choosing the "less expensive option" of asphalt. In addition, Theron was aware of the hesitancy of the engineers to request help with the design utilizing DAP.

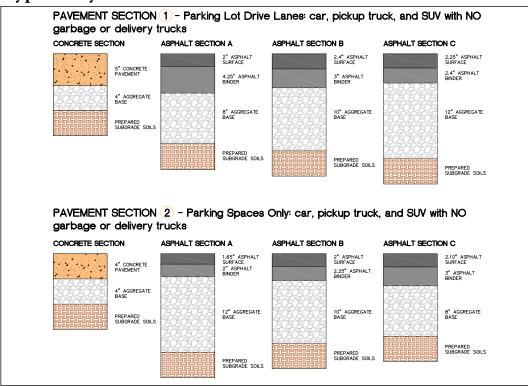
His idea was to create "generic" DAP packages for various typical projects such as a strip mall, gas station, hospital, school, truck stop, warehouse and others. Along with the generic DAP, he wanted to compare equivalent pavement sections of asphalt and concrete using the AASHTO 1993 pavement design structural numbers. Working with myself, and with input from Randy Riley of the American Concrete Paving Association, he developed color coded drawings showing equivalent paving sections for various sections of a parking lot, such as parking stalls, drive lanes, truck lanes and garbage truck tipping area(s). A typical strip mall DAP used by Theron is shown on page 29, as well as the equivalent pavement sections typically used in Illinois.

When reviewing the typical sections, it was evident to Theron that the asphalt sections were 6 to 14 inches deeper than the concrete sections-directly impacting the earthwork bid prices. By providing equivalent sections of concrete with significantly less earthwork, Theron successfully accounted for differences in initial costs of the pavement layers alone and, in fact, when

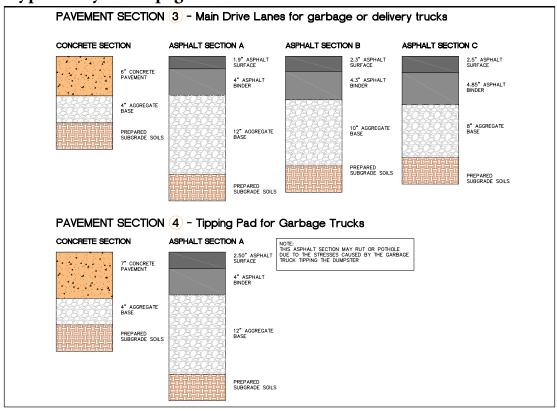
### "Typical" strip mall layout with numbered and color coded zones for multiple pavement thicknesses



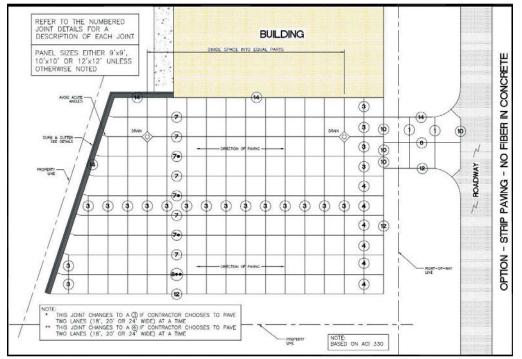
### Alternate thickness comparison charts for zones 1 & 2 in the "typical" layout above



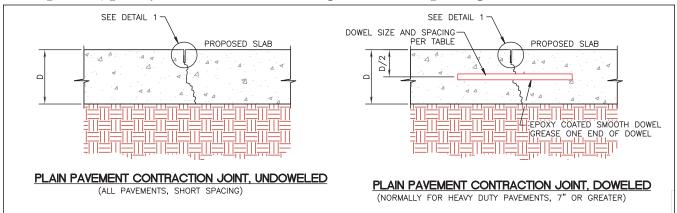
## Alternate thickness comparison charts for zones 3 & 4 in the "typical" layout on page 29



### "Typical" joint layout, with joint types, for strip paving construction



### Example of typical joint details in the design assistance package



added to the concrete numbers, could get OVERALL projects cost at or below the asphalt costs.

These generic DAP's were well received, but the engineers and contractors were still unsure of the joint layouts and details. So the Tobolski/Justice team went back to the drawing board and developed a "generic" joint layout plan for four different scenarios: 1. Strip paving, no structural fibers in the concrete mix; 2. Strip paving with structural fibers in the concrete mix; 3. Area/laser screed paving, no structural fibers in the concrete mix; and 4. Area/laser screed paving with structural fibers in the concrete mix. Jointing details and instructions for the use of dowels, tie bars, fibers and sawcutting were also included.

In only four months, Theron got his members to provide 26 project opportunities, leading to 12 DAP requests, and ultimately succeeded in flipping over 22,000 cubic yards

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of concrete parking lot pavement that otherwise would have been asphalt.

With the success of this generic DAP method, Theron foresees even more project flips. These generic DAP's are now available for use by all NRMCA members and state affiliates.

For more information, Ken Justice can be reached via e-mail at kjustice@nrmca.org.

Photos provided by Ken Justice.

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