

# **INDIANA CHAPTER**

# 2009 Indiana Excellence in Concrete Pavement Awards Presented

Indianapolis, IN — The Indiana Chapter - American Concrete Pavement Association (IC-ACPA) presented the **2009 Excellence in Concrete Pavement Awards** to project owners, contractors, engineers, and suppliers at a ceremony in Indianapolis on March 24, 2009.

# Category: Municipal Streets & Intersections (>30,000 SY) Project: 56th Street from Northfield Dr. to CR 900E, Brownsburg, IN (R-25925)

The first segment of a major reconstruction of 56th Street in Brownsburg, IN was recognized at this year's Excellence in Concrete Pavement Awards program. Constructed by Indianapolis based contractor, Berns Construction. Co., Inc., this project represents the Town of Brownsburg's portion of the long awaited 56th Street corridor; an up-grade developed in conjunction with Hendricks County to serve the growing community on the east side of Brownsburg, Indiana. The project involved the installation of storm drains, relocation of utilities, and widening of the two-lane road to a five-lane, 10" thick portland cement concrete pavement (PCCP) section from Northfield Avenue to CR 900E.



Funding for this segment was provided by the Town of Brownsburg and the new bridge over I-74 was funded through the Indiana Department of Transportation (INDOT). Berns Construction Co. delivered the project on schedule and within budget exceeding all project quality criteria even though they encountered significant weather and storm drainage delays and challenges during the early 2008 construction season. The contractor also created a safe transition between the old and new pavement to allow safe travel through the corridor until the final phase is completed by Hendricks Co. later this year. Berns Construction Co. is also the county's contractor for that phase of the project which runs between CR 900E and the Hendricks/Marion County line.

Owner: Designers: Contractor: Town of Brownsburg Floyd E. Burroughs & Associates, Inc. Parsons Cunningham & Shartle Engineers, Inc. Berns Construction Co., Inc.



## **Category: Reliever and General Aviation Airports** Project: Crawfordsville Municipal Airport Apron Reconstruction (AIP 2-28-0015-05)

The Crawfordsville Board of Aviation Commissioners (BOAC) undertook dual improvement projects including a new terminal building for the air field and reconstruction of the aircraft parking apron. Located just south of Crawfordsville between SR 47 and US 231, this municipal airport is one of several general aviation facilities in Indiana serving as an important but often overlooked public asset in the competitive field of community and economic development. Maintenance of service to their custom-



ers was critical during the reconstruction of this apron so the contractor, Rieth-Riley Construction Co., Inc. established a construction sequence that provided continuous access to the fueling island during the process. Pavement replacement began in June 2008 and paving was completed by mid October. This was a fairly straight forward "remove and replace" project where the existing asphalt pavement was removed and existing sub grade material was reshaped, graded, and compacted with some additional asphalt millings added to establish the specified elevation. The 8" thick P-501 portland cement concrete pavement (PCCP) was formed and poured using a 20' straightedge for finishing. The concrete was supplied by Irving Materials, Inc. who did an outstanding job monitoring the mix. The finished apron totaled 10,460 square yards of 8" P-501 PCCP with the pavement costs at \$459,000. The total project cost of the new apron was \$788,339. The new terminal building is under a separate contract and will open later this year with a grand opening planned in late summer/early fall, 2009.

**Owner: Designer: Construction Engineer: NGC Corporation Contractor: Ready Mix Supplier:** 

**City of Crawfordsville BOAC** Woolpert, LLC **Rieth-Riley Construction Co., Inc. Irving Materials, Inc.** 

# Category: Overlays Project: Delphi Municipal Airport Runway "18-36" Rehabilitation (AIP 3-18-0117-09)

The original Delphi Municipal Airport runway was built in the early 1970's and had been periodically patched as needed during the past several years. As an up-grade to the runway was necessary, the airport's consultant, NGC Corporation devised a plan to utilize Full Depth Reclamation (FDR); a process that creates a renewed base; and specified a 5" asphalt overlay for the surface as the Base Bid.. After some additional consideration of available options for this runway, they added Bid Alternate 2; which called for the 12" FDR process topped with a 5" thick P-



501 portland cement concrete pavement (PCCP); and Bid Alternate 3, which called for 5" thick P-501 PCCP over the existing asphalt surface. Bid Alternate 3 was selected as it resulted in a 22% reduction in cost from the Base Bid (no bid was received for Bid Alternate 2). A primary challenge for prime contractor, E&B Paving, Inc.'s Concrete Division, was to complete the project within the 63 consecutive calendar days allotted for the project. As E&B Paving worked with the consultant toward the July 7 start date, they were able to find efficiencies and reduce the actual construction time down to 40 days. Local excavation contractor, Rinehart Excavation, was hired under a separate contract to install edge drains prior to paving operations. Concrete was supplied by Irving Materials, Inc. from their Lafayette plant, 8 miles away. The Indiana Chapter - ACPA hosted a Project Open House on July 23, 2008 to allow other public officials, contractors, engineers and the general public to learn more about concrete overlays at general aviation facilities and see the paving operation in process. With the new Hoosier Heartland Highway scheduled for construction through this area in the near future, the new runway at the Delphi Municipal Airport serves as an added economic development asset for the community.

Owner:City of Delphi BOACDesigner:NGC CorporationContractor:E & B Paving, Inc., Concrete DivisionReady Mix Supplier:Irving Materials, Inc.

# Category: Municipal Streets & Intersections (<30,000 SY) Project: Front Street Reconstruction Project, Mishawaka, IN

The Front Street project is a 10" thick Portland cement concrete pavement (PCCP) roadway extension approximately 1600' long connecting existing Front Street to Main Street bordering the former Uniroyal Brownfield industrial site in downtown Mishawaka. This is part of a \$16M transformation known as the Ironworks Development including the Misha-



waka Riverwalk Phases 2 and 3. Following site dewatering and installation of storm, sanitary, and water utilities, 3000CY of mostly granular excavation and grading was completed. The contractor, Selge Construction, then placed a sub base of 6" compacted #53 aggregate followed by 10" thick dowelled PCCP. The project also included parallel and perpendicular parking lanes, 8' wide sidewalks, decorative lighting and landscaping. The centerpiece of the project is a roundabout installed at Front and Spring Streets incorporating a number of decorative paving techniques such as integral colored concrete crosswalks with bevel sawed joints exposing the white limestone aggregate, ADA ramps, integral colored pavement in the roundabout with slick tooled joints and a "broomed" pavement texture as the finish. A circular brick paver walk surrounds the center island concrete walls covered with a fieldstone façade. The Front Street project is an excellent example of the aesthetic versatility of concrete pavement and other concrete paving products.

Owner: Designer: Contractor: Ready Mix Supplier: City of Mishawaka DLZ Indiana, LLC Selge Construction Co., Inc. Aggregate Industries

# Category: Divided Highways/Interchanges (Urban) Project: I-65 Interchange at I-80/94, INDOT R-28982, Northwest Indiana

Part of a \$187M Major Moves Interchange Modification at I-65 and I-80/I-94 (Borman Expressway) in northwest Indiana, this segment of the project involves the I-65 mainline and was built in three phases. It included realignment of I -65 along with the construction of new high-speed ramps and collector distributors to accommodate a high volume of traffic anticipated over the next 30 years. While a 275 day closure period was necessary, Ramp D, NB 65 to EB 80/94 remained open throughout the pro-



ject. E&B Paving, Inc.'s Concrete Division, the contractor for this complex phase, had to refurbish three existing bridges and build six new ones before they could place most of the portland cement concrete pavement (PCCP). Crews were also hampered by significant rains and flooding during the project. E&B crews were still able to open the pavement within the original schedule while achieving a smooth riding pavement in the end. Overall, 53,000 SY of 16" thick mainline PCCP and 43,500 SY of 12" thick PCCP for the ramps and collectors was placed on the project. Total project cost for this contract was \$45.6M.

Owner: Contractor: Designer: INDOT E&B Paving, Inc., Concrete Division United Consulting Engineers, Inc.

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# Category: Divided Highways/Interchanges (Rural) Project: I-74/US 421 Interchange Modifications, INDOT (IR-29348)

As Honda decided to locate an auto assembly plant and a number of jobs in Greensburg and Decatur County, Indiana, one of the critical infrastructure incentive items was the realignment and up-grade of the I-74 Interchange at US 421. INDOT. Local officials, and their team of consultants and contractors worked quickly to develop and build new roadways and ramps to increase capacity and safety at the interchange that now serves the new Honda Manufacturing facility. ACPA member, Gohmann Asphalt & Construction



Co., Inc. was the concrete paving subcontractor responsible for providing the sub base and over 100,000 SY of Portland cement concrete pavement (PCCP) for the project which began in late 2007 and was completed in June 1008. Gohmann crews placed 11,000 SY of 10" thick PCCP and 90,000 SY of 11.5" thick PCCP along with the requisite sub base, totaling \$4.7M of the \$23.5M project. Sub base was the typical 6" of #53 compacted aggregate and 3" of open-graded #8 stone with concrete supplied by Prairie Materials. Concrete pavement was utilized for all of the major truck routes serving the new manufacturing complex including this interchange and a series of new and up-graded county roads.

Owner: Prime Contractor: Contractor: Ready Mix Supplier: Designer: INDOT Milestone, L.P. Gohmann Asphalt & Construction Co., Inc. Prairie Materials, Inc. R.W. Armstrong

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# Category: State Roads Project: Diamond Avenue, INDOT R-26450 (State Route 66), Evansville, Indiana

The Diamond Avenue project is a \$21M reconstruction of an urban section of SR 66 in a highly commercialized corridor in Evansville, IN. The project scope was complex calling for complete removal of the existing pavement; installation of extensive storm drainage facilities; and placement of over 112,000 SY of 11" and 10" thick Portland cement concrete pavement including the new four-lane main-line with center median islands, turn lanes, four intersection improvements, two reconstructed ramps at US 41,



approaches, driveways, curbs, sidewalks, signals and signage. Contractor E&B Paving worked closely with the community and INDOT, through bi-weekly partnering meetings, to coordinate and communicate critical elements of this complex project and to promote the safest and most efficient process for motorists, business, and construction crews as traffic was maintained throughout the two-season project. As an example, the City of Evansville was able to fit a major sanitary sewer project within the project limits concurrent to this project allowing the city to avoid further disruption to motorists and businesses in the corridor. In addition, E&B conducted paving operations primarily at night to minimize interference with daytime traffic. Communications with area businesses, schools and the general public were facilitated through frequent progress meetings and regular involvement of the local media. This extraordinary level of coordination has resulted in a fully renewed corridor serving this busy Evansville commercial district.

Owner: Designers:

**Contractor:** 

INDOT AECON Transportation Woolpert, LLC E & B Paving

# Category: Concrete Pavement Restoration (CPR) Project: US 231 PCCP Patching, INDOT RS-30962-A

INDOT's Crawfordsville District needed to restore portions of US 231 on the 28 year-old concrete pavement between downtown Crawfordsville and the I-74 interchange. Rieth-Riley Construction Co., Inc. was awarded the contract that involved saw cutting and removal of deteriorated concrete; reshaping and compacting of the sub base; .proper dowel bar installation; and placement of portland cement concrete pavement (PCCP) to finish the restoration project. 566 patches were poured with over 9000 dowel bar retrofits and 8700 LF of joint



resealing performed on this CPR project. A total of 9053 SY of 9.5' thick PCCP was hand placed, finished with a straight edge, and properly tined. INDOT added some additional quantities during the project extending the original completion date by two weeks. The project began in mid-September and was completed at the end of November. Total project cost was \$1.12M and PCCP costs were \$787,500.

Owner: Contractor: Ready Mix Supplier: INDOT Rieth-Riley Construction Co., Inc. Irving Materials, Inc.

IN-ACPA presents these awards to recognize exceptional construction of concrete pavement; and to honor the accomplishments of project owners, engineers, and contractors.