FISHING FOR INFRASTRUCTURE: BLENDING ECONOMIC DEVELOPMENT WITH SITE DEVELOPMENT

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In Butler County, West Chester Township
South of Dayton and North of Cincinnati
AERIAL VIEW OF THE SITE LOCATION
Commercial development activity in Butler County has been steadily rising back to pre-recession levels and nearly 20 years after the opening of the Union Centre Boulevard, this area is still a magnet for new development.
DEVELOPMENT AT AND AROUND UNION CENTRE BOULEVARD

New Garden Inn Hotel

New Holiday Inn, Under Construction

The Streets of West Chester

The Village at The Streets of West Chester
In 2013 Bass Pro Shops announces it plans to build a new store in West Chester Township.

Bass Pro Shops announcement attracts new business to the site which presents it’s own challenges.
The new Bass Pro Shops store in West Chester Township will feature:

- A 150,000 square-foot facility
- A nautical themed restaurant
- 12 lane bowling alley
- Boat showroom
“Top Golf” plans to construct a new 65,000 square foot facility near the site.

- The facility is expected to serve 45,000 visitors in the first year.
- Will create 450 full and part-time jobs.
- Expected to boost the economic output to West Chester by $264.5 million in the next 10 years.
“Scott Street Partners” plans to develop a 7.5 acre tract of land located just to the north of Bass Pro Shops

- Will feature dining facilities
- A total of four buildings
- Will create additional full and part time jobs
- Further boost the economic output to West Chester
“Streets of West Chester” plans to move ahead with their 200,000 square-foot expansion

- The expansion will include specialty and big box retail stores including dining and entertainment venues
- Will create additional full and part time jobs
- Further boost the economic output to West Chester
NEW DEVELOPMENT & BASS PRO LOCATION

New Bass Pro Shops

Streets of West Chester

Top Golf
When the Bass Pro Shops site was selected, there were no roads or utilities at the site

- Existing Civic Centre Boulevard does not extended beyond the Streets of West Chester development
- No public utilities (Water and sewer)
- Private utilities (Power, Natural gas and communication) could not be easily accessed
- New infrastructure to serve all new developments and not just Bass Pro Shops
Future economic benefits of the new developments lends itself for TIF funding opportunities

• Tax Increment Funding (TIF) is a funding mechanism used by many public agencies to fund infrastructure projects.

• Through the use of TIF, public agencies can dedicate future tax revenues of a business, or group of businesses toward an economic development project in the community.
With TIF funding, each developer had their own expectations of infrastructure items to be delivered to them such as:

- Storm sewer outlets
- Sanitary sewers
- Water
Three major developments all being planned at the same time as the roadway was being designed was a major challenge.

- Adequate access
- Storm water management
- Access to utilities
- Right of Way and easements
THE BASS PRO SHOPS SITE

New Bass Pro Shops
TOP GOLF SITE

New Bass Pro Shops

Top Golf
SCOTT STREET SITE

Scott Street

New Bass Pro Shops

Top Golf
Unnamed tributary of East Fork Mill Creek runs along the entire east side of the proposed Road.
Total stream length
Disturbed 298.50-ft, barely below the 300-ft Limit for a Nationwide Permit.

Existing culvert extended

East leg of proposed roundabout crosses stream. A new culvert is placed.
Proposed Road traversing around FEMA pond

Roadway EDA>1 acre
Roadway BMPs incorporated at site

Existing FEMA pond

Proposed Road traversing around FEMA pond
The TIS had its own challenges for this project. With Bass Pro Shops not being a typical land use from ITE manuals, the design team had to gather data from similar sites nearby.

- The existing Bass Pro Shops in Cincinnati could not be used.
- The existing Bass Pro Shops in Toledo was the closest one we could study.
- Miovision traffic count equipment was used.
- Focused on the redistribution of traffic through the proposed Civic Centre Boulevard.
TIS-USE OF MIOVISION EQUIPMENT TO COLLECT DATA

Miovision equipment

Sample of traffic data from the Toledo Bass Pro Shops Site
With the volume of truck traffic from Windisch Road, a roundabout in lieu of an intersection was recommended to discourage truck traffic through Civic Center Boulevard.

- Maneuverability of vehicles with boats through the roundabout was a concern for Bass Pro Shops
- With the exception of the east leg, all legs were designed for a WB-50 vehicle. The east leg was designed for an SU vehicle (Top Golf access)
- Other vehicular access points provided to the Top Golf site
- The location of the roundabout changed as access locations changed
ROUNDABOUT TEMPLATES
Intersection would not discourage heavy truck traffic from Windisch Road.
ROUNDABOUT LOCATION CHANGES AS ACCESS POINTS CHANGED

Current Location

Location Near Access
Public and private utilities serving all of the new developments within a tight right of way presented its own challenges. The infrastructure design included the design of the following public utilities:

- Storm Sewers coordinated with site development.
- Water Mains coordinated with site needs and other utilities.
New private utilities serving the new developments and the relocation of the existing were closely coordinated.

- Natural Gas (Duke Energy-Gas)
- Power (Duke Energy-Electric)
- Communication (Cincinnati Bell)
- Communication (Time Warner Cable)
• Civic Centre Boulevard (3 lane curbed)
• Tree lawn and walks on both sides
• Realignment of Windisch Road for a 90-degree intersection and the addition of a turn lane
• Widening of Allen Road and the addition of turn lanes
• The addition of sidewalk along Allen Road
• The installation of a mast arm traffic signal at the intersection of the proposed Civic Centre Boulevard extension with Allen Road
• Street lighting at the signalized intersection and roundabout
• Pedestrian lighting along Civic Centre Boulevard
• Landscaping at the intersection, roundabout and tree lawn areas
LANDSCAPING AT THE INTERSECTION

View from Allen Road looking towards the new Civic Centre Boulevard
LANDSCAPING AT THE INTERSECTION

View from Allen Road looking towards the new Civic Centre Boulevard
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View from Allen Road looking towards the new Civic Centre Boulevard
View from Allen Road looking towards the new Civic Centre Boulevard
LANDSCAPING AT THE INTERSECTION

View from the new Civic Centre Boulevard towards the roundabout
LANDSCAPING AT THE INTERSECTION

View from the new Civic Centre Boulevard towards the roundabout
LANDSCAPING AT THE INTERSECTION

View from the new Civic Centre Boulevard towards the roundabout
Transportation and economic development are intertwined. Businesses are choosing to locate in more accessible locations.

Targeted transportation project investments, such as the extension of the existing Civic Centre Boulevard, to accommodate new development will create jobs and improve the local economy.

With funding for transportation projects becoming scarce, more focus is needed on finding creative ways of partnering with businesses and developers to fund transportation projects.
THANK YOU

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