Bill Jeffers, Vanderburgh County Surveyor Doug McDonald, P.E., L.S., Chief Deputy Surveyor Baseline Park

VANDERBURGH COUNTY SURVEYOR'S OFFICE

Room 325 Civic Center Complex
One Northwest Martin Luther King, Jr. Boulevard
Evansville, Indiana 47708-1833

Phone: (812) 435-5210 FAX: (812) 435-5023

January 4, 2002

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Mr. Paul Elpers Elpers Brothers Construction, Inc. 11911 Winery Road Wadesville, IN 47638 812-963-9540 NAGE PLAN
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NOTICE OF INSUFFICIENCY OF DRAINAGE PLAN NORTHSIDE GYM AND FITNESS CENTER

Dear Mr. Elpers:

The site drainage plan, hereinafter referred to as "the Plan", submitted at or about noon December 03, 2001, for Northside Gym and Fitness Center, Lot 13, Baseline Business Park, hereinafter referred to as "the Site", is found to be insufficient in that the Plan does not meet certain design criteria set by the approved final drainage plan for Baseline Park.

Specific insufficiencies include but are not necessarily limited to the following:

- 1. The Plan does not include designs for routing all storm water run-off from the Site, thence through designated and platted drainage easements and into the subdivision's storm water retention facility.
- 2. The Plan lacks certain detailed information and depictions that, if included, would insure that undetained, excess storm water run-off would be directed away from properties adjacent to the site, and into appropriate storm water facilities.
- 3. The Plan includes designs for routing undetained storm water into the right-of-way for Baseline Road, and into an area without a roadside ditch or into a roadside ditch not capable of or intended to receive and convey storm water from the Site

Stoffed Shopped Shoppe

4. The routing of undetained storm water from the Site and into Baseline Road right-of-way as shown by the Plan will result, during intense rainfall events, in uncontrolled flooding of the roadway, and overloading of certain downstream pipes and channels not designed to receive storm water from the Site.

In addition, the Plan generally does not meet minimum requirements for site drainage plans of same or similar scope for reasons more specifically including, but not necessarily limited to:

- 5. The plan does not include sufficient details of yard and pavement grading to demonstrate full capture and orderly conveyance of surface water runoff into area inlets, channels, pipes, and other storm water drainage facilities.
- 6. Unnumbered and incorrectly identified structures located in the northeast corner of the site are not shown surrounded by or in proximity to sufficient grading details to prove adequate service as inlets for the entire north lawn.
- 7. There is a lack of grading details along east side of building to prove interception of storm run-off prior to entering on neighboring property.
- 8. Outdoor tennis/basketball court area is shown as a perfectly flat plane with no indication of direction of sheet flow. The Plan shows no method to intercept and convey storm run-off away from neighboring property and into available storm water facilities.
- 9. Outdoor tennis/basketball court is shown at same elevation as building floor indicating lack of flood protection for finished floor inside building.
- 10. Grading details for the sumped entrance of the 15" HDPE extend onto adjacent Lot 12 near southwest corner of parking lot without indication of permission to construct and maintain final grading on someone else's property.
- 11. Grading details indicate uncovered or insufficiently covered 15" diameter plastic pipe at southwest corner of parking lot. Flared end section or headwall required with anchors to prevent curl-up, and cover required per manufacturer's recommendation.
- 12. Straight grade of gutter run along west edge of parking lot without sumped inlet rims and alternating high low breaks allows excess accumulated storm flow to bypass inlets and flow across entrance into Baseline Road.

- 13. Straight graded entrance apron with insufficiently designed inlets appears to allow accumulated storm run-off to encroach travel lane of Baseline Road.
- 14. Information given indicates substandard 9" cover on pipe at west inlet in entrance apron.
- 15. Lawn area east of entrance and around the "future landscape berm" appear subject to chronic wetness due to lack of adequate grading and structural details.
- 16. The Plan lacks accompanying calculations and other data to prove sufficiency of pipe sizing to handle design storm run-off particularly from rooftops, parking lot, and tennis/basketball court.
- 17. In some cases, the Plan lacks correct identification, location, size and material of pipes.
- 18. The Plan lacks elevation drawings of bedding details for HDPE according to manufacturer's recommendations both under pavement and outside pavement areas as required.
- 19. In some cases the Plan lacks correct identification, location, and typical plan and profile drawings of inlet boxes, grate castings and other pipe connections.
- 20. The Plan lacks location and detail of flared end sections or other adequate end treatment for all exposed pipe ends as required.
- 21. The Plan lacks complete location and detail of downspout connections or splash pad discharge onto lawn surfaces.

Other items may become topical as review progresses. If you have questions or comments, please call the county surveyor.

Sincerely,

Bill Jeffers Vanderburgh County Surveyor

cc: County Engineer
Area Plan Commission