WEST CENTRAL CONSERVANCY DISTRICT REQUIREMENTS FOR TRANSFER

OF

DEVELOPMENT SEWER FACILITY (5/15/05 Amended 10/23/06, 4/21/15) EFFECTIVE April 21, 2015

The following items shall be required of all developers/developments when requesting transfer of sewer facilities to the West Central Conservancy District:

- Construction Plans must be signed and sealed by a licensed professional engineering firm selected by the District prior to the Construction Approval Process of Hendricks County authorities. The developer shall be responsible for all charges of the engineer during the plan approval process.
- 2. The **DEVELOPER** shall be responsible for the execution of any easements required by the District to provide access to all lift stations and service lines not included in the recorded subdivision plat. **Copies of any and all off-site easements are to be provided the District before development approval.**
- 3. A District Inspector will be assigned to the construction project and be responsible for the inspection of that project to completion and acceptance by the District, including inspecting all manholes (outlined in this document) and lift stations (specifications outlined in this document) of the sewer facilities prior to acceptance by the District. The developer shall be responsible for any and all costs associated with the inspection program by District personnel.
- 4. The District Inspector must be notified of <u>all</u> construction times for sewer installation. Failure to notify of construction and installation of sewer line that the Inspector cannot observe may require use of a tv camera to observe the installation after the fact and/or re-excavation of the work. The developer shall be responsible for any and all associated costs with inspection after the fact due to not informing the inspector of scheduled work being done.
- 5. The **DEVELOPER** shall provide three (3) sets of as-built drawings to the District consisting of one (1) set of prints and two (2) sets of as-builts on CAD diskettes. All as-built drawings will show the location and elevation of (1) all manholes installed, (2) all lines installed, (3) all laterals for connection to proposed buildings and (4) invert-elevations of all sanitary sewer and stubs.
- 6. The **DEVELOPER** (**OR CONTRACTOR**) shall conduct Manhole Vacuum Testing (outlined in this document) under the supervision of a District Inspector. **The developer shall be responsible for all costs associated with the District Inspector during the testing process.**
- 7. All newly installed sewer lines shall be cleaned and inspected by WCCD camera prior to acceptance by the District. The **DEVELOPER** shall be responsible for the cleaning of all newly installed sewer lines and coordinating the use of the CCTV camera system to inspect the lines <u>after</u> cleaning. This procedure shall be done after all lines have been installed and prior to the final walk-thru. Upon written request

- and payment of reimbursement for the cost of the tape, a copy of the televised lines will be provided to the developer. The developer shall be responsible for all costs associated with cleaning and televising the lines.
- 8. The **DEVELOPER** (**OR CONTRACTOR**) shall conduct Air Testing, Vacuum Testing, Mandrel Testing and Hydrostatic Testing (tests outlined in this document) under the supervision of a District Inspector. **The developer shall be responsible for all costs associated with the District Inspector during the testing process.**
- 9. The **DEVELOPER** shall provide the District copies of all operational and maintenance manuals for all lift station mechanical and electrical components.
- 10. The **DEVELOPER** (**OR CONTRACTOR**) shall provide the District a certification from the company installing the lift station, certifying that all pumps were properly tested and started by a duly trained pump technician. **A District Inspector <u>must</u> be present at the initial pump start-up.**
- 11. The **DEVELOPER** shall provide to the District the account number and address for the electrical service to any lift station enabling the District to assume payment of electrical expenses once the sewer facilities have been transferred to the District.
- 12. The **DEVELOPER** shall execute a Bill of Sale for Sewer Facilities substantially in the form as set forth in Exhibit A.
- 13. The **DEVELOPER** shall provide to the District a detailed cost analysis of the assets being transferred to the District by completing Exhibit B.
- 14. The **DEVELOPER** shall provide to the District a two-year Maintenance Bond in the amount of twenty percent (20%) of the sewer facility construction cost. This Bond to commence as close to the date of acceptance of the sewer facilities as possible.
- 15. All costs billed to the **DEVELOPER AND/OR CONTRACTOR** for services rendered by District personnel or contractors shall be paid in full prior to District acceptance of the sewer facilities.

LINE CONDITION

The sewer line will be clean for testing purposes. All construction debris, obstacles, sediment, etc. will be removed as a part of the normal construction process. A mechanical pipe plug must be installed at all new connections to WCCD sewers. This plug may only be removed after the final walk-thru. Removal of the plug prior to the final walk-thru will require all to be recleaned and televised prior to WCCD acceptance consideration and may include extending that cleaning to lines down-stream of project of construction waste. **Associated charges will be the responsibility of the DEVELOPER.**

LIFT STATION CONSTRUCTION SPECIFICATIONS

For there to be consistency in construction design, appearance and operation of lift stations that are to be accepted by the West Central Conservancy District, the following specifications are considered as minimum standards for acceptance for development sewer facilities possessing lift stations:

- 1. A concrete pad with a thickness of no less than 4" (four inches) covering the lift station area extending no less than 3' (three feet) past the wet well and valve vault.
- 2. Drives to the lift station shall be stone compacted and paved with the extreme minimum width of 10' (ten feet) designed to allow trucks to turn around and completely exit the thoroughfare route used to get to the station.
- 3. AES Intellinet Radio Alarm is to be installed as a part of the lift station installation.
- 4. All lift stations with static or erratic flow shall have a MULTI-TRODE pump activation/high level alarm installed.
- 5. An overhead, low voltage, light with an on/off switch must be installed inside fenced area.
- 6. A "Safe-Hatch" access cover from FLYGT, or other approved vendor, must be installed under the wet well access doors.

Any questions as to drives and/or equipment can be directed to District Inspection personnel at (317) 272-3944.

LIFT STATION FENCING AND MAINTENANCE RESPONSIBILITIES

- 1. Developers or Contractors are responsible for installing a fence that protects the new lift station function and provides safety to the public. A fence, 6' (six feet) in height, touching the perimeter of the pad, set in concrete with two (2) 4' (four feet) swing doors with a lock system. The swing doors need to be centered with the wet well. Fence composition for a chain link fence is to be at a minimum 11 gauge chain link. The fence should be raised approximately 3" (three inches) from ground level with one (1) strand of tension wire woven through the lowest links. Wooden privacy type fencing may also be used with prior District approval.
- 2. The area immediately outside the fenced area, excluding the gate area, is to be finish graded and sowed with grass. The area may be further landscaped with prior approval of the District in such a manner as to assist in "hiding" the station by use of shrubs, flowers and/or tall grasses. If the indicated landscape materials are used by the Developer, Contractor or Property Owners' Association, the materials must be planted a minimum of 10' (ten feet) from the fencing and roadway; must not interfere with the ingress and egress of the station; not be planted over existing the sewer lines that the roots can eventually interfere with the flow of the line and the responsibility to replace dead material and maintain landscaping remains the responsibility of the Developer, Contractor or Property Owners' Association.
- 3. The actual fencing, once installed and accepted by the District, shall be maintained by the District including stain/sealant for the wooden fencing that presents, in the opinion of the District, a neutral appearance to the fencing. A 3 –

4 year maintenance program will be implemented. Color, type of stain and sealant selection will rest solely at the discretion of the District.

MANHOLE INSPECTIONS

DEVELOPER (OR CONTRACTOR) shall ensure all new manholes show no visible signs of leakage or that the construction of the manhole causes no concern for safety in entering or exiting the manhole.

DEVELOPER (OR CONTRACTOR) shall ensure an internal/external chimney seal manufactured by Adapter, Inc. is installed on any newly constructed manhole.

DEVELOPER (OR CONTRACTOR) shall ensure any connection to an existing manhole be properly grouted and sealed to keep from leaking. Developer (or Contractor) will only be responsible for any connections made to an existing manhole – not the condition of the manhole prior to the connection.

Manholes shall be inspected by District Inspectors. Failed construction of new manholes or connections to existing manholes <u>must</u> be re-inspected by a District Inspector until such time as the inspection passes.

Significant issues surface with manholes being covered up in the early stages of the project by primarily service contractors and landscape contractors. For this reason, manholes will be inspected prior to acceptance of the sewer facilities by the West Central Conservancy District and two (2) additional times prior to the expiration of the bond. Repair and/or adjustment of manholes as a result of these inspections will be the responsibility of the DEVELOPER (OR CONTRACTOR) or become a claim against the Bond.

MANHOLE VACUUM TESTING

All new manholes must be air tested in accordance with ASTM C1244-93, Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test. The **DEVELOPER** (**OR CONTRACTOR**) is responsible for all equipment required for the proper testing of the manholes. "This test method is intended to be used as a preliminary test to enable the installer to demonstrate the condition of the concrete manholes prior to backfill. It may also be used to test manholes after backfilling". (ASTM C1244-93 1.1.2)

Testing for District purposes will be performed at the time of the air and mandrel testing. The test head shall be placed at the top of the manhole. A vacuum of ten inches (10") of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed and the pump shut off. The time measured for the vacuum to drop to nine inches (9") of mercury. The manhole shall pass if the time for the vacuum reading to drop from 10" to 9" of mercury meets or exceeds the values indicated in C1244-93 Table 1. **The DEVELOPER (OR CONTRACTOR) is responsible for any repairs needed and the manhole shall continue to be retested until a satisfactory test is obtained.**

The **DEVELOPER** (**OR CONTRACTOR**) shall provide the District a minimum forty-eight (48) hours of notice prior to the proposed testing date to allow for scheduling of personnel. District Inspectors may be contacted at the District Plant, 243 South County Road 625 East, Avon, IN or (317) 272-3944. The District shall make every effort to work with the proposed

schedule, but reserves the right to postpone testing for a maximum period of one (1) week in the event of scheduling conflicts.

MANDREL TESTING

DEVELOPER (**OR CONTRACTOR**) shall perform the Mandrel Test prior to the Air Test unless otherwise approved by a District Inspector for reason. The Mandrel Test and the Air Test shall be performed in the same general timeframe. **Water lines shall be installed prior to test.**

DEVELOPER (OR CONTRACTOR) shall provide all necessary equipment to perform the testing including, but not limited to, a mandrel with its proving ring and string.

The test shall be conducted by a District Inspector. Sewer lines shall be tested no sooner than thirty (30) days after completion of installation.

The Mandrel shall be a rigid device, cylindrical in shape and constructed with nine (9) or ten (10) evenly spaced arms or prongs that will pass through a five percent (5%) or less deflection of the base inside diameter of the pipe.

The sewer lines shall be pre-strung with the string intended to pull the mandrel to allow for a faster test.

The **DEVELOPER** (**OR CONTRACTOR**) shall uncover and repair all failed lines. **Failed** lines <u>must</u> be re-inspected by a District Inspector until such time as the lines pass.

AIR TESTING

Testing of sewer lines shall be conducted in the presence of the District Inspector by the DEVELOPER (OR CONTRACTOR). All water lines shall be installed prior to test.

Sewer lines shall be tested no sooner than thirty (30) days from completion of installation.

DEVELOPER (OR CONTRACTOR) shall provide all tools and equipment necessary to perform the test including, but not limited to, mechanical and pneumatic plugs, air control panel, shut-off valve, pressure regulation valve, pressure relief valve and input pressure gauge. No less than two (2) hoses shall be used for the airing of the line and the constant air monitoring.

Continuous monitoring pressure gauge must read from zero (0) to at least ten (10) psi with minimum divisions of one-tenth (.10) psi and an accuracy of plus or minus four-hundredths (.04) psi.

Sewer lines shall be pumped to no less than five (5) psi. Lines shall be allowed two (2) minutes for stabilization and be tested for five (5) minutes. Maximum allowable loss in pressure is five-tenths (0.5) psi. At no time shall the line drop pressure below four and five-tenths (4.5) psi.

DEVELOPER (OR CONTRACTOR) shall perform all necessary work in locating and repairing leak(s) to failed lines. **Failed lines must be re-inspected by a District Inspector until the line passes test.**

HYDROSTATIC TESTING

DEVELOPER (OR CONTRACTOR) shall provide all necessary tools including, but not limited to, a hydrostatic water pump, a pneumatic or mechanical plug and a hose to fill force main `and read continuous monitoring pressure gauge.

Continuous monitoring pressure gauge shall read from zero (0) to at least one hundred fifty (150) psi with minimum diversion of ten (10) psi.

Lines shall be pumped to one and one half (11/2) times the Pump Shutoff Head of the force main. Lines shall be allowed thirty (30) minutes for stabilization and be tested for one hundred twenty (120) minutes. Lines shall be allowed to drop no more than ten (10) gallons per inch diameter per mile per day.

Sewer lines shall be tested in the presence of a District Inspector by the DEVELOPER (OR CONTRACTOR). Failed lines shall be re-inspected until lines pass.

Locating leak(s) and repair of same is the responsibility of the DEVELOPER (OR CONTRACTOR).

EXHIBIT A

BILL OF SALE – SEWER FACILITIES

KNOW ALL MEN BY THESE PRESENTS, that _______, An Indiana Corporation ("Grantor"), for and in consideration of the sum of Ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby bargains, sells, transfers, assigns, and sets over unto WEST CENTRAL CONSERVANCY DISTRICT, a duly formed conservancy districted formed pursuant to I.C. 13-3-3 et seq. ("Grantee"), its successors and assigns, all of its

right, title and interest in and to the sewer mains and facilities (the "Sewer Facilities") described in the "as-built" sewer plans attached hereto as Exhibit 1 and made a part of hereof, including whether or not set in the "as-built" sewer plans:

- (a) All sewer mains, pipes and conduits, lift stations, manholes, all necessary or incidental auxiliary, or feeder, service mains, pipes and conduits and other facilities, appliances, apparatus and structures convenient or proper for the purpose of rendering sewage disposal service;
- (b) All rights and records, including without limiting accounting records relating to the installation, construction, acquisition, operation, maintenance, repair, inspection and renewal of the Sewer Facilities;
- (c) All right-of-ways, licenses, contracts, permits and other rights and authority held by Grantor in connection with its ownership of the Sewer Facilities; and electrical components.
- (d) All operational and maintenance manuals for all lift stations' mechanical and electrical component.

TO HAVE AND TO HOLD the Sewer Facilities, together with all incomes, revenues, rents, issues and profits thereof hereafter accruing unto Grantee, its successors and assigns, forever.

The Grantor hereby covenants with the Grantee that the Grantor is the lawful owner of, and has good and marketable title to, the Sewer Facilities for the use to which they are devoted; that the Sewer Facilities are free from encumbrances; that Grantor has good right to transfer the Sewer Facilities; and that Grantor will warrant and defend the Sewer Facilities against the lawful claims and demands of all persons claiming by, through or under Grantor including indemnifying Grantee for all its costs and expenses incurred by grantee for defending any claims and demands of any and all persons claiming by, through or under Grantor including Grantee's attorney's fees.

It is understood wherever in this instrument reference is made to either of the parties hereto, it shall be held to include the successors and assigns of such party the same as if in each and every case so expressed.

IN WITNESS WHEREOF,	has
Executed this Bill of Sale – Sewer Facilities on this day of	,
20	
GRANTOR	

	By:
	Name:
	Title:
ATTEST:	

EXHIBIT B

COST ANALYSIS OF SEWER FACILITIES OF

BEING TRANSFERRED TO
WEST CENTRAL CONSERVANCY DISTRICT

<u>ITEM</u> <u>COST</u>

Lift Stations	
a)pumps	
b)	
Total Cost Lift Station	
Feet ofin Service Lines	
Feet ofin Service Lines	
Total Cost Services Lines	
Manholes	
Total Cost Manholes	
Total Value of Sewer Facilities	\$
I hereby certify the above and foregoing cost analys transferred to the West Central Conservancy District is true and belief.	_