

RESOLUTION NO. 07-12-2012

**RESOLUTION OF THE COLLIER TOWNSHIP MUNICIPAL AUTHORITY (CTMA),
ALLEGHENY COUNTY, PENNSYLVANIA REVIEWING THE CURRENT CAPACITY
STATUS OF ALCOSAN POINT OF CONNECTION KNOWN AS C-54-12-THOMS RUN
ROAD**

WHEREAS, the COLLIER TOWNSHIP MUNICIPAL AUTHORITY, has executed an Administrative Consent Order (ACO) with the Allegheny County Health Department on January 8, 2004 as authorized and approved by CTMA Resolution 01-08-2004-01; and

WHEREAS, said ACO required preparation and submission of a full Feasibility Study by July 2013; and

WHEREAS, the US Environmental Protection Agency has entered a Consent Decree (CD) for the Allegheny County Sanitary Authority (ALCOSAN) requiring preparation of a Wet Weather Plan by January 2013; and

WHEREAS, said ACO requires that the COLLIER TOWNSHIP MUNICIPAL AUTHORITY cooperate with ALCOSAN in the preparation of its Consent Decree-mandated Wet Weather Plan; and

WHEREAS, ALCOSAN by letter dated November 7, 2011, directed only to Collier Township, had requested that, for each listed complex sewershed, the participating municipalities submit a single comprehensive draft Feasibility Study designated by Point of Connection (POC) and adopt and submit a resolution indicating the current status of its evaluation of leading alternative wet weather plan solutions; and

WHEREAS, the purpose of this Resolution, by the Collier Township Municipal Authority (CTMA) is to acknowledge this authority's consideration of the current preferred alternative(s) relative to the Wet Weather Plan.

NOW, THEREFORE, BE IT RESOLVED that


1. This authority herein named acknowledges an alternative analysis has been undertaken and preferred alternatives, along with current development and conditions comments have been short listed as identified in Attachment A hereto, and, based on information currently available at the time of this submission, concurs that they appear to be the best alternative(s).

2. This concurrence does not, in any manner whatsoever, provide any type of approval, nor does it commit this authority to any particular alternative, to any associated construction costs of the current preferred alternative, or to relinquish the opportunity to evaluate other possible alternatives prior to the ACO July 31, 2013 submission date.


3. Further, this concurrence does not preclude further study, consideration of additional alternatives, and final recommendation and acceptance of same prior to the ACO mandated submission of their Feasibility Study by July 31, 2013 or as additional information material to our deliberations may become available.

I, Dan Fotovich, Secretary, Collier Township Municipal Authority, hereby certify that the foregoing is a true copy of the Authority's Resolution No. 7-12-2012 which was adopted at a regularly scheduled meeting of the Collier Township Municipal Authority of the 12th day of July, 2012.

COLLIER TOWNSHIP MUNICIPAL AUTHORITY



Daniel J. Oberleitner, Chairman



Dan Fotovich, Secretary

Attachment A

To

Resolution No. 07-12-2012 of

COLLIER TOWNSHIP MUNICIPAL AUTHORITY

The Collier Township Municipal Authority has been in discussion with the South Fayette Municipal Authority to evaluate and consider various approaches to handling wet weather flows within POC C-54-12, Thoms Run. Based on information considered to the date of this Resolution including information developed by the Authority and information developed by ALCOSAN and provided to the COLLIER TOWNSHIP MUNICIPAL AUTHORITY, the current preferred alternative for ALCOSAN C-54-12, Thoms Run, is:

Conveyance of the 2 year Return Storm which has a Peak Instantaneous Rate of Flow of 3.61 mgd at the POC, and a total Response Volume of 1.83 MG at the POC.

As set forth in attached documents as prepared by NIRA Consulting Engineers identified and marked as “PRELIMINARY FLOW ESTIMATE FOR SANITARY SYSTEMS Collier Township Municipal Authority, Allegheny County, PA ALCOSAN POC C-54-12”.

Supplementing this material is a Current Status Statement which is review of the major issues related to the denial of conveyance access to the ALCOSAN chamber and municipal legislative changes that have taken place since the line was constructed that have reduce the density in development of land within Collier Township as well as transfer of property within the drainage area that has been permanently restricted so as to prevent this land from being developed for either residential or commercial use.

It is acknowledged that said alternative has an estimated feasibility-level Probable Construction Cost of \$1,289,880.00 (today's dollars) which would be required to “ Upgrade pipelines from C-54-12 at Chartiers Creek to Manhole TR-18 at Forsythe Road”. This upgrade would increase the line size from a current size of eighteen (18) inches to twenty one (21) inches.

PRELIMINARY FLOW ESTIMATE FOR SANITARY SYSTEMS

Collier Township Municipal Authority, Allegheny County, PA

ALCOSAN POC C-54-12

The following information is being submitted by Collier Township Municipal Authority to fulfill the ALCOSAN request for a Preliminary Flow Estimate (PFE):

- This cover sheet with information regarding the basis and coverage for the PFE.
- Peak Dry Weather Flow Estimate
- Peak Wet Weather Flow Estimate:
 - Live Excel worksheet with a graph depicting the peak base wastewater flow, peak ground water infiltration and total system flow for the 1, 2, 5 and 10 year design storms utilizing SCS Type II (summer and winter) Distributions.
 - Live Excel worksheets for the above design storm flow rates on a 15-minute time step basis for the entire storm period.

The provided PFE is being submitted on behalf of: Collier Township Municipal Authority and South Fayette Township.

The provided PFE is for an area tributary to ALCOSAN Point-of-Connection (POC) C-54-12 and is representative of a tributary area of 2,516.63 acres. This PFE represents ALL flow conveyed to the point of connection from ALL municipalities.

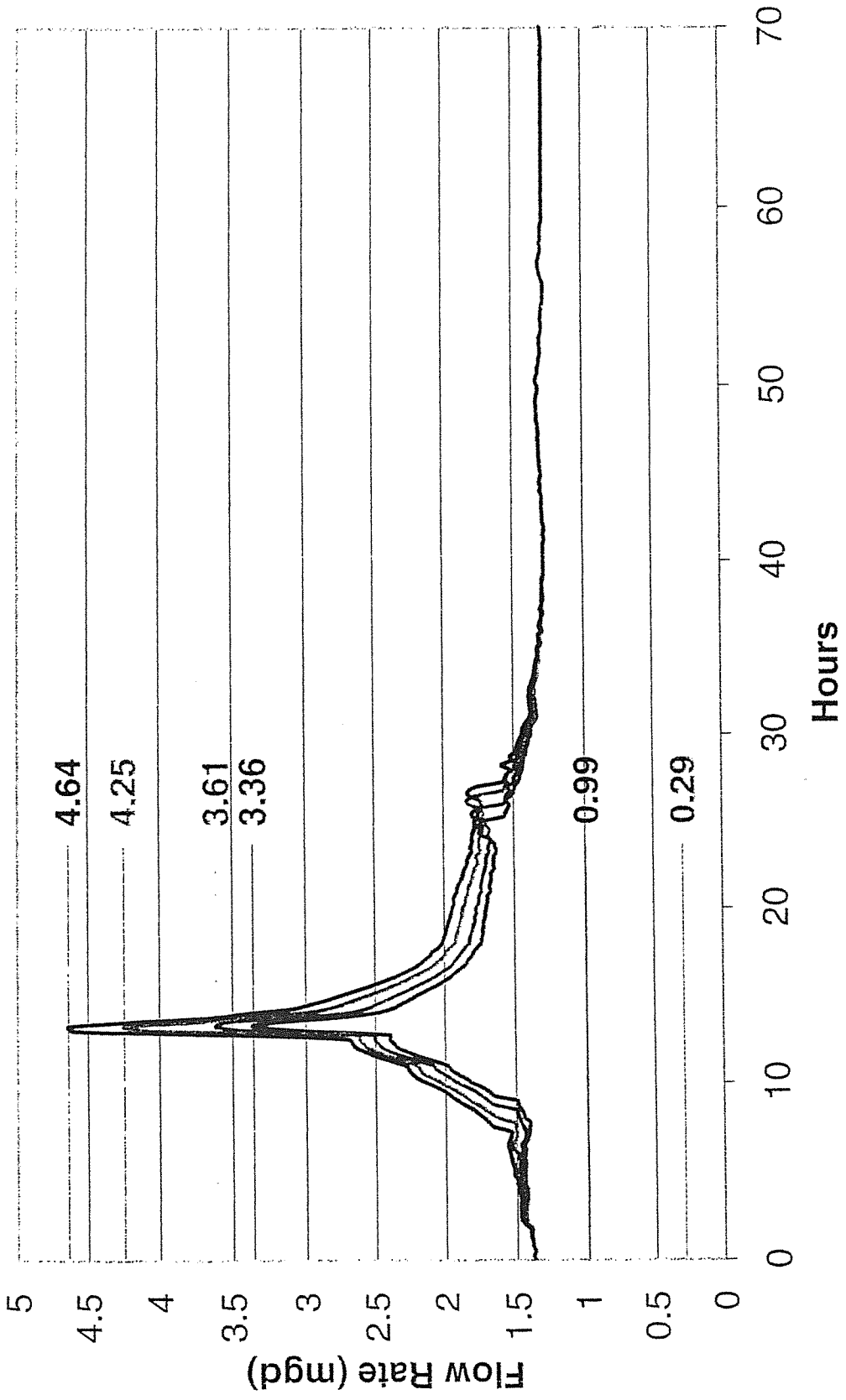
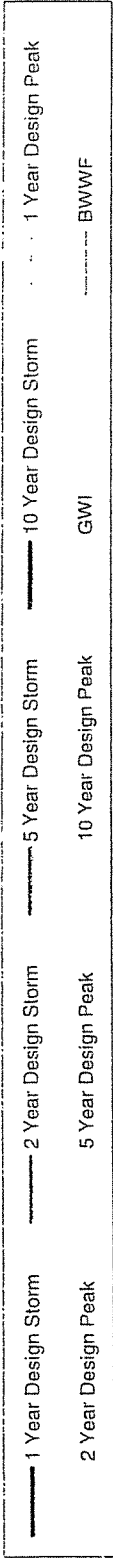
The Peak Dry Weather Flow is 0.9920 MGD, which includes all future possible development flows through Year 2046.

This PFE was developed utilizing the ALCOSAN H/H Model and Flow Monitoring.

The PFE is for the worse case of either current or future BWWF conditions. The PFE accounts for known future expansion possibilities in the basin service area. Data on undeveloped land and land usage zoning was used to project future flow conditions for the PFE.

Both Current BWWF and GWI were developed from examining the worst-case scenario as observed through either flow monitoring or in the H/H Model. Stormwater inflows were assessed by both the RTK Method (using Flow Monitoring Information) and the H/H Model; H/H Model values were utilized because they were found to be more conservative.

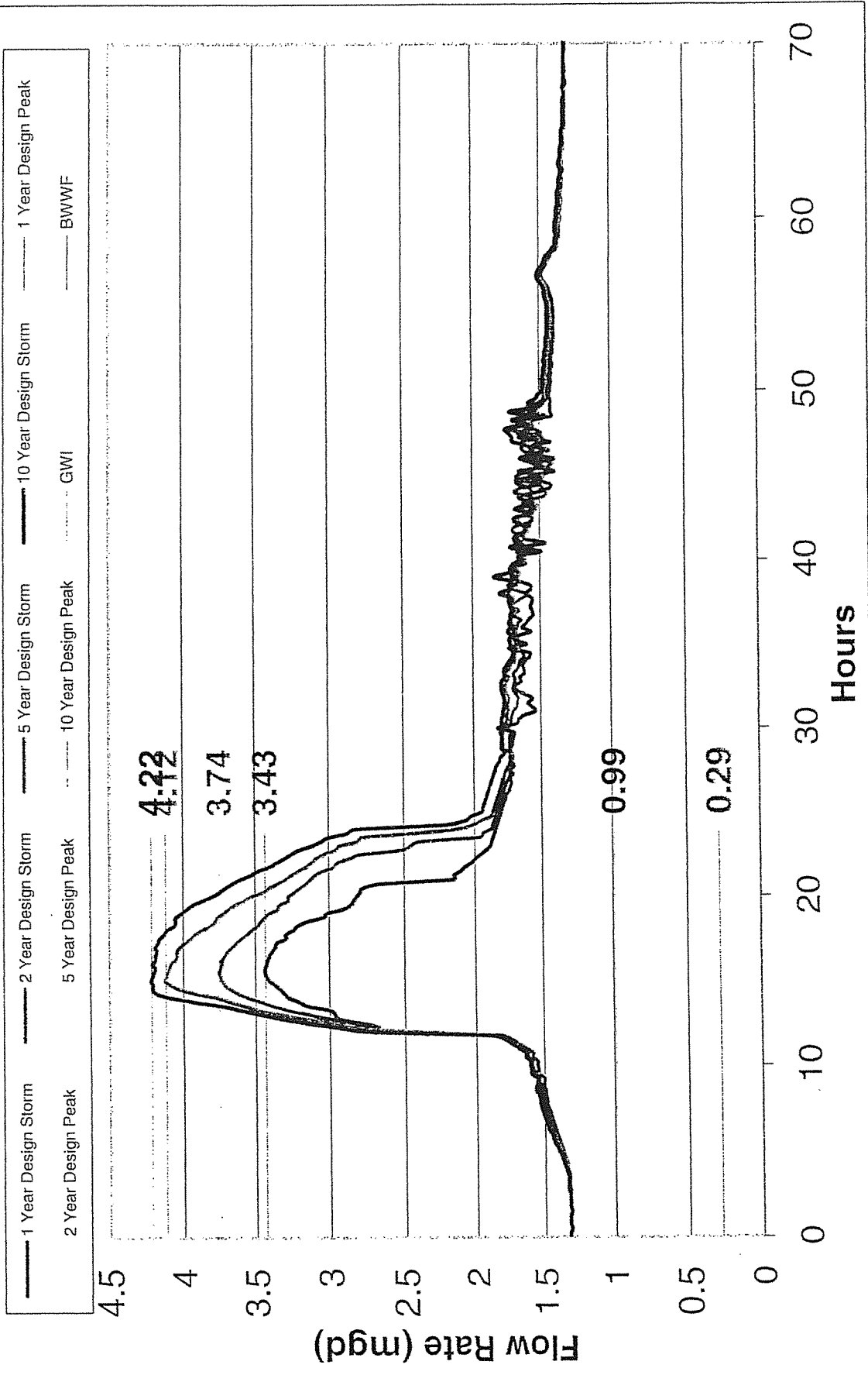
SUMMER DISTRIBUTION Synthetic Design Storm Responses ALCOSAN POC C-54-12



Design Storm	1-Year	2-Year	5-Year	10-Year
24-hour Volume (MG)	1.75	1.83	1.94	2.03
48-hour Volume (MG)	3.12	3.21	3.33	3.44
72-hour Volume (MG)	4.41	4.50	4.62	4.73

Design Storm	1-Year	2-Year	5-Year	10-Year
PEAK FLOW (MGD)	3.36	3.61	4.25	4.64
GWI FLOW (MGD)	0.29	0.29	0.29	0.29
BWWF (MGD)	0.99	0.99	0.99	0.99

WINTER DISTRIBUTION Synthetic Design Storm Responses ALCOSAN POC C-54-12



Design Storm	1-Year	2-Year	5-year	10-year
24-hour Volume (MG)	2.13	2.34	2.49	2.60
48-hour Volume (MG)	3.76	4.00	4.19	4.35
72-hour Volume (MG)	5.12	5.38	5.58	5.75

Design Storm	1-Year	2-Year	5-year	10-year
PEAK FLOW (MGD)	3.43	3.74	4.12	4.22
GWI FLOW (MGD)	0.29	0.29	0.29	0.29
BWWF (MGD)	0.99	0.99	0.99	0.99

**THOMS RUN INTERCEPTOR POC/PFE,
CHARTIERS CREEK
POC C-54-12, THOMS RUN**

CURRENT STATUS STATEMENT

The Thoms Run Road line was constructed and serves portions of both the Collier Township Municipal Authority area and the South Fayette Municipal Authority area.

The first phase of the line, from the Point of Connection to the Presto area, is approximately 4900 feet in length and is an 18 inch line including a 3 barrel siphon. At the Point of Connection with ALCOSAN there is no SSO and this line is a direct connection to ALCOSAN.

This first portion of the line has historically encountered a denial of service on the part of ALCOSAN during Wet Weather events. As recently as May 2012, the ALCOSAN Chartiers Creek line surcharged to the point of backing up into the Thoms Run Road line approximately 4000 foot length causing a discharge at a privately owned manhole. This line has not experienced dry weather problems.

The line is operated under a previously negotiated agreement between CTMA and SFMA and has been inspected on a regular basis and maintained on a regular basis.

Because of ALCOSAN reverse surcharges, CTMA has installed bolt-down water tight manhole covers from the Point of Connection to the Presto area. CTMA has also reignited 2830 feet of the pipe because of mine acid damage to portions of the ductile iron pipe installed during the original construction. These recent repairs were performed to avoid any possible future line failure in the area of the repairs.

The parties believe that, since the construction of the line, there have been significant changes in the Collier Township area, including Township zoning changes, restricting development that will reduce capacity discharges to this line. These changes also include the implementation of mandatory dye-testing of all houses based on the sale of the property and the verification that driveway drains and roof leaders do not drain into the sanitary sewer system.

The area serviced by the line has now been essentially semi fully developed and there are limited lot areas for development within this area. The area is also subject to the Thoms Run Basin with steep slopes on both sides of the Basin restricting and/or preventing development.

Since the original capacity design of the line, the Beccari Farm, consisting of 131.57 acres and identified as Tax Parcel 328-S-2 and 328-P-1 has been Deed restricted and cannot be developed for residential or commercial use. Additionally, Collier Township acquired a portion of the Charles E. Kelly site, consisting of 76.334 acres, and the property has been permanently converted into a park with limited restroom usage only.

CTMA believes that a portion of the property in South Fayette, identified as the Boys' Home, which is currently being pumped into another drainage area, may provide up to a maximum of 250 EDUs if, and when, the pump station is ever eliminated and a connection made to the Thoms Run Road line. The original capacity design of the line and the agreement between the parties anticipated and planned for this possibility of 250 EDUs.

The parties feel that it is unrealistic to believe that the peak dry weather flow will be reached by 2046 given the topography of the area and the elimination of various large tracts of property from development within the Collier Township municipal boundaries.

The parties do not plan to consider any upgrade of the Thoms Run line until the Denial of Service on the part of ALCOSAN is eliminated and further wet weather testing can be preformed assuring that the Denial of Access has been permanently eliminated.

Attached is a preliminary flow estimate, prepared by NIRA Consulting Engineers, Inc., for POC C-54-12. The probable cost of upgrading Phase 1 of the line from an 18 inch line to a 21 inch line would be estimated to cost \$1,300,000.00 in today's dollars and the parties believe that the upgrade will not ever be required and/or that the upgrade will not occur.

Current CTMA residential units connected equal 939 units

Current SFMA residential units connected equal 107 and 9 commercial connections

Listing of Property in Collier Township that is not available for development due to ownership changes or deed and use restrictions

Parcel #	Owner	Size of parcel
Kelly Township Park-Steen Hollow Road		
406-D-00003	Collier Township	0 6.334 acres
329-J-0001	Collier Township	.5 acres
329-P-00001	Beccari Farm	95.38 acres
328-A-00002	Beccari Farm	36.19 acres
Total restricted property size		131.57 acres
330-J-100		
Collier Municipal Park –		
C E Kelly base –Nike Site Road		69.5 acres