




## COUNTY OF DUTCHESS

### Memo

TO: Dale Borchert, Chairman of the Legislature  
Gregg Pulver, Chairman, Public Works and Capital Projects Committee

FROM: William F.X. O'Neil, Deputy County Executive 

DATE: March 10, 2016

RE: Justice and Transition Center Project

I am responding to Legislators' questions regarding the Justice and Transition Center project.

**Question: How much was spent housing out inmates for the last ten years?**

**Response:**

Housing Out 2006-2016			
	Paid to Other Institutions	Est. Admin Expenses	Total Cost of Housing Out
2006	1,996,645	338,365	2,335,010
2007	2,147,845	363,988	2,511,833
2008	2,743,284	464,895	3,208,179
2009	2,545,101	431,310	2,976,411
2010	3,559,049	603,140	4,162,190
2011	4,975,200	843,131	5,824,465
2012	6,297,600	1,067,234	7,525,461
2013	6,054,060	1,025,962	7,028,848
2014	6,324,986	1,071,875	8,216,532
2015*	2,560,400	433,903	2,994,303
2016*	1,105,470	187,340	1,292,810

\*Housing out costs in 2015 and 2016 reflect the implementation of temporary housing PODs mid-year 2015.

**Question: *What is the tax impact of this project?***

**Response:**

Based on our projections and analysis of debt service, our methodology of borrowing, combined with the operational savings anticipated as a result of a more efficient design and inmate to correction officer ratio, we do not project a tax impact as a result of this project. Each budget year we analyze the myriad variables that make up the budget and make decisions to produce a balanced budget that minimizes the cost to taxpayers. Since taking office, County Executive Molinaro has been committed to minimizing taxes and cutting them if possible. For the past two years, the County Executive has reduced taxes- with an over \$1M cut in 2016, the largest levy reduction in over 15 years. The County Executive will continue to manage budgets and is committed to staying under the tax cap, and will continue to reduce taxes whenever possible.

**Question: *Provide a brief summary of what the consultants did and what was found on the Traffic Study, Storm Water Report, and Groundwater Sampling.***

**Response:**

See Attachment #1.

C: All Legislators  
Carolyn Morris, Clerk of the Legislature

## MEMORANDUM

To: Ms. Noel Knille, AIA, ASLA

From: Mr. Christopher Lapine, P.E., LEED AP

cc: Mr. Ken Ricci, FAIA

Date: March 9, 2016

Re: Dutchess County Justice and Transition Center  
Traffic Study, Storm Water Report, and Groundwater Sampling Summary

Job #: 81429

The purpose of this memorandum is to provide a summary of work and findings as requested by the County Legislature for the following:

- Traffic Study
- Storm Water Report
- Groundwater Sampling

### **Traffic Assessment Summary**

A traffic assessment was undertaken to determine the potential impacts of additional traffic that will be generated by the proposed project. Vehicle counts were conducted at surrounding intersections to document the base conditions for the weekday morning and afternoon peak periods. A review of accident records for the area was also undertaken.

To determine the impacts of additional traffic for the project, it was estimated that 50 new trips would enter the facility in the morning and 50 trips would exit in the afternoon. Subsequent to this assessment, an internet search of other traffic reports for existing jails/correctional facilities yielded two studies for comparison purposes. Applying the data from those studies to the *Dutchess County Justice and Transition Center* project indicates that the project would generate less than 20 trips for the morning and afternoon peak hours. Therefore, the estimate of 50 additional trips used in the assessment can be considered to be conservative.

The findings of the assessment showed that the project will add very minimal increases in vehicle delay to the adjacent intersections and therefore no result in any significant traffic impact. The findings also showed through a review of accident records that the project will not exacerbate any safety issue.

### **Stormwater Assessment Summary**

The Preliminary Stormwater Pollution Prevention Plan (SWPPP) was developed in accordance with the “New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity” General Permit Number GP-0-15-002, effective January 29, 2015 through January 28, 2020. The Preliminary SWPPP and accompanying plans identify and detailed stormwater management, pollution prevention, and erosion and sediment control measures necessary during and following completion of construction.

This project involves the reconstruction of existing impervious area with a focus on adaptive reuse of portions of existing buildings, creating more efficient parking and access aisles within the existing parking areas, and to incorporate pedestrian-friendly streetscape/landscape improvements along North Hamilton Street and Parker Avenue and is considered a redevelopment . Since the project is being considered a redevelopment, the stormwater management measures were developed in accordance with the NYSDEC “Chapter 9: Redevelopment, New York State Storm Water Design Manual (NYSSWDM).”

The Preliminary SWPPP analyzed and reported on the hydrologic analysis of the 10 and 100-year storm events for both post-development and pre-development flows. It also documented the required water quality volume to be treated in accordance with Chapter 9 of the NYSSWDM and how the water quality treatment objective was met.

The study area consists of an overall watershed that encompasses approximately 13.3 acres and contains the 12.61 acre project site. The study area is part of a larger watershed shed which is eventually conveyed to the Fallkill Creek. The project The Fallkill Creek is classified by NYSDEC as a Class C water body, and is included in the Section 303(d) list of impaired waters found in Appendix E of GP-0-15-002.

The overall watershed was broken down into smaller watersheds, or subcatchments, to allow for the preliminary analysis of runoff conditions at several locations throughout the study area. Each of these locations were defined as a Design Point (DP). The design theory is to provide a system that reduces post-development peak discharge rates to values less than or equal to pre-development peak discharge rates at each DP. The DP’s are as follows:

- DP 1 Detention pond outfall
- DP2 Outfall from catch basin/ hydrodynamic separator
- DP3 42” Pipe in Parker Avenue
- DP4 N Hamilton Street going North (NE corner of site)
- DP5 Parking lot depression former Hamilton reproduction site

- DP6 Central eastern North Hamilton Street

A preliminary review of the pre- and post-development watershed conditions was performed for all design points and storm events evaluated. The review considered drainage patterns, soil types, ground cover, planned site development, site grading and, existing and proposed stormwater management facilities as part of site improvements. Although there was an overall decrease in impervious cover, the preliminary evaluation concluded watershed areas contributing to DP 5 and 6 were being redirected or eliminated as a result of the jail expansion, and therefore attenuation practices were necessary to manage the peak rate of runoff for post-development conditions to rates less than or equal to pre-development conditions. The preliminary recommended attenuation practice consisted of underground forty eight (48) inch diameter detention pipe located to the west of the jail. A summary of the analysis is as follows:

**Summary of Preliminary Pre- and Post-Development Peak Discharge Rates**

<b>Preliminary Pre- vs. Post-Development Discharge Rate (cfs)</b>				
<b>Design Point (DP)</b>	<b>10-year 24-hour storm event</b>		<b>100-year 24-hour storm event</b>	
	<b>Pre</b>	<b>Post</b>	<b>Pre</b>	<b>Post</b>
DP 1	12.60	8.97	30.69	29.79
DP2	3.33	2.61	6.11	4.90
DP3	14.44	13.91	27.81	27.49
DP4	0.96	0.67	1.72	1.23
DP5	Eliminated Depression			
DP6	Area redirected			

Chapter 9 of the Design Manual outlines alternative WQv treatment objectives for redevelopment projects. According to Section 9.2.1.B.IV, redevelopment activities can achieve the water quality treatment objective through a combination of impervious cover reduction and standard or alternative SMPs that provide a weighted average of at least two of the above methods, calculated as follows:

This redevelopment project is proposing a combination of impervious cover reduction and alternative practice(s). As such, four (4) hydrodynamic separators have been recommend during the schematic design to meet the WQv objective. They are pre-fabricated devices that come in the form of an underground manhole or vault, which move water in a circular, centrifugal manner accelerating the separation and deposition of settleable solids into a sump where they are retained. Buoyant debris, oil, and grease rise to the surface and are separated from the water as it flows under a baffle wall. Finally, treated water exits the treatment chamber through a flow control orifice located behind the baffle wall.

During the design stages, plans identifying the temporary and permanent erosion and sediment control measures will be required to be developed. These measures will be implemented during construction, to minimize soil erosion and control sediment transport off-site, and after construction, and to control the quality of stormwater runoff from the developed site.

The Final SWPPP and design/construction plans will outline the construction scheduling for implementing the erosion and sediment control measures. These documents will also include limitations on the duration of soil exposure, criteria and specifications for placement and installation of the erosion and sediment control measures, a maintenance schedule, inspection schedule, and specifications for the implementation of erosion and sediment control practices and procedures.

As runoff from the site discharges to the Fallkill Creek, erosion and sediment control inspections shall occur at an interval of at least twice every seven (7) calendar days, with the inspections separated by a minimum of at least two (2) full calendar days.

#### **Groundwater Assessment Summary**

In 1998, the highest site concentration of total VOCs were reported in MW-4, at 2,173 ppb, which included 1,100 ppb PCE. Since the soil removal remedy was implemented, groundwater quality in and near this location has been represented by sampling from wells HR-MW-B1, HR-MW-B2 and HR-MW-B3. The most recent February 2016 samples exhibited between 32 and 76 total VOCs, including between 4.6 and 20 ppb PCE and 7 to 49 ppb TCE, which are generally consistent with samples from 2009 and 2010 and continue to maintain the improved groundwater quality expected to decrease slowly over time due to natural attenuation. Public exposure to this groundwater is limited by site easement conditions and associated Site Management Plan that ban using site groundwater, and require NYSDEC notification for any ground penetrating excavations, and a vapor management system for future land uses until such time as data demonstrate that the system is no longer needed. With the implementation of proper engineering and institutional controls the NYSDEC and NYSDOH has indicated the proposed project is consistent with the achieved cleanup levels.