

**PB# 01-51**

**Fox Meadow Estates**

**52-1-20**

TOWN OF NEW WINDSOR  
PLANNING BOARD  
APPROVED COPY  
2-18-05

PB# 01-51

Fox

meadow



\*see additional

maps\*

1/20/03 Requested from Dave Higgins  
a revised application from  
new owner and letter regarding  
the escrow money.

EW

Approved  
Plans rolled in safe.

ROLLING ACRES DEVELOPERS, INC.

Town Of New Windsor

2/2/2005

23981

27,558.00

CHECKS EXPRESS 845.362.7875

M & T

27,558.00

Approved  
Plans rolled in safe.

ROLLING ACRES DEVELOPERS, INC.

Town Of New Windsor

2/2/2005

23981

27,558.00

CHECKS EXPRESS 845.362.7875

M & T

27,558.00

10/1/03

Janet Davies

914-542-5427

Septic is

Too close to wells

Spoke to Dave Higgins - he will  
call her and explain - plans  
have been corrected and she can  
review them at his office if she  
likes.

*(Signature)*

**Drainage Report**  
**Fox Meadow Estates**  
**New Windsor, Orange County, NY**

**August 19, 2002**

I. Introduction

As part of the proposed project, the existing undeveloped area of the project site will be developed with roadways, driveways, and buildings. The increase in impervious area associated with these improvements will result in an increase in the volume of runoff from the project site. In order to collect and control the runoff, a storm water drainage system has been designed. This report discusses the methodology used in determining the adequacy of the designed system in controlling stormwater runoff and summarizes the results of the analysis.

II. Methodology

The locations of all inlets were determined based upon the existing and proposed grading of the project site. For purposes of this analysis, Haestad Methods' StormCad software package has been used to determine discharge rates for each inlet, the capacity of proposed pipe sections, and the hydraulic grade elevation at all inlets. The software package utilizes the Rational Method in determining the peak discharge rates. This method computes the peak discharge (cfs) by multiplying the rainfall intensity (in/hour) by the catchment area (acres) and a rational coefficient. The rational coefficient is taken as 0.25 for unpaved areas and 0.95 for paved areas and rooftops.

First, catchment areas for each of the inlets were determined. Included with this report are the summaries indicating the impervious and unpaved areas that contribute to each of the inlets. Figure 1 depicts the various areas contributing to each inlet and the associated travel paths. The time of concentration for each inlet was then determined using the travel path of flow into the basin and Figure 2. These values, as well as the input data pertaining to the characteristics of the drainage system (i.e.: pipe sizes and materials, inverts, basin rim and sump elevations, and headloss coefficients) were set into the computer model. Rainfall intensity was calculated for the region of interest. Figure 2 represents the values of rainfall intensity associated with various times of concentration for Orange County, New York. For purposes of the design, a 25-year storm frequency has been used. Using this information, StormCad computes the discharge, capacity, and hydraulic grade elevation for each item within the computer model.

Included with this report are the computation cycles performed by the StormCad analysis, and the node and pipe reports indicating input and output data for each branch. In general, the naming convention for a proposed pipe matches the number of the upstream node.

### III. Summary of Results

Inspection of the hydraulic grade elevations listed for each of the nodes indicates that the water elevation within the structure is well below the rim elevations. This confirms the proposed system's adequacy for peak discharges through the pipe network.

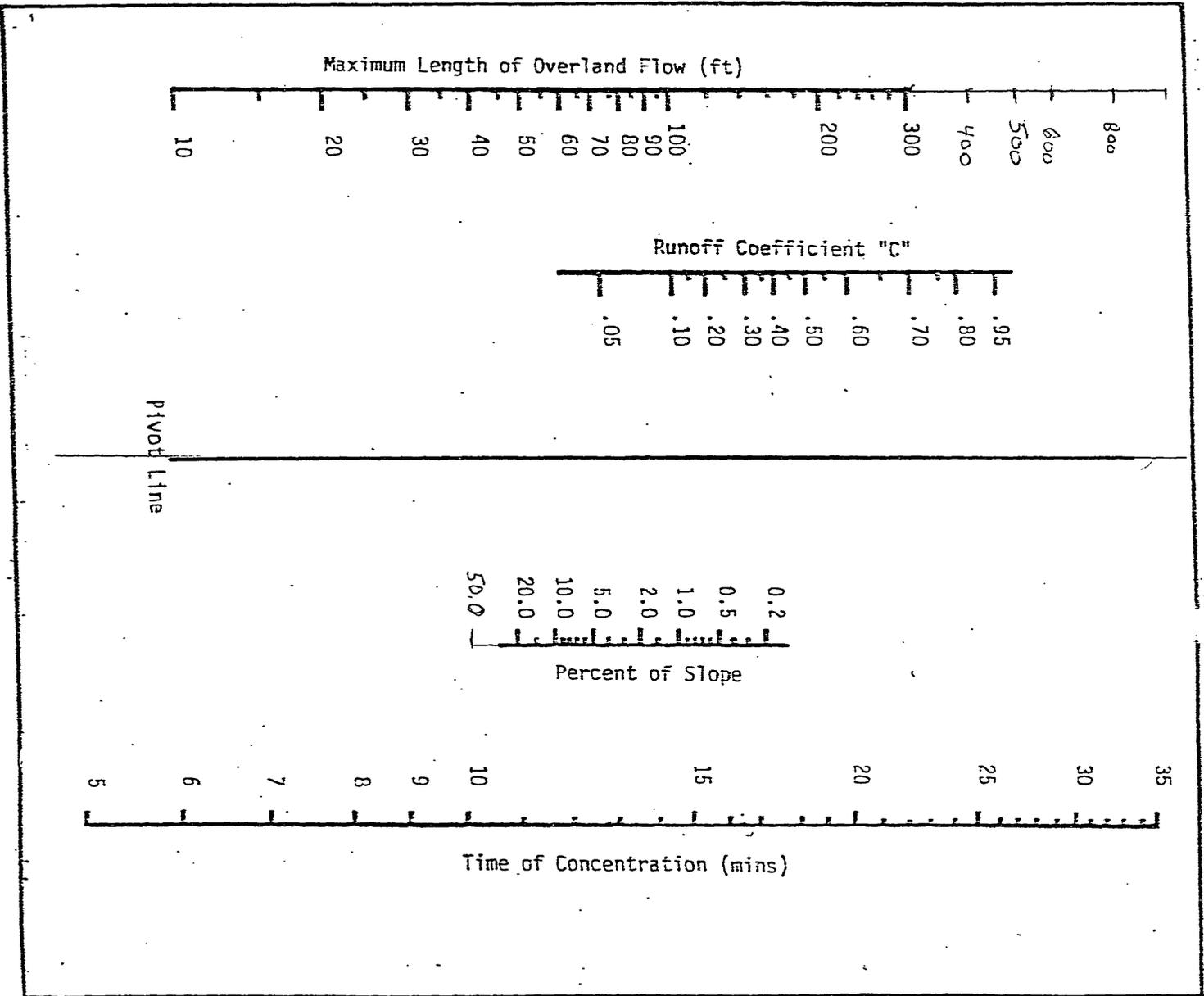
The proposed pipes that cross under the proposed road at Sta 1+60 have also been designed. In the Stormwater Drainage Report, provided separately, it was determined that the 100-year peak discharge that would cross under the proposed road at this point is 58.16 cfs. It has been calculated that four 18-inch diameter pipes are required to convey this flow through with the head available before overtopping the curb.



DH/klb  
Attachments

# FIGURE 2

TIME OF CONCENTRATION NOMOGRAPH  
(for use with the Rational Method)



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 GOSHEN, NY 10924  
 Tel. (845) 294-3700  
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JOB FOX MEADOW ESTATES  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

CB#1 - TOTAL DRAINAGE AREA = 4,447 SQ. FT.  
 (SAG) IMPERVIOUS AREA = 4,447 SQ. FT.

TRAVEL PATH: 120' @ 2% Paved 4.5 min.

CB#2: TOTAL DRAINAGE AREA = 4,333 SQ. FT.  
 (SAG) IMPERVIOUS AREA = 4,333 SQ. FT.

TRAVEL PATH: 160' @ 2% Paved 5.0 min.

CB#3: TOTAL DRAINAGE AREA = 2,569 SQ. FT.  
 IMPERVIOUS AREA = 2,569 SQ. FT.

TRAVEL PATH: 175' @ 2% Paved 3.5 min.

CB#4A: TOTAL DRAINAGE AREA = 1,674 SQ. FT.  
 IMPERVIOUS AREA = 1,225 SQ. FT.  
 GRASSED AREA = 449 SQ. FT.

TRAVEL PATH:  
 30' @ 30% GRASS 4.0 min  
 85' @ 9% Paved 3.4 min  
 7.4 min

CB#5: TOTAL DRAINAGE AREA = 3,736 SQ. FT.  
 IMPERVIOUS AREA = 3,736 SQ. FT.

TRAVEL PATH: 245' @ 9% Paved 4.0 min.

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CB-4B- TOTAL DRAINAGE AREA = 2,765 SQ. FT.  
 IMPERVIOUS AREA = 1,328 SQ. FT.  
 GRASSED AREA = 1,437 SQ. FT.

TRAVEL PATH:  
 30' @ 30% GRASS - 4.0 min.  
 60' @ 9% PAVED - 3.3 min.  
7.3 min.

CB-6B TOTAL DRAINAGE AREA = 48,636 SQ. FT.  
 IMPERVIOUS AREA = 2,971 SQ. FT.  
 GRASSED AREA = 45,665 SQ. FT.

TRAVEL PATH:  
 210' @ 6% GRASS 11.4 min.  
 255' @ 15% GRASS 10.3 min.  
 168' @ 9% PAVED 3.6 min.  
25.3 min.

CB-8B TOTAL DRAINAGE AREA = 15,958 SQ. FT.  
 IMPERVIOUS AREA = 1,464 SQ. FT.  
 GRASS AREA = 14,494 SQ. FT.

TRAVEL PATH:  
 168' @ 15% GRASS 9.0 min.  
 40' @ 30% GRASS 4.5 min.  
 30' @ 9% PAVED 2.5 min.  
16 min.

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SCALE \_\_\_\_\_

CB # 6A TOTAL DRAINAGE AREA = 114,035 SQ. FT.  
IMPERVIOUS AREA = 7,938 SQ. FT.  
GRASSED AREA = 106,097 SQ. FT.

TRAVEL PATH  
320' @ 13% GRASS 11.8 min.  
60' @ 30% GRASS 5.4 min.  
155' @ 12% GRASS 9.0 min.  
26.2 min.

CB # 7: TOTAL DRAINAGE AREA = 3,726 SQ. FT.  
IMPERVIOUS AREA = 3,726 SQ. FT.

TRAVEL PATH:  
255' @ 8% PAVED 4.5 min.

CB # 8A: TOTAL DRAINAGE AREA = 20,184 SQ. FT.  
IMPERVIOUS AREA = 1,502 SQ. FT.  
GRASSED AREA = 18,682 SQ. FT.

TRAVEL PATH:  
445' @ 14% GRASS 12.8 min  
118' @ 9% PAVED 3.8 min  
16.6 min

CB # 9 TOTAL DRAINAGE AREA = 1,536 SQ. FT.  
IMPERVIOUS AREA = 1,536 SQ. FT.

TRAVEL PATH:  
125' @ 11% PAVED 5.5 min.

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SCALE \_\_\_\_\_

CB # 10 - TOTAL DRAINAGE AREA = 89,805 SQ. FT.  
IMPERVIOUS AREA = 10,195 SQ. FT.  
GRASSED AREA = 79,610 SQ. FT.

TRAVEL PATH:  
385' @ 15% GRASS 12.0 MIN  
40' @ 30% GRASS 4.3 MIN  
80' @ 1% PAVED 4.5 MIN  

---

20.8 MIN

CB # 11: TOTAL DRAINAGE AREA = 4,327 SQ. FT.  
IMPERVIOUS AREA = 4,327 SQ. FT.

TRAVEL PATH:  
165' @ 1.5% PAVED 5.3 MIN.

CB # 12: TOTAL DRAINAGE AREA = 101,447 SQ. FT.  
IMPERVIOUS AREA = 11,863 SQ. FT.  
GRASSED AREA = 89,584 SQ. FT.

TRAVEL PATH:  
380' @ 15% GRASS 12.0 MIN.  
40' @ 33% GRASS 4.3 MIN  
115' @ 1% PAVED 4.7 MIN  

---

21.0 MIN.

CB # 13: TOTAL DRAINAGE AREA = 2,790 SQ. FT.  
IMPERVIOUS AREA = 2,790 SQ. FT.

TRAVEL PATH:  
190' @ 8% PAVED 4.7 MIN.

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CB # 14: TOTAL DRAINAGE AREA = 13,895 SQ. FT.  
 IMPERVIOUS AREA = 2,445 SQ. FT.  
 GRASSED AREA = 11,450 SQ. FT.

TRAVEL PATH:  
 235' @ 17% GRASS 9.7 MIN  
 95' @ 8% PAVED 3.6 MIN  
 13.3 MIN

CB # 15: TOTAL DRAINAGE AREA = 5,154 SQ. FT.  
 IMPERVIOUS AREA = 2,607 SQ. FT.  
 GRASSED AREA = 2,547 SQ. FT.

TRAVEL PATH:  
 38' @ 17% GRASS 5.0 MIN  
 35' @ 33% GRASS 3.8 MIN  
 136' @ 10% PAVED 3.4 MIN  
 12.2 MIN

CB # 16: TOTAL DRAINAGE AREA = 4,155 SQ. FT.  
 IMPERVIOUS AREA = 2,255 SQ. FT.  
 GRASSED AREA = 1,900 SQ. FT.

TRAVEL PATH:  
 40' @ 33% GRASS 3.9 MIN  
 170' @ 10% PAVED 3.3 MIN  
 7.2 MIN

CB # 17: TOTAL DRAINAGE AREA = 17,575 SQ. FT.  
 IMPERVIOUS AREA = 5,700 SQ. FT.  
 GRASSED AREA = 11,875 SQ. FT.

TRAVEL PATH:  
 125' @ 12% GRASS 8 MIN.  
 58' @ 10% PAVED 3.0 MIN  
 11.0 MIN

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CB # 18: TOTAL DRAINAGE AREA = 4,954 SQ. FT.  
 IMPERVIOUS AREA = 2,078 SQ. FT.  
 GRASSED AREA = 2,876 SQ. FT.

TRAVEL PATH:  
 35' @ 33% GRASS 4.0 MIN.  
 120' @ 10% PAVED 3.3 MIN.  
 7.3 MIN.

CB # 19: TOTAL DRAINAGE AREA = 24,357 SQ. FT.  
 IMPERVIOUS AREA = 6,637 SQ. FT.  
 GRASSED AREA = 17,720 SQ. FT.

TRAVEL PATH:  
 75' @ 4% GRASS 8.2 MIN.  
 45' @ 20% GRASS 5.0 MIN.  
 95' @ 10% PAVED 2.8 MIN.  
 16.0 MIN.

CB # 20: TOTAL DRAINAGE AREA = 11,035 SQ. FT.  
 IMPERVIOUS AREA = 5,213 SQ. FT.  
 GRASSED AREA = 5,822 SQ. FT.

TRAVEL PATH:  
 68' @ 9% GRASS 6.9 MIN.  
 130' @ 5% PAVED 3.9 MIN.  
 10.8 MIN.

CB # 21: TOTAL DRAINAGE AREA = 21,371 SQ. FT.  
 IMPERVIOUS AREA = 13,768 SQ. FT.  
 GRASSED AREA = 7,603 SQ. FT.

TRAVEL PATH:  
 100' @ 1% GRASS 12.0 MIN.  
 135' @ 4% PAVED 4.0 MIN.  
 136' @ 2% PAVED 11.7 MIN.  
 27.7 MIN.

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SCALE \_\_\_\_\_

CB-22- TOTAL DRAINAGE AREA = 18,308 SQ. FT.  
IMPERVIOUS AREA = 5526 SQ. FT.  
GRASSSED AREA = 12,782 SQ. FT.

TRAVEL PATH:  
65' @ 4.5% GRASS 7.5 MIN  
30' @ 30% GRASS 3.8 MIN  
135' @ 2% PAVED 5.2 MIN  

---

16.5 MIN

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BASIN II EXTERNAL DRAINAGE AREA

TOTAL AREA = 162,798 SQ. FT.

IMPERVIOUS AREA = 3,208 SQ. FT.

GRASS AREA = 159,590 SQ. FT.

TRAVEL PATH:

825 LF @ 14% GRASS 17.5 MIN.

## Detailed Report for Inlet; CB-1

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	3,609.70 ft	Calculated Station	0+69 ft
Y	1,506.41 ft		

### Elevations

Ground Elevation	456.42 ft	Hydraulic Grade Line In	453.07 ft
Rim Elevation	456.42 ft	Hydraulic Grade Line Out	453.07 ft
Sump Elevation	452.42 ft		

### Headlosses

Gravily Element Headloss	0.00 ft	Depth Out	0.65 ft
Headloss Method	Absolute	Velocity Out	1.45 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.03 ft

### System Flow Summary

Total System Flow	0.78 cfs	System Rational Flow	0.78 cfs
System Flow Time	4.50 min	System Additional Flow	0.00 cfs
System Intensity	8.00 in/hr	System Known Flow	0.00 cfs
System CA	4,225 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	4,447 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	4,225 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	4,225 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.78 cfs	Total Inlet Time of Concentration	4.50 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.78 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	In Sag
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft		

## Detailed Report for Inlet: CB-1

<b>External Pipe Flow</b>			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

<b>Intercepted Flow Summary</b>			
Intercepted Rational Flow	0.78 cfs	Intercepted CA	4,225 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	4.50 min
Total Intercepted Flow	0.78 cfs	Capture Efficiency	100.0 %

<b>Upstream Piped Flow Summary</b>			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		

<b>Design Constraints Summary</b>			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

<b>Subwatershed Information</b>	
Area (ft <sup>2</sup> )	Inlet C
4,447	0.95

<b>User Data</b>
Date Installed

<b>Message List</b>
Message List
Information: Surface load time is below the minimum allowable duration.
Information: Load time is below minimum allowable.

## Detailed Report for Inlet: CB-2

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	3,598.88 ft	Calculated Station	0+44 ft
Y	1,483.92 ft		
Elevations			
Ground Elevation	456.42 ft	Hydraulic Grade Line In	453.08 ft
Rim Elevation	456.42 ft	Hydraulic Grade Line Out	453.08 ft
Sump Elevation	451.67 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	1.41 ft
Headloss Method	Absolute	Velocity Out	8.72 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	1.18 ft
System Flow Summary			
Total System Flow	15.00 cfs	System Rational Flow	15.00 cfs
System Flow Time	30.77 min	System Additional Flow	0.00 cfs
System Intensity	3.57 in/hr	System Known Flow	0.00 cfs
System CA	181,620 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	4,333 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	4,116 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	4,116 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.76 cfs	Total Inlet Time of Concentration	5.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.76 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	In Sag
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L <sub>r</sub>	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft		

## Detailed Report for Inlet: CB-2

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.76 cfs	Intercepted CA	4,116 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	5.00 min
Total Intercepted Flow	0.76 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	14.66 cfs	Upstream CA	177,504 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.57 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	30.77 min
Total Upstream Flow	14.66 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
4,333	0.95		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-3

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	3,762.95 ft	Calculated Station	2+38 ft
Y	1,433.09 ft		
Elevations			
Ground Elevation	461.24 ft	Hydraulic Grade Line In	458.13 ft
Rim Elevation	461.24 ft	Hydraulic Grade Line Out	458.13 ft
Sump Elevation	457.24 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.89 ft
Headloss Method	Absolute	Velocity Out	0.61 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.01 ft
System Flow Summary			
Total System Flow	0.45 cfs	System Rational Flow	0.45 cfs
System Flow Time	3.50 min	System Additional Flow	0.00 cfs
System Intensity	8.00 in/hr	System Known Flow	0.00 cfs
System CA	2,441 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	2,569 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	2,441 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	2,441 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.45 cfs	Total Inlet Time of Concentration	3.50 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.45 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-1
Longitudinal Slope	0.020000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-3

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	0.45 cfs	Intercepted CA	2,441 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	3.50 min
Total Intercepted Flow	0.45 cfs	Capture Efficiency	100.0 %

Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information	
Area (ft <sup>2</sup> )	Inlet C
2,569	0.95

User Data
Date Installed

Message List
Message List
Information: Surface load time is below the minimum allowable duration.
Information: Load time is below minimum allowable.

## Detailed Report for Inlet: CB-4A

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	3,752.06 ft	Calculated Station	2+14 ft
Y	1,411.29 ft		

### Elevations

Ground Elevation	461.24 ft	Hydraulic Grade Line In	458.13 ft
Rim Elevation	461.24 ft	Hydraulic Grade Line Out	458.13 ft
Sump Elevation	456.74 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	1.39 ft
Headloss Method	Absolute	Velocity Out	8.41 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	1.10 ft

### System Flow Summary

Total System Flow	14.37 cfs	System Rational Flow	14.37 cfs
System Flow Time	30.44 min	System Additional Flow	0.00 cfs
System Intensity	3.58 in/hr	System Known Flow	0.00 cfs
System CA	173,279 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	1,674 ft <sup>2</sup>	Composite Rational C	0.76
Inlet CA	1,276 ft <sup>2</sup>	Carryover CA	14 ft <sup>2</sup>
Total Inlet CA	1,290 ft <sup>2</sup>	Total Inlet Intensity	7.33 in/hr
Total Inlet Rational Flow	0.22 cfs	Total Inlet Time of Concentration	7.40 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.22 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-2
Longitudinal Slope	0.050000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-4A

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.22 cfs	Intercepted CA	1,290 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.33 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	7.40 min
Total Intercepted Flow	0.22 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	14.26 cfs	Upstream CA	171,989 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.58 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	30.44 min
Total Upstream Flow	14.26 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
1,225	0.95		
449	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-4B

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	3,831.41 ft	Calculated Station	3+01 ft
Y	1,376.08 ft		

### Elevations

Ground Elevation	469.00 ft	Hydraulic Grade Line In	465.98 ft
Rim Elevation	469.00 ft	Hydraulic Grade Line Out	465.98 ft
Sump Elevation	464.75 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	1.23 ft
Headloss Method	Absolute	Velocity Out	11.51 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	2.06 ft

### System Flow Summary

Total System Flow	14.08 cfs	System Rational Flow	14.08 cfs
System Flow Time	30.31 min	System Additional Flow	0.00 cfs
System Intensity	3.59 in/hr	System Known Flow	0.00 cfs
System CA	169,549 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	2,765 ft <sup>2</sup>	Composite Rational C	0.59
Inlet CA	1,621 ft <sup>2</sup>	Carryover CA	7,114 ft <sup>2</sup>
Total Inlet CA	8,735 ft <sup>2</sup>	Total Inlet Intensity	7.36 in/hr
Total Inlet Rational Flow	1.49 cfs	Total Inlet Time of Concentration	7.30 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.49 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L <sub>r</sub>	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-4A
Longitudinal Slope	0.070000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-4B

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	1.48 cfs	Intercepted CA	8,721 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.36 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	7.30 min
Total Intercepted Flow	1.48 cfs	Capture Efficiency	99.8 %
Upstream Piped Flow Summary			
Upstream Rational Flow	13.35 cfs	Upstream CA	160,828 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.59 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	30.31 min
Total Upstream Flow	13.35 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
	Area (ft <sup>2</sup> )	Inlet C	
	1,328	0.95	
	1,437	0.25	
User Data			
Date Installed			

## Detailed Report for Inlet: CB-5

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	3,922.64 ft	Calculated Station	4+17 ft
Y	1,389.08 ft		
Elevations			
Ground Elevation	475.29 ft	Hydraulic Grade Line In	472.28 ft
Rim Elevation	475.29 ft	Hydraulic Grade Line Out	472.28 ft
Sump Elevation	471.29 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.99 ft
Headloss Method	Absolute	Velocity Out	0.84 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.01 ft
System Flow Summary			
Total System Flow	0.66 cfs	System Rational Flow	0.66 cfs
System Flow Time	4.00 min	System Additional Flow	0.00 cfs
System Intensity	8.00 in/hr	System Known Flow	0.00 cfs
System CA	3,549 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	3,736 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	3,549 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	3,549 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.66 cfs	Total Inlet Time of Concentration	4.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.66 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-3
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-5

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	0.66 cfs	Intercepted CA	3,549 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	4.00 min
Total Intercepted Flow	0.66 cfs	Capture Efficiency	100.0 %

Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information	
Area (ft <sup>2</sup> )	Inlet C
3,736	0.95

User Data
Date Installed

Message List
Message List
Information: Surface load time is below the minimum allowable duration.
Information: Load time is below minimum allowable.

## Detailed Report for Inlet: CB-6A

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	3,922.64 ft	Calculated Station	3+93 ft
Y	1,364.77 ft		
Elevations			
Ground Elevation	475.29 ft	Hydraulic Grade Line In	472.27 ft
Rim Elevation	475.29 ft	Hydraulic Grade Line Out	472.27 ft
Sump Elevation	471.04 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	1.23 ft
Headloss Method	Absolute	Velocity Out	10.95 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	1.86 ft
System Flow Summary			
Total System Flow	13.37 cfs	System Rational Flow	13.37 cfs
System Flow Time	30.17 min	System Additional Flow	0.00 cfs
System Intensity	3.59 in/hr	System Known Flow	0.00 cfs
System CA	160,828 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	114,035 ft <sup>2</sup>	Composite Rational C	0.30
Inlet CA	34,065 ft <sup>2</sup>	Carryover CA	790 ft <sup>2</sup>
Total Inlet CA	34,855 ft <sup>2</sup>	Total Inlet Intensity	4.01 in/hr
Total Inlet Rational Flow	3.23 cfs	Total Inlet Time of Concentration	26.20 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	3.23 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-4B
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-6A

External Pipe Flow			
External CA	0 ft²	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	2.57 cfs	Intercepted CA	27,741 ft²
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	4.01 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	26.20 min
Total Intercepted Flow	2.57 cfs	Capture Efficiency	79.6 %
Upstream Piped Flow Summary			
Upstream Rational Flow	11.07 cfs	Upstream CA	133,086 ft²
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.59 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	30.17 min
Total Upstream Flow	11.07 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft²)	Inlet C		
7,938	0.95		
106,097	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-6B

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,050.05 ft	Calculated Station	5+23 ft
Y	1,391.34 ft		

### Elevations

Ground Elevation	487.00 ft	Hydraulic Grade Line In	483.95 ft
Rim Elevation	487.00 ft	Hydraulic Grade Line Out	483.95 ft
Sump Elevation	482.75 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	1.20 ft
Headloss Method	Absolute	Velocity Out	8.94 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	1.24 ft

### System Flow Summary

Total System Flow	10.81 cfs	System Rational Flow	10.81 cfs
System Flow Time	29.93 min	System Additional Flow	0.00 cfs
System Intensity	3.61 in/hr	System Known Flow	0.00 cfs
System CA	129,537 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	48,636 ft <sup>2</sup>	Composite Rational C	0.29
Inlet CA	14,239 ft <sup>2</sup>	Carryover CA	36 ft <sup>2</sup>
Total Inlet CA	14,275 ft <sup>2</sup>	Total Inlet Intensity	4.10 in/hr
Total Inlet Rational Flow	1.35 cfs	Total Inlet Time of Concentration	25.30 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.35 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-6A
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-6B

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	1.28 cfs	Intercepted CA	13,485 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	4.10 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	25.30 min
Total Intercepted Flow	1.28 cfs	Capture Efficiency	94.5 %
Upstream Piped Flow Summary			
Upstream Rational Flow	9.69 cfs	Upstream CA	116,052 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.61 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	29.93 min
Total Upstream Flow	9.69 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
2,971	0.95		
45,665	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-7

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,147.29 ft	Calculated Station	6+75 ft
Y	1,477.10 ft		

### Elevations

Ground Elevation	497.88 ft	Hydraulic Grade Line In	494.81 ft
Rim Elevation	497.88 ft	Hydraulic Grade Line Out	494.81 ft
Sump Elevation	493.88 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.93 ft
Headloss Method	Absolute	Velocity Out	0.86 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.01 ft

### System Flow Summary

Total System Flow	0.66 cfs	System Rational Flow	0.66 cfs
System Flow Time	4.50 min	System Additional Flow	0.00 cfs
System Intensity	8.00 in/hr	System Known Flow	0.00 cfs
System CA	3,540 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	3,726 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	3,540 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	3,540 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.66 cfs	Total Inlet Time of Concentration	4.50 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.66 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-5
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-7

<b>External Pipe Flow</b>			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

<b>Intercepted Flow Summary</b>			
Intercepted Rational Flow	0.66 cfs	Intercepted CA	3,540 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	4.50 min
Total Intercepted Flow	0.66 cfs	Capture Efficiency	100.0 %

<b>Upstream Piped Flow Summary</b>			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		

<b>Design Constraints Summary</b>			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

<b>Subwatershed Information</b>	
Area (ft <sup>2</sup> )	Inlet C
3,726	0.95

<b>User Data</b>
Date Installed

<b>Message List</b>
Message List
Information: Surface load time is below the minimum allowable duration.
Information: Load time is below minimum allowable.

## Detailed Report for Inlet: CB-8A

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	4,159.87 ft	Calculated Station	6+50 ft
Y	1,455.30 ft		
Elevations			
Ground Elevation	497.88 ft	Hydraulic Grade Line In	494.81 ft
Rim Elevation	497.88 ft	Hydraulic Grade Line Out	494.81 ft
Sump Elevation	493.63 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	1.18 ft
Headloss Method	Absolute	Velocity Out	8.15 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	1.03 ft
System Flow Summary			
Total System Flow	9.76 cfs	System Rational Flow	9.76 cfs
System Flow Time	29.66 min	System Additional Flow	0.00 cfs
System Intensity	3.64 in/hr	System Known Flow	0.00 cfs
System CA	116,052 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	20,184 ft <sup>2</sup>	Composite Rational C	0.30
Inlet CA	6,097 ft <sup>2</sup>	Carryover CA	2,801 ft <sup>2</sup>
Total Inlet CA	8,898 ft <sup>2</sup>	Total Inlet Intensity	5.03 in/hr
Total Inlet Rational Flow	1.04 cfs	Total Inlet Time of Concentration	16.60 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.04 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-6B
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-8A

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	1.03 cfs	Intercepted CA	8,862 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.03 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	16.60 min
Total Intercepted Flow	1.03 cfs	Capture Efficiency	99.6 %

Upstream Piped Flow Summary			
Upstream Rational Flow	9.02 cfs	Upstream CA	107,100 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.64 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	29.66 min
Total Upstream Flow	9.02 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information		
Area (ft <sup>2</sup> )	Inlet C	
1,502	0.95	
18,682	0.25	

User Data	
Date Installed	

## Detailed Report for Inlet: CB-8B

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,283.28 ft	Calculated Station	7+93 ft
Y	1,527.58 ft		

### Elevations

Ground Elevation	510.00 ft	Hydraulic Grade Line In	506.90 ft
Rim Elevation	510.00 ft	Hydraulic Grade Line Out	506.90 ft
Sump Elevation	505.75 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	1.15 ft
Headloss Method	Absolute	Velocity Out	7.46 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.86 ft

### System Flow Summary

Total System Flow	8.80 cfs	System Rational Flow	8.80 cfs
System Flow Time	29.34 min	System Additional Flow	0.00 cfs
System Intensity	3.67 in/hr	System Known Flow	0.00 cfs
System CA	103,651 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	15,958 ft <sup>2</sup>	Composite Rational C	0.31
Inlet CA	5,014 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	5,014 ft <sup>2</sup>	Total Inlet Intensity	5.09 in/hr
Total Inlet Rational Flow	0.59 cfs	Total Inlet Time of Concentration	16.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.59 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-8A
Longitudinal Slope	0.090000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-8B

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	0.59 cfs	Intercepted CA	5,014 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.09 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	16.00 min
Total Intercepted Flow	0.59 cfs	Capture Efficiency	100.0 %

Upstream Piped Flow Summary			
Upstream Rational Flow	8.38 cfs	Upstream CA	98,636 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.67 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	29.34 min
Total Upstream Flow	8.38 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information	
Area (ft <sup>2</sup> )	Inlet C
1,464	0.95
14,494	0.25

User Data
Date Installed

## Detailed Report for Inlet: CB-9

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,363.56 ft	Calculated Station	9+25 ft
Y	1,604.09 ft		

### Elevations

Ground Elevation	517.27 ft	Hydraulic Grade Line In	513.65 ft
Rim Elevation	517.27 ft	Hydraulic Grade Line Out	513.65 ft
Sump Elevation	513.27 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.38 ft
Headloss Method	Absolute	Velocity Out	0.97 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.01 ft

### System Flow Summary

Total System Flow	0.27 cfs	System Rational Flow	0.27 cfs
System Flow Time	5.50 min	System Additional Flow	0.00 cfs
System Intensity	7.86 in/hr	System Known Flow	0.00 cfs
System CA	1,459 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	1,536 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	1,459 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	1,459 ft <sup>2</sup>	Total Inlet Intensity	7.86 in/hr
Total Inlet Rational Flow	0.27 cfs	Total Inlet Time of Concentration	5.50 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.27 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-7
Longitudinal Slope	0.050000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-9

External Pipe Flow			
External CA	0 ft²	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.27 cfs	Intercepted CA	1,459 ft²
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.86 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	5.50 min
Total Intercepted Flow	0.27 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft²
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft²)	Inlet C		
1,536	0.95		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-10

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,375.72 ft	Calculated Station	9+01 ft
Y	1,583.14 ft		

### Elevations

Ground Elevation	517.27 ft	Hydraulic Grade Line In	513.66 ft
Rim Elevation	517.27 ft	Hydraulic Grade Line Out	513.66 ft
Sump Elevation	512.58 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	1.08 ft
Headloss Method	Absolute	Velocity Out	5.70 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.50 ft

### System Flow Summary

Total System Flow	7.75 cfs	System Rational Flow	7.75 cfs
System Flow Time	22.02 min	System Additional Flow	0.00 cfs
System Intensity	4.45 in/hr	System Known Flow	0.00 cfs
System CA	75,211 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	89,805 ft <sup>2</sup>	Composite Rational C	0.33
Inlet CA	29,588 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	29,588 ft <sup>2</sup>	Total Inlet Intensity	4.58 in/hr
Total Inlet Rational Flow	3.14 cfs	Total Inlet Time of Concentration	20.80 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	3.14 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Gate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-8A
Longitudinal Slope	0.050000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-10

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	2.84 cfs	Intercepted CA	26,787 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	4.58 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	20.80 min
Total Intercepted Flow	2.84 cfs	Capture Efficiency	90.5 %
Upstream Piped Flow Summary			
Upstream Rational Flow	4.99 cfs	Upstream CA	48,424 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	4.45 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	22.02 min
Total Upstream Flow	4.99 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
10,195	0.95		
79,610	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-11

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,586.12 ft	Calculated Station	11+84 ft
Y	1,734.44 ft		

### Elevations

Ground Elevation	518.37 ft	Hydraulic Grade Line In	514.73 ft
Rim Elevation	518.37 ft	Hydraulic Grade Line Out	514.73 ft
Sump Elevation	514.37 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.36 ft
Headloss Method	Absolute	Velocity Out	2.93 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.13 ft

### System Flow Summary

Total System Flow	0.75 cfs	System Rational Flow	0.75 cfs
System Flow Time	5.30 min	System Additional Flow	0.00 cfs
System Intensity	7.92 in/hr	System Known Flow	0.00 cfs
System CA	4,111 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	4,327 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	4,111 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	4,111 ft <sup>2</sup>	Total Inlet Intensity	7.92 in/hr
Total Inlet Rational Flow	0.75 cfs	Total Inlet Time of Concentration	5.30 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.75 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	In Sag
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft		

## Detailed Report for Inlet: CB-11

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.75 cfs	Intercepted CA	4,111 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.92 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	5.30 min
Total Intercepted Flow	0.75 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
4,327	0.95		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-12

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,598.27 ft	Calculated Station	11+59 ft
Y	1,713.06 ft		

### Elevations

Ground Elevation	518.37 ft	Hydraulic Grade Line In	514.73 ft
Rim Elevation	518.37 ft	Hydraulic Grade Line Out	514.73 ft
Sump Elevation	513.87 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.86 ft
Headloss Method	Absolute	Velocity Out	4.76 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.35 ft

### System Flow Summary

Total System Flow	4.96 cfs	System Rational Flow	4.96 cfs
System Flow Time	21.00 min	System Additional Flow	0.00 cfs
System Intensity	4.56 in/hr	System Known Flow	0.00 cfs
System CA	46,964 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	101,447 ft <sup>2</sup>	Composite Rational C	0.33
Inlet CA	33,666 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	33,666 ft <sup>2</sup>	Total Inlet Intensity	4.56 in/hr
Total Inlet Rational Flow	3.55 cfs	Total Inlet Time of Concentration	21.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	3.55 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	In Sag
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.50 ft
Combination Inlet Grate Opening L	2.50 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft		

## Detailed Report for Inlet: CB-12

External Pipe Flow			
External CA	0 ft²	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	3.55 cfs	Intercepted CA	33,686 ft²
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	4.56 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	21.00 min
Total Intercepted Flow	3.55 cfs	Capture Efficiency	100.0 %

Upstream Piped Flow Summary			
Upstream Rational Flow	1.67 cfs	Upstream CA	13,299 ft²
Upstream Additional Flow	0.00 cfs	Upstream Intensity	5.42 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	14.23 min
Total Upstream Flow	1.67 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information	
Area (ft²)	Inlet C
11,863	0.95
89,584	0.25

User Data
Date Installed

## Detailed Report for Inlet: CB-13

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	4,726.11 ft	Calculated Station	13+47 ft
Y	1,816.17 ft		
Elevations			
Ground Elevation	522.13 ft	Hydraulic Grade Line In	518.47 ft
Rim Elevation	522.13 ft	Hydraulic Grade Line Out	518.47 ft
Sump Elevation	518.13 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.34 ft
Headloss Method	Absolute	Velocity Out	2.85 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.13 ft
System Flow Summary			
Total System Flow	0.68 cfs	System Rational Flow	0.68 cfs
System Flow Time	4.70 min	System Additional Flow	0.00 cfs
System Intensity	8.00 in/hr	System Known Flow	0.00 cfs
System CA	3,677 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	2,790 ft <sup>2</sup>	Composite Rational C	0.95
Inlet CA	2,650 ft <sup>2</sup>	Carryover CA	1,026 ft <sup>2</sup>
Total Inlet CA	3,677 ft <sup>2</sup>	Total Inlet Intensity	8.00 in/hr
Total Inlet Rational Flow	0.68 cfs	Total Inlet Time of Concentration	4.70 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.68 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L <sub>i</sub>	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-11
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-13

External Pipe Flow			
External CA	0 ft²	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	0.68 cfs	Intercepted CA	3,677 ft²
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	8.00 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	4.70 min
Total Intercepted Flow	0.68 cfs	Capture Efficiency	100.0 %

Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft²
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information	
Area (ft²)	Inlet C
2,790	0.95

User Data
Date Installed

Message List
Message List
Information: Surface load time is below the minimum allowable duration.
Information: Load time is below minimum allowable.

## Detailed Report for Inlet: CB-14

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,738.68 ft	Calculated Station	13+21 ft
Y	1,793.96 ft		

### Elevations

Ground Elevation	522.13 ft	Hydraulic Grade Line In	518.46 ft
Rim Elevation	522.13 ft	Hydraulic Grade Line Out	518.46 ft
Sump Elevation	518.00 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.46 ft
Headloss Method	Absolute	Velocity Out	3.39 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.18 ft

### System Flow Summary

Total System Flow	1.21 cfs	System Rational Flow	1.21 cfs
System Flow Time	13.30 min	System Additional Flow	0.00 cfs
System Intensity	5.68 in/hr	System Known Flow	0.00 cfs
System CA	9,188 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	13,895 ft <sup>2</sup>	Composite Rational C	0.37
Inlet CA	5,185 ft <sup>2</sup>	Carryover CA	326 ft <sup>2</sup>
Total Inlet CA	5,511 ft <sup>2</sup>	Total Inlet Intensity	5.68 in/hr
Total Inlet Rational Flow	0.72 cfs	Total Inlet Time of Concentration	13.30 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.72 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	2.00 ft
Combination Inlet Grate Opening L	2.00 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	true	Gutter Cross Slope	0.100 ft/ft
Gutter Width	2.00 ft	Bypass Target	CB-12
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

Title: Fox Meadow Estates

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Project Engineer: David Higgins

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Page 33

## Detailed Report for Inlet: CB-14

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.72 cfs	Intercepted CA	5,511 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.68 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	13.30 min
Total Intercepted Flow	0.72 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.68 cfs	Upstream CA	3,677 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	8.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	4.88 min
Total Upstream Flow	0.68 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
2,445	0.95		
11,450	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-15

Scenario Summary	
Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

Geometric Summary			
X	4,905.45 ft	Calculated Station	6+86 ft
Y	1,805.92 ft		

Elevations			
Ground Elevation	535.28 ft	Hydraulic Grade Line In	529.86 ft
Rim Elevation	535.28 ft	Hydraulic Grade Line Out	529.86 ft
Sump Elevation	529.12 ft		

Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.74 ft
Headloss Method	Absolute	Velocity Out	4.33 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.29 ft

System Flow Summary			
Total System Flow	3.79 cfs	System Rational Flow	3.79 cfs
System Flow Time	16.70 min	System Additional Flow	0.00 cfs
System Intensity	5.02 in/hr	System Known Flow	0.00 cfs
System CA	32,598 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

Inlet Flow Summary			
Area	5,154 ft <sup>2</sup>	Composite Rational C	0.60
Inlet CA	3,113 ft <sup>2</sup>	Carryover CA	2,993 ft <sup>2</sup>
Total Inlet CA	6,106 ft <sup>2</sup>	Total Inlet Intensity	5.98 in/hr
Total Inlet Rational Flow	0.85 cfs	Total Inlet Time of Concentration	12.20 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.85 cfs		

Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening Lt	3.00 ft
Combination Inlet Grate Opening Lt	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-13
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-15

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### External Pipe Flow

External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
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### Intercepted Flow Summary

Intercepted Rational Flow	0.70 cfs	Intercepted CA	5,080 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.98 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	12.20 min
Total Intercepted Flow	0.70 cfs	Capture Efficiency	83.2 %

---

### Upstream Piped Flow Summary

Upstream Rational Flow	3.20 cfs	Upstream CA	27,518 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	5.02 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	16.70 min
Total Upstream Flow	3.20 cfs		

---

### Design Constraints Summary

Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

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### Subwatershed Information

Area (ft <sup>2</sup> )	Inlet C
2,607	0.95
2,547	0.25

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### User Data

Date Installed
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## Detailed Report for Inlet: CB-16

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	4,890.03 ft	Calculated Station	7+11 ft
Y	1,785.76 ft		
Elevations			
Ground Elevation	535.28 ft	Hydraulic Grade Line In	530.94 ft
Rim Elevation	535.28 ft	Hydraulic Grade Line Out	530.94 ft
Sump Elevation	530.67 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.27 ft
Headloss Method	Absolute	Velocity Out	2.47 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.09 ft
System Flow Summary			
Total System Flow	0.48 cfs	System Rational Flow	0.48 cfs
System Flow Time	7.20 min	System Additional Flow	0.00 cfs
System Intensity	7.38 in/hr	System Known Flow	0.00 cfs
System CA	2,824 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	4,156 ft <sup>2</sup>	Composite Rational C	0.63
Inlet CA	2,617 ft <sup>2</sup>	Carryover CA	532 ft <sup>2</sup>
Total Inlet CA	3,150 ft <sup>2</sup>	Total Inlet Intensity	7.38 in/hr
Total Inlet Rational Flow	0.54 cfs	Total Inlet Time of Concentration	7.20 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.54 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-14
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-16

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.48 cfs	Intercepted CA	2,824 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.38 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	7.20 min
Total Intercepted Flow	0.48 cfs	Capture Efficiency	89.7 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
2,255	0.95		
1,900	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-17

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	4,968.32 ft	Calculated Station	8+55 ft
Y	1,649.19 ft		
Elevations			
Ground Elevation	551.66 ft	Hydraulic Grade Line In	547.23 ft
Rim Elevation	551.66 ft	Hydraulic Grade Line Out	547.23 ft
Sump Elevation	546.55 ft		
Headlosses			
Gravity Element Headloss	0.00 ft	Depth Out	0.68 ft
Headloss Method	Absolute	Velocity Out	4.21 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.28 ft
System Flow Summary			
Total System Flow	2.89 cfs	System Rational Flow	2.89 cfs
System Flow Time	16.36 min	System Additional Flow	0.00 cfs
System Intensity	5.06 in/hr	System Known Flow	0.00 cfs
System CA	24,695 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Inlet Flow Summary			
Area	17,575 ft <sup>2</sup>	Composite Rational C	0.48
Inlet CA	8,384 ft <sup>2</sup>	Carryover CA	2,625 ft <sup>2</sup>
Total Inlet CA	11,009 ft <sup>2</sup>	Total Inlet Intensity	6.32 in/hr
Total Inlet Rational Flow	1.61 cfs	Total Inlet Time of Concentration	11.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.61 cfs		
Inlet Characteristics			
Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-15
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-17

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	1.17 cfs	Intercepted CA	8,016 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	6.32 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	11.00 min
Total Intercepted Flow	1.17 cfs	Capture Efficiency	72.8 %
Upstream Piped Flow Summary			
Upstream Rational Flow	1.95 cfs	Upstream CA	16,678 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	5.06 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	16.36 min
Total Upstream Flow	1.95 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
5,700	0.95		
11,875	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-18

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### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

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### Geometric Summary

X	4,942.73 ft	Calculated Station	8+81 ft
Y	1,653.42 ft		

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### Elevations

Ground Elevation	551.66 ft	Hydraulic Grade Line In	547.35 ft
Rim Elevation	551.66 ft	Hydraulic Grade Line Out	547.35 ft
Sump Elevation	547.05 ft		

---

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.30 ft
Headloss Method	Absolute	Velocity Out	2.60 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.11 ft

---

### System Flow Summary

Total System Flow	0.58 cfs	System Rational Flow	0.58 cfs
System Flow Time	7.30 min	System Additional Flow	0.00 cfs
System Intensity	7.36 in/hr	System Known Flow	0.00 cfs
System CA	3,428 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

---

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Inlet Flow Summary

Area	4,954 ft <sup>2</sup>	Composite Rational C	0.54
Inlet CA	2,693 ft <sup>2</sup>	Carryover CA	1,267 ft <sup>2</sup>
Total Inlet CA	3,960 ft <sup>2</sup>	Total Inlet Intensity	7.36 in/hr
Total Inlet Rational Flow	0.67 cfs	Total Inlet Time of Concentration	7.30 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.67 cfs		

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### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-16
Longitudinal Slope	0.100000 ft/ft	Mannings n	0.012

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Project Engineer: David Higgins

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Page 41

## Detailed Report for Inlet: CB-18

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.58 cfs	Intercepted CA	3,428 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	7.36 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	7.30 min
Total Intercepted Flow	0.58 cfs	Capture Efficiency	86.6 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
2,078	0.95		
2,876	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-19

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,910.03 ft	Calculated Station	9+99 ft
Y	1,517.36 ft		

### Elevations

Ground Elevation	564.70 ft	Hydraulic Grade Line In	560.34 ft
Rim Elevation	564.70 ft	Hydraulic Grade Line Out	560.34 ft
Sump Elevation	559.84 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.50 ft
Headloss Method	Absolute	Velocity Out	3.45 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.19 ft

### System Flow Summary

Total System Flow	1.56 cfs	System Rational Flow	1.56 cfs
System Flow Time	16.00 min	System Additional Flow	0.00 cfs
System Intensity	5.09 in/hr	System Known Flow	0.00 cfs
System CA	13,251 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	24,357 ft <sup>2</sup>	Composite Rational C	0.44
Inlet CA	10,735 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	10,735 ft <sup>2</sup>	Total Inlet Intensity	5.09 in/hr
Total Inlet Rational Flow	1.27 cfs	Total Inlet Time of Concentration	16.00 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.27 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-17
Longitudinal Slope	0.080000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-19

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min

Intercepted Flow Summary			
Intercepted Rational Flow	0.96 cfs	Intercepted CA	8,110 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.09 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	16.00 min
Total Intercepted Flow	0.96 cfs	Capture Efficiency	75.5 %

Upstream Piped Flow Summary			
Upstream Rational Flow	0.75 cfs	Upstream CA	5,141 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	6.32 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	10.99 min
Total Upstream Flow	0.75 cfs		

Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

Subwatershed Information		
Area (ft <sup>2</sup> )	Inlet C	
6,637	0.95	
17,720	0.25	

User Data
Date Installed

## Detailed Report for Inlet: CB-20

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,886.81 ft	Calculated Stallon	10+25 ft
Y	1,528.88 ft		

### Elevations

Ground Elevation	564.70 ft	Hydraulic Grade Line In	560.43 ft
Rim Elevation	564.70 ft	Hydraulic Grade Line Out	560.43 ft
Sump Elevation	560.09 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.34 ft
Headloss Method	Absolute	Velocity Out	2.80 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.12 ft

### System Flow Summary

Total System Flow	0.76 cfs	System Rational Flow	0.76 cfs
System Flow Time	10.80 min	System Additional Flow	0.00 cfs
System Intensity	6.38 in/hr	System Known Flow	0.00 cfs
System CA	5,141 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	11,035 ft <sup>2</sup>	Composite Rational C	0.58
Inlet CA	6,408 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	6,408 ft <sup>2</sup>	Total Inlet Intensity	6.38 in/hr
Total Inlet Rational Flow	0.95 cfs	Total Inlet Time of Concentration	10.80 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.95 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-18
Longitudinal Slope	0.080000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-20

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.76 cfs	Intercepted CA	5,141 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	6.38 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	10.80 min
Total Intercepted Flow	0.76 cfs	Capture Efficiency	80.2 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
5,213	0.95		
5,822	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-21

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,556.50 ft	Calculated Station	13+60 ft
Y	1,046.98 ft		

### Elevations

Ground Elevation	561.00 ft	Hydraulic Grade Line In	556.88 ft
Rim Elevation	561.00 ft	Hydraulic Grade Line Out	556.88 ft
Sump Elevation	556.39 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.49 ft
Headloss Method	Absolute	Velocity Out	3.42 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.18 ft

### System Flow Summary

Total System Flow	1.52 cfs	System Rational Flow	1.52 cfs
System Flow Time	27.70 min	System Additional Flow	0.00 cfs
System Intensity	3.85 in/hr	System Known Flow	0.00 cfs
System CA	17,097 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	21,371 ft <sup>2</sup>	Composite Rational C	0.70
Inlet CA	14,980 ft <sup>2</sup>	Carryover CA	2,117 ft <sup>2</sup>
Total Inlet CA	17,097 ft <sup>2</sup>	Total Inlet Intensity	3.85 in/hr
Total Inlet Rational Flow	1.52 cfs	Total Inlet Time of Concentration	27.70 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	1.52 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	In Sag
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft		

## Detailed Report for Inlet: CB-21

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	1.52 cfs	Intercepted CA	17,097 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	3.85 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	27.70 min
Total Intercepted Flow	1.52 cfs	Capture Efficiency	100.0 %
Upstream Piped Flow Summary			
Upstream Rational Flow	0.00 cfs	Upstream CA	0 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	0.00 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	0.00 min
Total Upstream Flow	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constrains?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
13,768	0.96		
7,603	0.25		
User Data			
Date Installed			

## Detailed Report for Inlet: CB-22

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Geometric Summary

X	4,558.59 ft	Calculated Station	13+01 ft
Y	1,106.03 ft		

### Elevations

Ground Elevation	561.00 ft	Hydraulic Grade Line In	556.37 ft
Rim Elevation	561.00 ft	Hydraulic Grade Line Out	556.37 ft
Sump Elevation	555.80 ft		

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.57 ft
Headloss Method	Absolute	Velocity Out	3.76 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.22 ft

### System Flow Summary

Total System Flow	2.07 cfs	System Rational Flow	2.07 cfs
System Flow Time	28.02 min	System Additional Flow	0.00 cfs
System Intensity	3.81 in/hr	System Known Flow	0.00 cfs
System CA	23,426 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

### Inlet Flow Summary

Area	18,308 ft <sup>2</sup>	Composite Rational C	0.46
Inlet CA	8,445 ft <sup>2</sup>	Carryover CA	0 ft <sup>2</sup>
Total Inlet CA	8,445 ft <sup>2</sup>	Total Inlet Intensity	5.04 in/hr
Total Inlet Rational Flow	0.98 cfs	Total Inlet Time of Concentration	16.50 min
Total Inlet Additional Flow	0.00 cfs	Total Inlet Known Flow	0.00 cfs
Total Flow To Inlet	0.98 cfs		

### Inlet Characteristics

Inlet Type	Combination Inlet	Inlet Location	On Grade
Inlet	Combination CAMPBELL CI-2617	Combination Inlet Curb Opening L	3.00 ft
Combination Inlet Grate Opening L	3.98 ft	Combination Inlet Clogging Factor	0.0 %
Inlet Section Properties	Gutter Section	Road Cross Slope	0.020 ft/ft
Depressed Gutter?	false	Gutter Cross Slope	0.020 ft/ft
Gutter Width	0.00 ft	Bypass Target	CB-21
Longitudinal Slope	0.020000 ft/ft	Mannings n	0.012

## Detailed Report for Inlet: CB-22

External Pipe Flow			
External CA	0 ft <sup>2</sup>	External Time of Concentration	0.00 min
Intercepted Flow Summary			
Intercepted Rational Flow	0.74 cfs	Intercepted CA	6,329 ft <sup>2</sup>
Intercepted Additional Flow	0.00 cfs	Intercepted Intensity	5.04 in/hr
Intercepted Known Flow	0.00 cfs	Intercepted Tc	16.50 min
Total Intercepted Flow	0.74 cfs	Capture Efficiency	74.9 %
Upstream Piped Flow Summary			
Upstream Rational Flow	1.51 cfs	Upstream CA	17,097 ft <sup>2</sup>
Upstream Additional Flow	0.00 cfs	Upstream Intensity	3.81 in/hr
Upstream Known Flow	0.00 cfs	Upstream Time Of Concentration	28.02 min
Total Upstream Flow	1.51 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
Subwatershed Information			
Area (ft <sup>2</sup> )	Inlet C		
5,526	0.95		
12,782	0.25		
User Data			
Date Installed			

## Detailed Report for Outlet: FES-1

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Geometric Summary

---

X	3,575.19 ft	Station	0+00 ft
Y	1,446.92 ft		

---

### Elevations

---

Ground Elevation	452.00 ft	Sump Elevation	447.50 ft
Rim Elevation	452.00 ft		

---

### Tailwater Hydraulics

---

Tailwater Condition	Free Outfall	Hydraulic Grade Line Out	448.27 ft
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---

### System Flow Summary

---

Total System Flow	14.99 cfs	System Rational Flow	14.99 cfs
System Flow Time	30.83 min	System Known Flow	0.00 cfs
System Intensity	3.57 in/hr	System Additional Flow	0.00 cfs
System CA	181,620 ft <sup>2</sup>	Total Lost Flow	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Incoming Diverted Flow

---

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Design Constraints Summary

---

Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

---

### User Data

---

Date Installed

---

## Detailed Report for Outlet: FES-2

Scenario Summary			
Label	Base		
Physical Properties Alternative	Physical Properties-Alternative 3		
Catchments Alternative	Base-Catchments		
System Flows Alternative	Base-System Flows		
Structure Headlosses Alternative	Base-Structure Headlosses		
Boundary Conditions Alternative	Base-Boundary Conditions		
Design Constraints Alternative	Base-Design Constraints		
Cost Alternative	Base-Cost		
User Data Alternative	Base-User Data		
Geometric Summary			
X	5,347.87 ft	Station	0+00 ft
Y	2,329.67 ft		
Elevations			
Ground Elevation	465.00 ft	Sump Elevation	462.53 ft
Rim Elevation	465.00 ft		
Tailwater Hydraulics			
Tailwater Condition	Free Outfall	Hydraulic Grade Line Out	463.06 ft
System Flow Summary			
Total System Flow	3.67 cfs	System Rational Flow	3.67 cfs
System Flow Time	18.11 min	System Known Flow	0.00 cfs
System Intensity	4.87 in/hr	System Additional Flow	0.00 cfs
System CA	32,598 ft <sup>2</sup>	Total Lost Flow	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Incoming Diverted Flow			
Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		
Design Constraints Summary			
Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft
User Data			
Date Installed			

## Detailed Report for Pipe: P-1

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	6.95 degrees	Length	25.00 ft
Upstream Node	CB-1	Downstream Node	CB-2

---

### Hydraulic Summary

---

Total System Flow	0.78 cfs	Full Capacity	6.68 cfs
Profile Description	Composite: Pressure/S1	Energy Slope	0.000442 ft/ft
Gravity Element Headloss	-0.01 ft	Velocity In	1.45 ft/s
Average Velocity	1.22 ft/s	Velocity Out	1.00 ft/s
Constructed Slope	0.030000 ft/ft	Design Capacity	6.68 cfs
Excess Full Capacity	5.90 cfs	Excess Design Capacity	5.90 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	452.42	456.42	453.42	3.00	0.65	453.07	453.10
Downstream	451.67	456.42	452.67	3.75	1.41	453.08	453.09

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-2

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.00 degrees	Length	44.00 ft
Upstream Node	CB-2	Downstream Node	FES-1

---

### Hydraulic Summary

---

Total System Flow	15.00 cfs	Full Capacity	35.03 cfs
Profile Description	S2	Energy Slope	0.041877 ft/ft
Gravity Element Headloss	4.80 ft	Velocity In	8.72 ft/s
Average Velocity	12.53 ft/s	Velocity Out	16.33 ft/s
Constructed Slope	0.094773 ft/ft	Design Capacity	35.03 cfs
Excess Full Capacity	20.03 cfs	Excess Design Capacity	20.03 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	451.67	456.42	453.17	3.25	1.41	453.08	454.26
Downstream	447.50	452.00	449.00	3.00	0.77	448.27	452.42

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe; P-3

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	88.80 degrees	Length	24.00 ft
Upstream Node	CB-3	Downstream Node	CB-4A

---

### Hydraulic Summary

---

Total System Flow	0.45 cfs	Full Capacity	5.57 cfs
Profile Description	Composite: Pressure/S1	Energy Slope	0.000134 ft/ft
Gravity Element Headloss	2.58e-3 ft	Velocity In	0.61 ft/s
Average Velocity	0.59 ft/s	Velocity Out	0.58 ft/s
Constructed Slope	0.020833 ft/ft	Design Capacity	5.57 cfs
Excess Full Capacity	5.12 cfs	Excess Design Capacity	5.12 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	457.24	461.24	458.24	3.00	0.89	458.13	458.14
Downstream	456.74	461.24	457.74	3.50	1.39	458.13	458.14

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-4

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	82.73 degrees	Length	170.00 ft
Upstream Node	CB-4A	Downstream Node	CB-2

---

### Hydraulic Summary

---

Total System Flow	14.37 cfs	Full Capacity	19.65 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.029820 ft/ft
Gravity Element Headloss	5.06 ft	Velocity In	8.41 ft/s
Average Velocity	8.38 ft/s	Velocity Out	8.35 ft/s
Constructed Slope	0.029824 ft/ft	Design Capacity	19.65 cfs
Excess Full Capacity	5.29 cfs	Excess Design Capacity	5.29 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	456.74	461.24	458.24	3.00	1.39	458.13	459.23
Downstream	451.67	456.42	453.17	3.25	1.41	453.08	454.16

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

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### Message List

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#### Message List

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Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-4

---

Message List

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Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-4B

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	1.44 degrees	Length	87.00 ft
Upstream Node	CB-4B	Downstream Node	CB-4A

---

### Hydraulic Summary

---

Total System Flow	14.08 cfs	Full Capacity	21.23 cfs
Profile Description	Composite: Pressure/S1/S2	Energy Slope	0.090377 ft/ft
Gravity Element Headloss	7.85 ft	Velocity In	11.51 ft/s
Average Velocity	11.49 ft/s	Velocity Out	11.48 ft/s
Constructed Slope	0.092069 ft/ft	Design Capacity	21.23 cfs
Excess Full Capacity	7.16 cfs	Excess Design Capacity	7.16 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	464.75	469.00	466.00	3.00	1.23	465.98	468.04
Downstream	456.74	461.24	457.99	3.25	1.39	458.13	460.18

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

### Message List

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#### Message List

---

Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-4B

Message List
Message List
Information: Critical depth assumed upstream.

## Detailed Report for Pipe: P-5

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	97.06 degrees	Length	24.00 ft
Upstream Node	CB-5	Downstream Node	CB-6A

---

### Hydraulic Summary

---

Total System Flow	0.66 cfs	Full Capacity	3.94 cfs
Profile Description	Composite: Pressure/S1	Energy Slope	0.000289 ft/ft
Gravity Element Headloss	0.01 ft	Velocity In	0.84 ft/s
Average Velocity	0.84 ft/s	Velocity Out	0.84 ft/s
Constructed Slope	0.010417 ft/ft	Design Capacity	3.94 cfs
Excess Full Capacity	3.28 cfs	Excess Design Capacity	3.28 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	471.29	475.29	472.29	3.00	0.99	472.28	472.29
Downstream	471.04	475.29	472.04	3.25	1.23	472.27	472.28

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-6A

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	16.87 degrees	Length	92.00 ft
Upstream Node	CB-6A	Downstream Node	CB-4B

---

### Hydraulic Summary

---

Total System Flow	13.37 cfs	Full Capacity	18.30 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.068367 ft/ft
Gravity Element Headloss	6.29 ft	Velocity In	10.95 ft/s
Average Velocity	10.94 ft/s	Velocity Out	10.93 ft/s
Constructed Slope	0.068370 ft/ft	Design Capacity	18.30 cfs
Excess Full Capacity	4.92 cfs	Excess Design Capacity	4.92 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	471.04	475.29	472.29	3.00	1.23	472.27	474.13
Downstream	464.75	469.00	466.00	3.00	1.23	465.98	467.84

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

### Message List

---

#### Message List

---

Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-6A

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-6B

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	18.84 degrees	Length	130.00 ft
Upstream Node	CB-6B	Downstream Node	CB-6A

---

### Hydraulic Summary

---

Total System Flow	10.81 cfs	Full Capacity	21.00 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.090042 ft/ft
Gravity Element Headloss	11.68 ft	Velocity In	8.94 ft/s
Average Velocity	8.90 ft/s	Velocity Out	8.86 ft/s
Constructed Slope	0.090077 ft/ft	Design Capacity	21.00 cfs
Excess Full Capacity	10.19 cfs	Excess Design Capacity	10.19 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	482.75	487.00	484.00	3.00	1.20	483.95	485.19
Downstream	471.04	475.29	472.29	3.00	1.23	472.27	473.49

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

### Message List

---

#### Message List

---

Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-6B

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-7

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	89.76 degrees	Length	25.00 ft
Upstream Node	CB-7	Downstream Node	CB-8A

---

### Hydraulic Summary

---

Total System Flow	0.66 cfs	Full Capacity	3.86 cfs
Profile Description	Composite: Pressure/S1	Energy Slope	0.000282 ft/ft
Gravity Element Headloss	0.01 ft	Velocity In	0.86 ft/s
Average Velocity	0.85 ft/s	Velocity Out	0.83 ft/s
Constructed Slope	0.010000 ft/ft	Design Capacity	3.86 cfs
Excess Full Capacity	3.20 cfs	Excess Design Capacity	3.20 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	493.88	497.88	494.88	3.00	0.93	494.81	494.83
Downstream	493.63	497.88	494.63	3.25	1.18	494.81	494.82

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-8

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	18.44 degrees	Length	127.00 ft
Upstream Node	CB-8A	Downstream Node	CB-6B

---

### Hydraulic Summary

---

Total System Flow	9.76 cfs	Full Capacity	20.48 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.085653 ft/ft
Gravity Element Headloss	10.86 ft	Velocity In	8.15 ft/s
Average Velocity	8.11 ft/s	Velocity Out	8.07 ft/s
Constructed Slope	0.085669 ft/ft	Design Capacity	20.48 cfs
Excess Full Capacity	10.72 cfs	Excess Design Capacity	10.72 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	493.63	497.88	494.88	3.00	1.18	494.81	495.84
Downstream	482.75	487.00	484.00	3.00	1.20	483.95	484.96

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

---

### Message List

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Message List

---

Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-8

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-8A

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.14 degrees	Length	143.00 ft
Upstream Node	CB-8B	Downstream Node	CB-8A

---

### Hydraulic Summary

---

Total System Flow	8.80 cfs	Full Capacity	20.37 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.084736 ft/ft
Gravity Element Headloss	12.09 ft	Velocity In	7.46 ft/s
Average Velocity	7.40 ft/s	Velocity Out	7.34 ft/s
Constructed Slope	0.084755 ft/ft	Design Capacity	20.37 cfs
Excess Full Capacity	11.57 cfs	Excess Design Capacity	11.57 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	505.75	510.00	507.00	3.00	1.15	506.90	507.76
Downstream	493.63	497.88	494.88	3.00	1.18	494.81	495.65

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

---

### Message List

---

#### Message List

---

Information: Hydraulic Jump formed.

---

Detailed Report for Pipe: P-8A

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-9

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	89.11 degrees	Length	24.00 ft
Upstream Node	CB-9	Downstream Node	CB-10

### Hydraulic Summary

Total System Flow	0.27 cfs	Full Capacity	5.23 cfs
Profile Description	S1	Energy Slope	0.000163 ft/ft
Gravity Element Headloss	-0.01 ft	Velocity In	0.97 ft/s
Average Velocity	0.68 ft/s	Velocity Out	0.38 ft/s
Constructed Slope	0.018333 ft/ft	Design Capacity	5.23 cfs
Excess Full Capacity	4.96 cfs	Excess Design Capacity	4.96 cfs

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	513.27	517.27	514.27	3.00	0.38	513.65	513.66
Downstream	512.83	517.27	513.83	3.44	0.83	513.66	513.66

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

### User Data

Date Installed

## Detailed Report for Pipe: P-10

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.65 degrees	Length	108.00 ft
Upstream Node	CB-10	Downstream Node	CB-8B

---

### Hydraulic Summary

---

Total System Flow	7.75 cfs	Full Capacity	27.13 cfs
Profile Description	S2	Energy Slope	0.041203 ft/ft
Gravity Element Headloss	6.67 ft	Velocity In	5.70 ft/s
Average Velocity	9.47 ft/s	Velocity Out	13.24 ft/s
Constructed Slope	0.066852 ft/ft	Design Capacity	27.13 cfs
Excess Full Capacity	19.39 cfs	Excess Design Capacity	19.39 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	512.58	517.27	514.08	3.19	1.08	513.66	514.16
Downstream	506.44	510.00	507.94	2.06	0.55	506.99	509.71

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

---

## Detailed Report for Pipe: P-11

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### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	89.35 degrees	Length	25.00 ft
Upstream Node	CB-11	Downstream Node	CB-12

---

### Hydraulic Summary

---

Total System Flow	0.75 cfs	Full Capacity	3.86 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.004167 ft/ft
Gravity Element Headloss	0.01 ft	Velocity In	2.93 ft/s
Average Velocity	2.22 ft/s	Velocity Out	1.51 ft/s
Constructed Slope	0.010000 ft/ft	Design Capacity	3.86 cfs
Excess Full Capacity	3.11 cfs	Excess Design Capacity	3.11 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	514.37	518.37	515.37	3.00	0.36	514.73	514.87
Downstream	514.12	518.37	515.12	3.25	0.61	514.73	514.76

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

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### Message List

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#### Message List

---

Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-11

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Message List

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Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-12

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.73 degrees	Length	258.00 ft
Upstream Node	CB-12	Downstream Node	CB-10

---

### Hydraulic Summary

---

Total System Flow	4.96 cfs	Full Capacity	8.05 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.004701 ft/ft
Gravity Element Headloss	1.07 ft	Velocity In	4.75 ft/s
Average Velocity	4.20 ft/s	Velocity Out	3.64 ft/s
Constructed Slope	0.005000 ft/ft	Design Capacity	8.05 cfs
Excess Full Capacity	3.09 cfs	Excess Design Capacity	3.09 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	513.87	518.37	515.37	3.00	0.86	514.73	515.08
Downstream	512.58	517.27	514.08	3.19	1.08	513.66	513.86

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

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### Message List

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#### Message List

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Information: Hydraulic jump formed.

---

Detailed Report for Pipe: P-12

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-13

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### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	89.56 degrees	Length	26.00 ft
Upstream Node	CB-13	Downstream Node	CB-14

---

### Hydraulic Summary

---

Total System Flow	0.68 cfs	Full Capacity	2.73 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.003062 ft/ft
Gravity Element Headloss	0.01 ft	Velocity In	2.85 ft/s
Average Velocity	2.38 ft/s	Velocity Out	1.91 ft/s
Constructed Slope	0.005000 ft/ft	Design Capacity	2.73 cfs
Excess Full Capacity	2.05 cfs	Excess Design Capacity	2.05 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	518.13	522.13	519.13	3.00	0.34	518.47	518.60
Downstream	518.00	522.13	519.00	3.13	0.46	518.46	518.52

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

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Date Installed

---

### Message List

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Message List

---

Information: Hydraulic Jump formed.

---

Detailed Report for Pipe: P-13

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-14

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### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.33 degrees	Length	162.00 ft
Upstream Node	CB-14	Downstream Node	CB-12

---

### Hydraulic Summary

Total System Flow	1.21 cfs	Full Capacity	5.97 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.023607 ft/ft
Gravity Element Headloss	3.74 ft	Velocity In	3.39 ft/s
Average Velocity	2.91 ft/s	Velocity Out	2.42 ft/s
Constructed Slope	0.023951 ft/ft	Design Capacity	5.97 cfs
Excess Full Capacity	4.77 cfs	Excess Design Capacity	4.77 cfs

---

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	518.00	522.13	519.00	3.13	0.46	518.46	518.64
Downstream	514.12	518.37	515.12	3.25	0.61	514.73	514.82

---

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

Date Installed

---

### Message List

#### Message List

Information: Hydraulic Jump formed.

Detailed Report for Pipe: P-14

---

Message List

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Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-15

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.03 degrees	Length	300.00 ft
Upstream Node	CB-15	Downstream Node	SDMH-B

### Hydraulic Summary

Total System Flow	3.79 cfs	Full Capacity	36.77 cfs
Profile Description	S2	Energy Slope	0.097471 ft/ft
Gravity Element Headloss	31.75 ft	Velocity In	4.33 ft/s
Average Velocity	8.88 ft/s	Velocity Out	13.42 ft/s
Constructed Slope	0.104433 ft/ft	Design Capacity	36.77 cfs
Excess Full Capacity	32.99 cfs	Excess Design Capacity	32.99 cfs

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	529.12	535.28	530.62	4.66	0.74	529.86	530.16
Downstream	497.79	501.79	499.29	2.50	0.33	498.12	500.91

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

### User Data

Date Installed

## Detailed Report for Pipe: P-16

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	2.80 degrees	Length	25.00 ft
Upstream Node	CB-16	Downstream Node	CB-15

---

### Hydraulic Summary

---

Total System Flow	0.48 cfs	Full Capacity	7.00 cfs
Profile Description	S2	Energy Slope	0.009072 ft/ft
Gravity Element Headloss	0.30 ft	Velocity In	2.47 ft/s
Average Velocity	2.87 ft/s	Velocity Out	3.27 ft/s
Constructed Slope	0.010000 ft/ft	Design Capacity	7.00 cfs
Excess Full Capacity	6.52 cfs	Excess Design Capacity	6.52 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	530.67	535.28	531.92	3.36	0.27	530.94	531.04
Downstream	530.42	535.28	531.67	3.61	0.22	530.64	530.81

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-17

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	62.06 degrees	Length	169.00 ft
Upstream Node	CB-17	Downstream Node	CB-15

---

### Hydraulic Summary

---

Total System Flow	2.89 cfs	Full Capacity	21.62 cfs
Profile Description	S2	Energy Slope	0.085479 ft/ft
Gravity Element Headloss	16.50 ft	Velocity In	4.21 ft/s
Average Velocity	8.23 ft/s	Velocity Out	12.26 ft/s
Constructed Slope	0.095444 ft/ft	Design Capacity	21.62 cfs
Excess Full Capacity	18.73 cfs	Excess Design Capacity	18.73 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	546.55	551.66	547.80	3.86	0.68	547.23	547.51
Downstream	530.42	535.28	531.67	3.61	0.31	530.73	533.06

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-18

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	121.26 degrees	Length	26.00 ft
Upstream Node	CB-18	Downstream Node	CB-17

---

### Hydraulic Summary

---

Total System Flow	0.58 cfs	Full Capacity	6.86 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.007038 ft/ft
Gravity Element Headloss	0.11 ft	Velocity In	2.60 ft/s
Average Velocity	2.07 ft/s	Velocity Out	1.55 ft/s
Constructed Slope	0.009615 ft/ft	Design Capacity	6.86 cfs
Excess Full Capacity	6.28 cfs	Excess Design Capacity	6.28 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	547.05	551.66	548.30	3.36	0.30	547.35	547.45
Downstream	546.80	551.66	548.05	3.61	0.43	547.23	547.27

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

### Message List

---

#### Message List

---

Information: Hydraulic Jump formed.

---

## Detailed Report for Pipe: P-18

---

### Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-19

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	45.71 degrees	Length	144.00 ft
Upstream Node	CB-19	Downstream Node	CB-17

---

### Hydraulic Summary

---

Total System Flow	1.56 cfs	Full Capacity	21.06 cfs
Profile Description	S2	Energy Slope	0.082779 ft/ft
Gravity Element Headloss	13.30 ft	Velocity In	3.45 ft/s
Average Velocity	6.75 ft/s	Velocity Out	10.05 ft/s
Constructed Slope	0.090556 ft/ft	Design Capacity	21.06 cfs
Excess Full Capacity	19.50 cfs	Excess Design Capacity	19.50 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	559.84	564.70	561.09	3.61	0.50	560.34	560.52
Downstream	546.80	551.66	548.05	3.61	0.23	547.03	548.60

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

## Detailed Report for Pipe: P-20

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

---

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	92.54 degrees	Length	26.00 ft
Upstream Node	CB-20	Downstream Node	CB-19

---

### Hydraulic Summary

---

Total System Flow	0.76 cfs	Full Capacity	6.86 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.006679 ft/ft
Gravity Element Headloss	0.10 ft	Velocity In	2.80 ft/s
Average Velocity	2.24 ft/s	Velocity Out	1.68 ft/s
Constructed Slope	0.009615 ft/ft	Design Capacity	6.86 cfs
Excess Full Capacity	6.10 cfs	Excess Design Capacity	6.10 cfs

---

### Elevations/Depths

---

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	560.09	564.70	561.34	3.36	0.34	560.43	560.55
Downstream	559.84	564.70	561.09	3.61	0.50	560.34	560.38

---

### Pipe Design Options

---

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

---

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

---

Date Installed

---

### Message List

---

#### Message List

---

Information: Hydraulic Jump formed.

---

Detailed Report for Pipe: P-20

---

Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-21

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	43.28 degrees	Length	59.00 ft
Upstream Node	CB-21	Downstream Node	CB-22

### Hydraulic Summary

Total System Flow	1.52 cfs	Full Capacity	7.00 cfs
Profile Description	Composite: S1/S2	Energy Slope	0.009629 ft/ft
Gravity Element Headloss	0.51 ft	Velocity In	3.42 ft/s
Average Velocity	3.10 ft/s	Velocity Out	2.77 ft/s
Constructed Slope	0.010000 ft/ft	Design Capacity	7.00 cfs
Excess Full Capacity	5.48 cfs	Excess Design Capacity	5.48 cfs

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	556.39	561.00	557.64	3.36	0.49	556.88	557.06
Downstream	555.80	561.00	557.05	3.95	0.57	556.37	556.49

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

### User Data

Date Installed

### Message List

#### Message List

Information: Hydraulic Jump formed.

## Detailed Report for Pipe: P-21

---

### Message List

---

Message List

---

Information: Critical depth assumed upstream.

---

## Detailed Report for Pipe: P-22

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	15.24 degrees	Length	238.00 ft
Upstream Node	CB-22	Downstream Node	SDMH-A

### Hydraulic Summary

Total System Flow	2.07 cfs	Full Capacity	9.41 cfs
Profile Description	S2	Energy Slope	0.017263 ft/ft
Gravity Element Headloss	4.48 ft	Velocity In	3.76 ft/s
Average Velocity	4.95 ft/s	Velocity Out	6.14 ft/s
Constructed Slope	0.018067 ft/ft	Design Capacity	9.41 cfs
Excess Full Capacity	7.34 cfs	Excess Design Capacity	7.34 cfs

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	556.80	561.00	557.05	3.95	0.57	556.37	556.59
Downstream	551.50	556.00	552.75	3.25	0.40	551.90	552.48

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

### User Data

Date Installed

## Detailed Report for Pipe: P-SDMHA

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	94.34 degrees	Length	270.00 ft
Upstream Node	SDMH-A	Downstream Node	CB-8B

### Hydraulic Summary

Total System Flow	2.02 cfs	Full Capacity	28.51 cfs
Profile Description	S2	Energy Slope	0.157658 f/ft
Gravity Element Headloss	45.15 ft	Velocity In	3.74 f/s
Average Velocity	8.58 f/s	Velocity Out	13.42 f/s
Constructed Slope	0.165963 f/ft	Design Capacity	28.51 cfs
Excess Full Capacity	26.49 cfs	Excess Design Capacity	26.49 cfs

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	551.50	556.00	552.75	3.25	0.57	552.07	552.28
Downstream	506.69	510.00	507.94	2.06	0.23	506.92	509.72

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 f/ft	Maximum Slope	0.300000 f/ft

### User Data

Date Installed

## Detailed Report for Pipe: P-SDMHB

---

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.01 degrees	Length	300.00 ft
Upstream Node	SDMH-B	Downstream Node	SDMH-C

---

### Hydraulic Summary

Total System Flow	3.74 cfs	Full Capacity	38.54 cfs
Profile Description	S2	Energy Slope	0.107176 ft/ft
Gravity Element Headloss	34.83 ft	Velocity In	4.31 ft/s
Average Velocity	9.07 ft/s	Velocity Out	13.82 ft/s
Constructed Slope	0.114700 ft/ft	Design Capacity	38.54 cfs
Excess Full Capacity	34.80 cfs	Excess Design Capacity	34.80 cfs

---

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	497.79	501.79	499.29	2.50	0.74	498.53	498.82
Downstream	463.38	468.38	464.88	3.50	0.32	463.70	466.67

---

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

Date Installed

## Detailed Report for Pipe: P-SDMHC

---

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Pipe Characteristics

Material	Corrugated HDPE (Smooth Interior)	Mannings n	0.012
Section Shape	Circular	Number of Sections	1
Bend Angle	0.00 degrees	Length	86.00 ft
Upstream Node	SDMH-C	Downstream Node	FES-2

---

### Hydraulic Summary

Total System Flow	3.70 cfs	Full Capacity	24.36 cfs
Profile Description	S2	Energy Slope	0.008791 ft/ft
Gravity Element Headloss	1.00 ft	Velocity In	3.98 ft/s
Average Velocity	4.79 ft/s	Velocity Out	5.60 ft/s
Constructed Slope	0.009884 ft/ft	Design Capacity	24.36 cfs
Excess Full Capacity	20.67 cfs	Excess Design Capacity	20.67 cfs

---

### Elevations/Depths

	Invert (ft)	Ground (ft)	Crown (ft)	Cover (ft)	Depth (ft)	Hydraulic Grade (ft)	EGL (ft)
Upstream	463.38	468.38	465.38	3.00	0.67	464.05	464.30
Downstream	462.53	465.00	464.53	0.47	0.53	463.06	463.54

---

### Pipe Design Options

Design Pipe?	true	Design Upstream Invert?	true
Design Downstream Invert?	true	Specify Local Pipe Constraints?	false
Part Full Design?	false	Design Percent Full	N/A %
Allow Multiple Sections?	false	Maximum Number Sections	N/A
Limit Section Size?	false	Maximum Section Rise	N/A ft

---

### Pipe Design Constraints

Minimum Velocity	0.00 ft/s	Maximum Velocity	15.00 ft/s
Minimum Cover	2.00 ft	Maximum Cover	15.00 ft
Minimum Slope	0.005000 ft/ft	Maximum Slope	0.300000 ft/ft

---

### User Data

Date Installed

---

### Message List

#### Message List

Warning: Pipe falls minimum cover constraint.

## Detailed Report for Junction: SDMH-A

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Geometric Summary

---

X	4,401.80 ft	Calculated Station	10+63 ft
Y	1,284.77 ft	Structure Diameter	4.00 ft
		Bolted Cover?	false

---

### Elevations

---

Ground Elevation	556.00 ft	Hydraulic Grade Line In	552.07 ft
Rim Elevation	556.00 ft	Hydraulic Grade Line Out	552.07 ft
Sump Elevation	551.50 ft		

---

### Headlosses

---

Gravity Element Headloss	0.00 ft	Depth Out	0.57 ft
Headloss Method	Absolute	Velocity Out	3.74 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.22 ft

---

### System Flow Summary

---

Total System Flow	2.02 cfs	System Rational Flow	2.02 cfs
System Flow Time	28.82 min	System Known Flow	0.00 cfs
System Intensity	3.73 in/hr	System Additional Flow	0.00 cfs
System CA	23,426 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

---

### Incoming Diverted Flow

---

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Design Constraints Summary

---

Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

---

### User Data

---

Date Installed

---

## Detailed Report for Junction: SDMH-B

---

### Scenario Summary

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Geometric Summary

X	5,098.79 ft	Calculated Station	3+86 ft
Y	2,034.67 ft	Structure Diameter	4.00 ft
		Bolled Cover?	false

---

### Elevations

Ground Elevation	501.79 ft	Hydraulic Grade Line In	498.53 ft
Rim Elevation	501.79 ft	Hydraulic Grade Line Out	498.53 ft
Sump Elevation	497.79 ft		

---

### Headlosses

Gravity Element Headloss	0.00 ft	Depth Out	0.74 ft
Headloss Method	Absolute	Velocity Out	4.31 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.29 ft

---

### System Flow Summary

Total System Flow	3.74 cfs	System Rational Flow	3.74 cfs
System Flow Time	17.26 min	System Known Flow	0.00 cfs
System Intensity	4.96 in/hr	System Additional Flow	0.00 cfs
System CA	32,598 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

---

### Incoming Diverted Flow

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Design Constraints Summary

Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

---

### User Data

Date Installed

## Detailed Report for Junction: SDMH-C

---

### Scenario Summary

---

Label	Base
Physical Properties Alternative	Physical Properties-Alternative 3
Catchments Alternative	Base-Catchments
System Flows Alternative	Base-System Flows
Structure Headlosses Alternative	Base-Structure Headlosses
Boundary Conditions Alternative	Base-Boundary Conditions
Design Constraints Alternative	Base-Design Constraints
Cost Alternative	Base-Cost
User Data Alternative	Base-User Data

---

### Geometric Summary

---

X	5,292.63 ft	Calculated Station	0+86 ft
Y	2,264.27 ft	Structure Diameter	4.00 ft
		Bolled Cover?	false

---

### Elevations

---

Ground Elevation	468.38 ft	Hydraulic Grade Line In	464.05 ft
Rim Elevation	468.38 ft	Hydraulic Grade Line Out	464.05 ft
Sump Elevation	463.38 ft		

---

### Headlosses

---

Gravity Element Headloss	0.00 ft	Depth Out	0.67 ft
Headloss Method	Absolute	Velocity Out	3.98 ft/s
Absolute Headloss	0.00 ft	Velocity Head Out	0.25 ft

---

### System Flow Summary

---

Total System Flow	3.70 cfs	System Rational Flow	3.70 cfs
System Flow Time	17.81 min	System Known Flow	0.00 cfs
System Intensity	4.90 in/hr	System Additional Flow	0.00 cfs
System CA	32,598 ft <sup>2</sup>	Total Diverted Flow In	0.00 cfs

---

### Incoming Diverted Flow

---

Local Diverted Flow In	0.00 cfs	Global Diverted Flow In	0.00 cfs
Total Diverted Flow In	0.00 cfs		

---

### Design Constraints Summary

---

Pipe Matching	Inverts	Allow Drop Structure?	true
Matchline Offset	0.00 ft	Local Pipe Matching Constraints?	false
Design Structure Elevation?	true	Desired Sump Depth	0.00 ft

---

### User Data

---

Date Installed

---

LANC & TULLY, P.C.  
 P.O. Box 687  
 GOSHEN, NY 10924  
 Tel. (845) 294-3700  
 FAX (845) 294-8609

JOB FOX MEADOW ESTATES  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CALCULATED BY DFH DATE 8/19/02  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

DETERMINING PIPE SIZE REQUIRED FOR CROSSING  
 AT STM 1+60  
 FROM TR-SS ANALYSIS, 100-YEAR PEAK DISCHARGE  
 58.16 cfs.

INVERT OF PIPE (s) = 452.40  
 LOW POINT CURB ELEVATION = 457.09  
 AVAILABLE HEAD = 457.09 - 452.40 = 4.69'

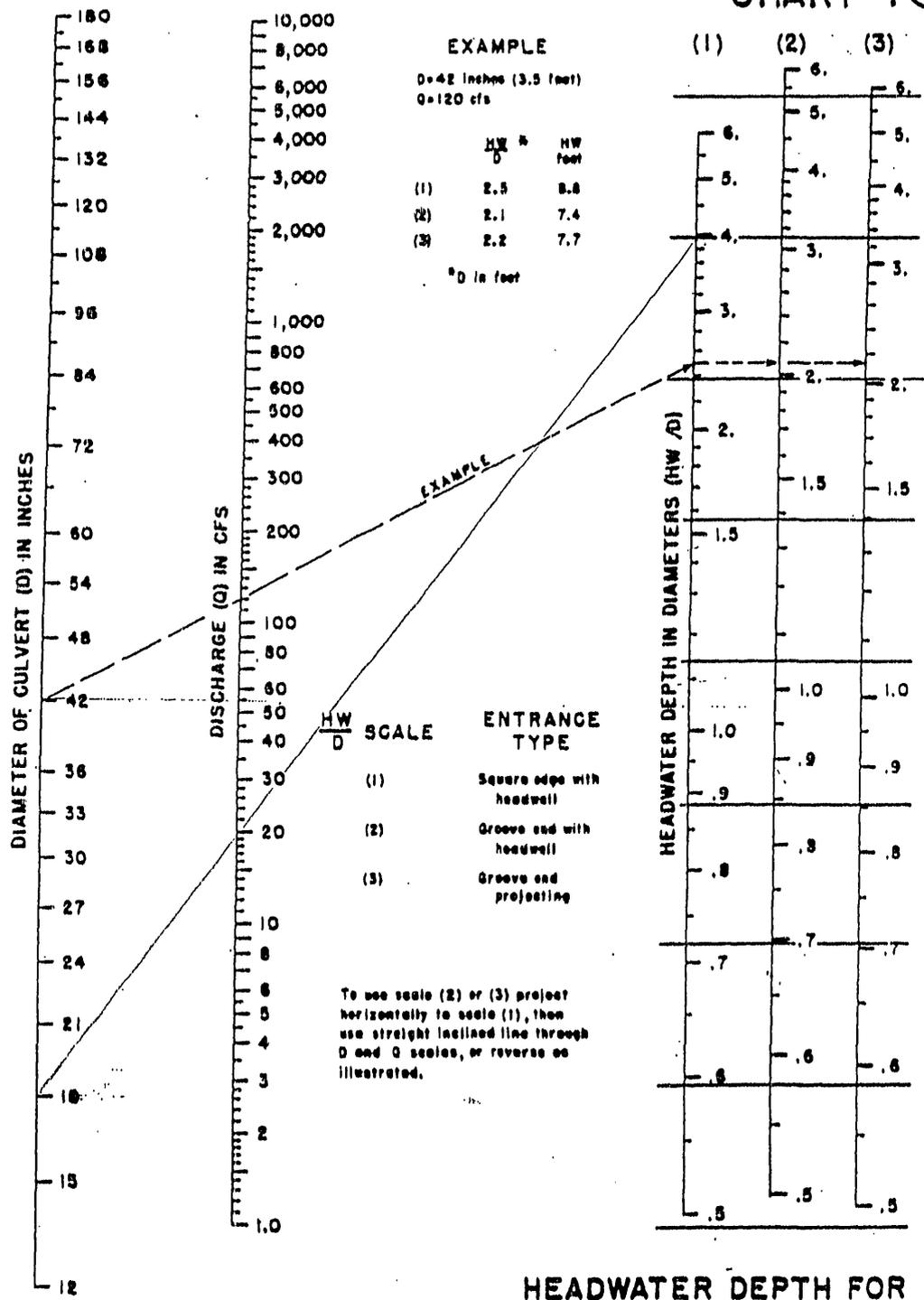
CHECK INLET CONTROL:  
 USING 18" DIA. RCP, FROM CHART 1,  
 $HW/D = 4.69/1.5 = 3.12$   
 $Q = 20$  cfs

CHECK OUTLET CONTROL:  
 $HW = H + h_0 - L_o S$   
 $L_o S = 80 \times .005 = 0.40$   
 $h_0 = d_c + D/2 = 1.5$   
 $4.69 = H + 1.5 - 0.40$   
 $\therefore H = 3.59$   
 FROM CHART 5,  $Q = 14.5$  cfs

$\therefore$  OUTLET CONTROL GOVERNS.

NUMBER OF PIPES NEEDED =  $58.16 \text{ cfs} / 14.5 \text{ cfs}$   
 = 4.0

# CHART 1



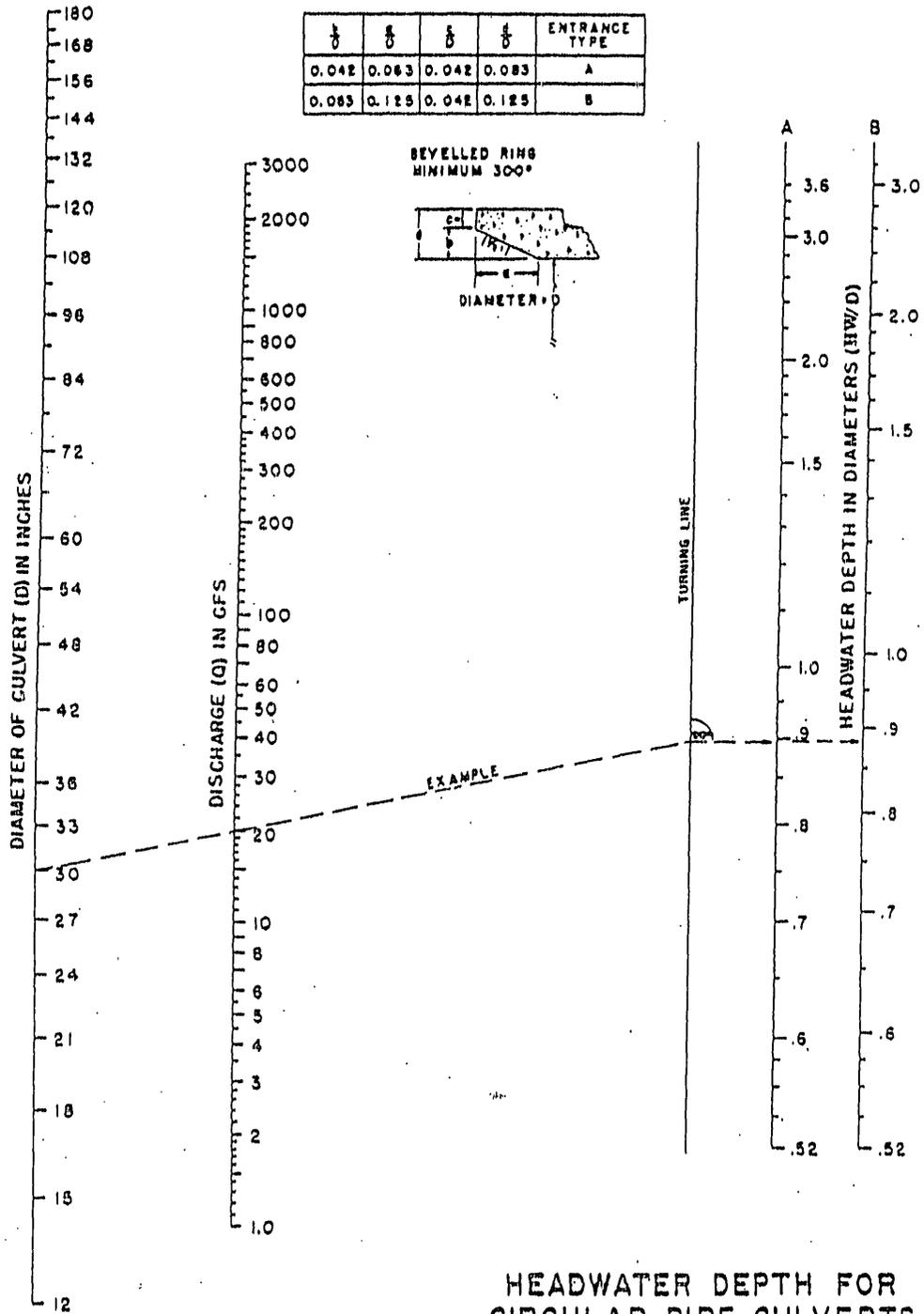
## HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

HEADWATER SCALES 2 & 3  
 REVISED MAY 1964

BUREAU OF PUBLIC ROADS JAN. 1963

# CHART 3

$\frac{1}{D}$	$\frac{2}{D}$	$\frac{3}{D}$	$\frac{4}{D}$	ENTRANCE TYPE
0.042	0.083	0.042	0.083	A
0.083	0.125	0.042	0.125	B

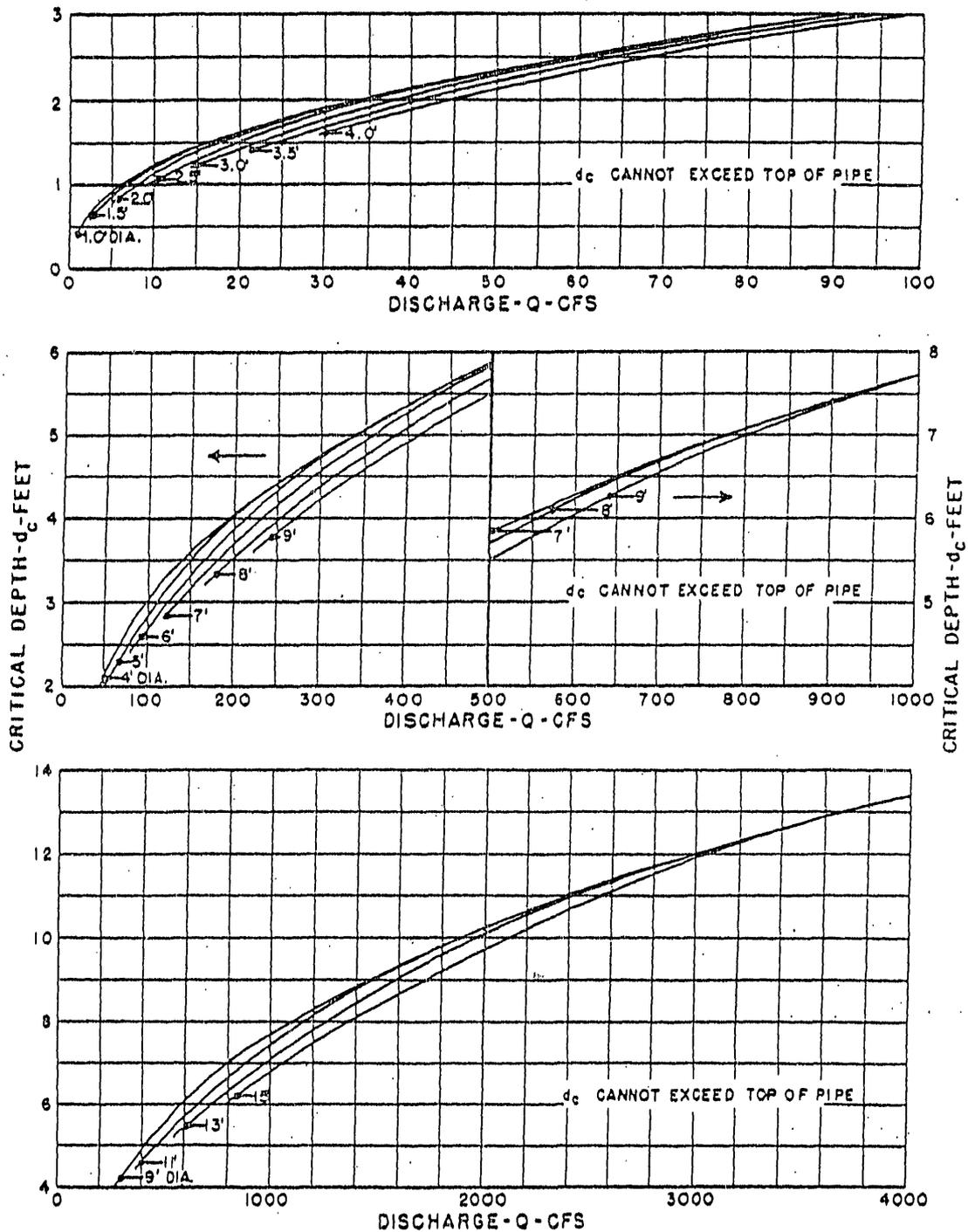


FEDERAL HIGHWAY ADMINISTRATION  
MAY 1973

HEADWATER DEPTH FOR  
CIRCULAR PIPE CULVERTS  
WITH BEVELED RING  
INLET CONTROL



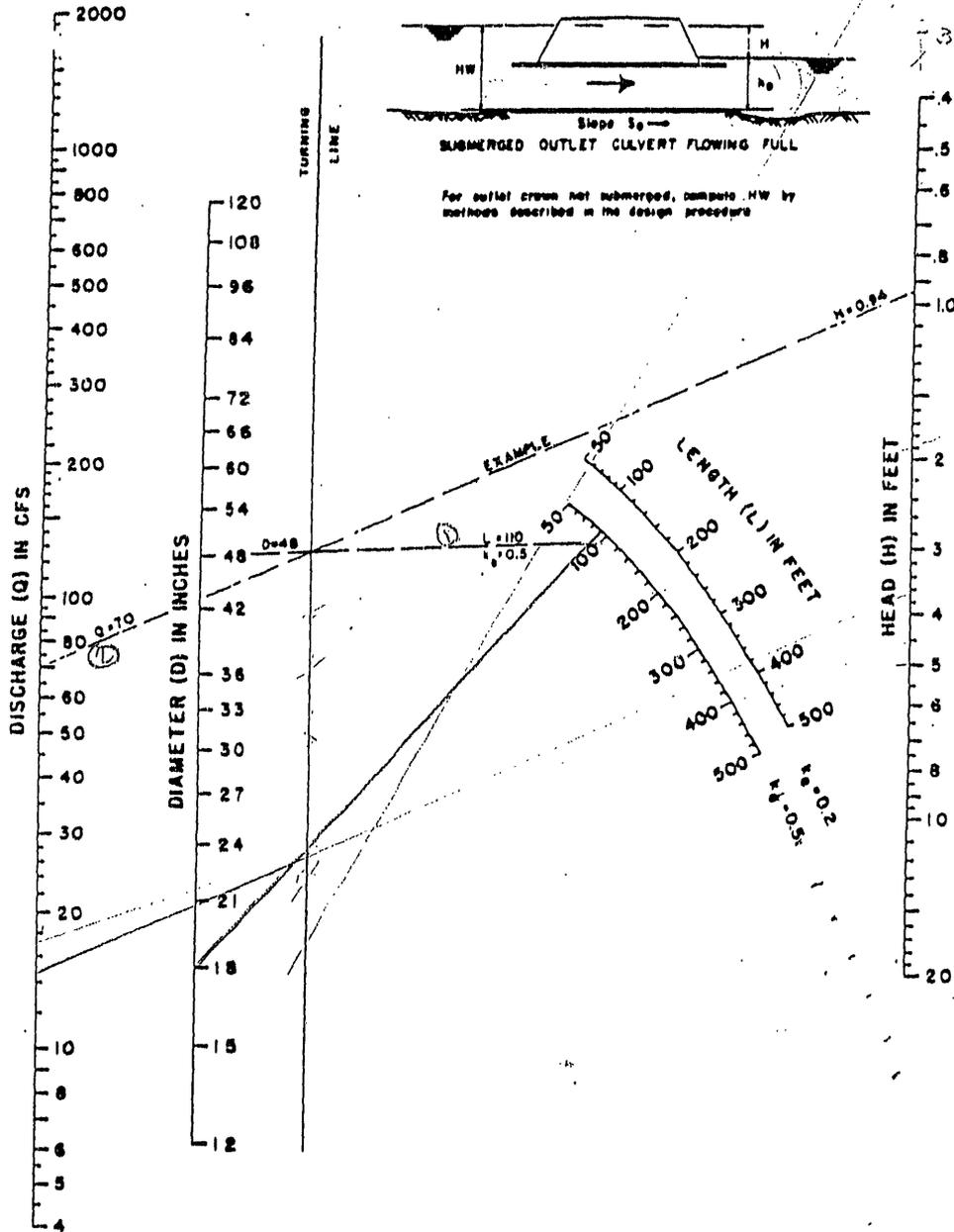
# CHART 4



BUREAU OF PUBLIC ROADS  
JAN. 1964

## CRITICAL DEPTH CIRCULAR PIPE

# CHART 5



HEAD FOR  
CONCRETE PIPE CULVERTS  
FLOWING FULL  
 $n = 0.012$

01-51

**#7 On Agenda:      Receive And File Irrevocable Letter Of Credit -  
                                 Fox Meadow Subdivision**

Hearing no objection, the Town Board of the Town of New Windsor receive and file an Irrevocable Letter of Credit issued by Union State Bank dated February 1, 2005 in the amount of \$688,950.00 for the account of Rolling Acres Fox Meadow, LLC with regard to Fox Meadow Subdivision.

01-51

Map Number 193-05 City New Windsor  
Section 52 Block 1 Lot 20 Town New Windsor  
Village New Windsor

Title: Fox Meadow Estates

Dated: 8-31-04 Filed 2/24/05

Approved by James Resto Jr.

on 2/18/05

Record Owner Fox Meadow Estates LLC

DONNA L. BENSON  
Orange County Clerk

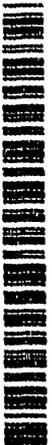
(13 Sheets) ~~\$~~ 130-

5 Signed  
Total ~~\$~~ 135-

RECEIVED  
MAR 1 2005  
TOWN CLERK'S OFFICE

RECEIVED  
MAR 1 - 2005  
TOWN OF NEW WINDSOR  
ASSESSORS OFFICE

RECORDED/FILED ORANGE COUNTY  
BOOK 02005 PAGE 0193  
12/24/2005/ 16:09:52  
FILE NUMBER 20050020820  
RECEIPT#383600 patti





# Town of New Windsor

555 Union Avenue  
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## OFFICE OF THE PLANNING BOARD

21 August 2001

**SUBJECT: FOX MEADOW SUBDIVISION  
TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK  
(NWPB REF. NO. 01-51)**

To all Involved Agencies:

The Town of New Windsor Planning Board has had placed before it an application for Subdivision approval of the Fox Meadow Subdivision project, located off Toleman Road within the Town. The project involves, in general, the subdivision of an 82 +/- Acre parcel into 33 residential lots, one to include continued use as a horse farm. It is the opinion of the Town of New Windsor Planning Board that the action is an Unlisted Action under SEQRA. This letter is written as a request for Lead Agency Coordination as required under Part 617 of the Environmental Conservation Law.

A letter of response with regard to your interest in the position of Lead Agency, as defined by Part 617, Title 6 of the Environmental Conservation Law and the SEQRA review process, sent to the Planning Board at the above address, attention of Mark J. Edsall, P.E., Planning Board Engineer (contact person), would be most appreciated. Should no other involved agency desire the Lead Agency position; it is the desire of the Town of New Windsor Planning Board to assume such role. Should the Planning Board fail to receive a written response requesting Lead Agency within thirty (30) days, it will be understood that you do not have an interest in the Lead Agency position. Thank you for your attention to this matter. Should you have any questions regarding this notice, please feel free to contact the undersigned at the above number or (845) 562-8640.

Very truly yours,

*Mark J. Edsall, P.E.*  
Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

NYS Department of Environmental Conservation, New Paltz  
New York State Parks, Recreation and Historic Preservation  
Orange County Department of Health  
George J. Meyers, Town of New Windsor Supervisor (w/o encl)  
Town of New Windsor Town Clerk (w/o encl)  
Orange County Department of Planning  
Myra Mason, Planning Board Secretary  
Planning Board Attorney (w/o encl)  
Applicant (w/o encl)

NW01-51-LA Coord Letter.doc

*sent out 8/28/01*

617.20  
Appendix A  
State Environmental Quality Review  
FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

- Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3:** If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

**DETERMINATION OF SIGNIFICANCE— Type 1 and Unlisted Actions**

Identify the Portions of EAF completed for this project:     Part 1     Part 2     Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

- A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a **negative declaration will be prepared.**
- B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a **CONDITIONED negative declaration will be prepared.\***
- C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a **positive declaration will be prepared.**

\* A Conditioned Negative Declaration is only valid for Unlisted Actions

Subdivision For Fox Meadow Estates

Name of Action

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

Date

# PART 1—PROJECT INFORMATION

## Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

NAME OF ACTION Subdivision For Fox Meadow Estates		
LOCATION OF ACTION (Include Street Address, Municipality and County) Toleman Road, Town of New Windsor, Orange County		
NAME OF APPLICANT/SPONSOR Toleman Partners, LLC		BUSINESS TELEPHONE (914 )663-8633
ADDRESS 133 S. MacQuesten Parkway		
CITY/PO Mt. Vernon		STATE NY
		ZIP CODE 10550
NAME OF OWNER (if different)		BUSINESS TELEPHONE ( )
ADDRESS		
CITY/PO		STATE
		ZIP CODE
DESCRIPTION OF ACTION  Creation of 33 Single-Family Residential Lots to be served by individual wells and sewage disposal systems and the development of approximately 4,000 feet of roadway.		

Please Complete Each Question— Indicate N.A. if not applicable

### A. Site Description

Physical setting of overall project, both developed and undeveloped areas.

1. Present land use:     Urban     Industrial     Commercial     Residential (suburban)     Rural (non-farm)  
                                   Forest     Agriculture     Other \_\_\_\_\_

2. Total acreage of project area:    82.4 +/- acres.

APPROXIMATE ACREAGE

	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	<u>60.6</u> acres	<u>39.4</u> acres
Forested	<u>20.7</u> acres	<u>10.7</u> acres
Agricultural (Includes orchards, cropland, pasture, etc.)	_____ acres	_____ acres
Wetland (Freshwater or tidal as per Articles 24, 25 of ECL)	<u>0.5</u> acres	<u>0.5</u> acres
Water Surface Area	_____ acres	_____ acres
Unvegetated (Rock, earth or fill)	_____ acres	_____ acres
Roads, buildings and other paved surfaces	<u>0.6</u> acres	<u>6.8</u> acres
Other (Indicate type) <u>Lawns</u>	_____ acres	<u>25.0</u> acres

3. What is predominant soil type(s) on project site? Mardin, Erie, Madalin
- a. Soil drainage:     Well drained 0 % of site     Moderately well drained 65 % of site  
                                   Poorly drained 35 % of site
- b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? 10 acres. (See 1 NYCRR 370).
4. Are there bedrock outcroppings on project site?     Yes     No
- a. What is depth to bedrock? 6+ (in feet) (Per SCS Soil Survey of Orange County)

5. Approximate percentage of proposed project site with slopes:  0-10% 65 %  10-15% 21 %  
 15% or greater 14 %
6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or the National Registers of Historic Places?  Yes  No
7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks?  Yes  No
8. What is the depth of the water table? 1.5-2.0 (in feet) (Per SCS Soil Survey of Orange County)
9. Is site located over a primary, principal, or sole source aquifer?  Yes  No
10. Do hunting, fishing or shell fishing opportunities presently exist in the project area?  Yes  No
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?  
 Yes  No According to Pending NYSDEC Review  
 Identify each species \_\_\_\_\_
12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations)  
 Yes  No Describe \_\_\_\_\_
13. Is the project site presently used by the community or neighborhood as an open space or recreation area?  
 Yes  No If yes, explain \_\_\_\_\_
14. Does the present site include scenic views known to be important to the community?  
 Yes  No
15. Streams within or contiguous to project area: Unnamed Stream  
 a. Name of Stream and name of River to which it is tributary Unknown
16. Lakes, ponds, wetland areas within or contiguous to project area:  
 a. Name Unknown b. Size (In acres) 10
17. Is the site served by existing public utilities?  Yes  No  
 a) If Yes, does sufficient capacity exist to allow connection?  Yes  No  
 b) If Yes, will improvements be necessary to allow connection?  Yes  No
18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes  No
19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617?  Yes  No
20. Has the site ever been used for the disposal of solid or hazardous wastes?  Yes  No (None known of)

## B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate)
- a. Total contiguous acreage owned or controlled by project sponsor 82.4 +/- acres.
- b. Project acreage to be developed: 82.4 acres initially; 82.4 acres ultimately.
- c. Project acreage to remain undeveloped 0 acres.
- d. Length of project, in miles: N/A (If appropriate)
- e. If the project is an expansion, indicate percent of expansion proposed N/A %;
- f. Number of off-street parking spaces existing 0; proposed 0.
- g. Maximum vehicular trips generated per hour 33 (upon completion of project)?
- h. If residential: Number and type of housing units:
- |            | One Family | Two Family | Multiple Family | Condominium |
|------------|------------|------------|-----------------|-------------|
| Initially  | <u>33</u>  | <u>-</u>   | <u>-</u>        | <u>-</u>    |
| Ultimately | <u>33</u>  | <u>-</u>   | <u>-</u>        | <u>-</u>    |
- i. Dimensions (in feet) of largest proposed structure 35 height; 30 width; 50 length.
- j. Linear feet of frontage along a public thoroughfare project will occupy is? 5,600 ft.

2. How much natural material (i.e., rock, earth, etc.) will be removed from the site? 0 tons/cubic yards
3. Will disturbed areas be reclaimed?  Yes  No  N/A
- a. If yes, for what intended purpose is the site being reclaimed? Lawns
- b. Will topsoil be stockpiled for reclamation?  Yes  No
- c. Will upper subsoil be stockpiled for reclamation?  Yes  No
4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 10 acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?  
 Yes  No
6. If single phase project: Anticipated period of construction 18 months, (including demolition).
7. If multi-phased:
- a. Total number of phases anticipated N/A (number).
- b. Anticipated date of commencement phase 1 \_\_\_\_\_ month \_\_\_\_\_ year, (including demolition).
- c. Approximate completion date of final phase \_\_\_\_\_ month \_\_\_\_\_ year.
- d. Is phase 1 functionally dependent on subsequent phases?  Yes  No
8. Will blasting occur during construction?  Yes  No
9. Number of jobs generated: during construction 40; after project is complete 0.
10. Number of jobs eliminated by this project 0.
11. Will project require relocation of any projects or facilities?  Yes  No If yes, explain \_\_\_\_\_
12. Is surface liquid waste disposal involved?  Yes  No
- a. If yes, indicate type of waste (sewage, industrial, etc.) and amount \_\_\_\_\_
- b. Name of water body into which effluent will be discharged \_\_\_\_\_
13. Is subsurface liquid waste disposal involved?  Yes  No Type Domestic Wastewater
14. Will surface area of an existing water body increase or decrease by proposal?  Yes  No  
Explain \_\_\_\_\_
15. Is project or any portion of project located in a 100 year flood plain?  Yes  No
16. Will the project generate solid waste?  Yes  No
- a. If yes, what is the amount per month 2 tons
- b. If yes, will an existing solid waste facility be used?  Yes  No
- c. If yes, give name Private Hauler; location Unknown
- d. Will any wastes not go into a sewage disposal system or into a sanitary landfill?  Yes  No
- e. If Yes, explain \_\_\_\_\_
17. Will the project involve the disposal of solid waste?  Yes  No
- a. If yes, what is the anticipated rate of disposal? \_\_\_\_\_ tons/month.
- b. If yes, what is the anticipated site life? \_\_\_\_\_ years.
18. Will project use herbicides or pesticides?  Yes  No
19. Will project routinely produce odors (more than one hour per day)?  Yes  No
20. Will project produce operating noise exceeding the local ambient noise levels?  Yes  No
21. Will project result in an increase in energy use?  Yes  No  
If yes, indicate type(s) Electricity, oil
22. If water supply is from wells, indicate pumping capacity 5 gallons/minute. (Min. required by  
O.C. Health Dept.)
23. Total anticipated water usage per day 17,160 gallons/day.
24. Does project involve Local, State or Federal funding?  Yes  No  
If Yes, explain \_\_\_\_\_

**25. Approvals Required:**

		Type	Submittal Date
City, Town, Village Board	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
<del>City, Town, Village</del> Planning Board	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Subdivision</u>	_____
City, Town Zoning Board	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
<del>City, County</del> Health Department	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Sanitary Facilities</u>	_____
Other Local Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
Other Regional Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
State Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
Federal Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____

**C. Zoning and Planning Information**

- Does proposed action involve a planning or zoning decision?  Yes  No  
 If Yes, indicate decision required:  
 zoning amendment    zoning variance    special use permit    subdivision    site plan  
 new/revision of master plan    resource management plan    other \_\_\_\_\_
- What is the zoning classification(s) of the site? R-1 (Rural Residential)
- What is the maximum potential development of the site if developed as permitted by the present zoning?  
82 Lots based upon minimum acreage
- What is the proposed zoning of the site? Unchanged
- What is the maximum potential development of the site if developed as permitted by the proposed zoning?  
Unchanged
- Is the proposed action consistent with the recommended uses in adopted local land use plans?  Yes  No
- What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?  
R-1 (Rural Residential), OLI (Office and Light Industry)
- Is the proposed action compatible with adjoining/surrounding land uses within a ¼ mile?  Yes  No
- If the proposed action is the subdivision of land, how many lots are proposed? 33  
 a. What is the minimum lot size proposed? 1.0 acres
- Will proposed action require any authorization(s) for the formation of sewer or water districts?  Yes  No
- Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?  Yes  No  
 a. If yes, is existing capacity sufficient to handle projected demand?  Yes  No
- Will the proposed action result in the generation of traffic significantly above present levels?  Yes  No  
 a. If yes, is the existing road network adequate to handle the additional traffic?  Yes  No

**D. Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

**E. Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name David Higgins, P.E. Date 7/12/01  
 Signature *David Higgins* Title Project Engineer

If the action is in the Coastal Area and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

## Part 2—PROJECT IMPACTS AND THEIR MAGNITUDE

Responsibility of Lead Agency

### General Information (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been reasonable? The reviewer is not expected to be an expert environmental analyst.
- The Examples provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumulative effects.

### Instructions (Read carefully)

- a. Answer each of the 20 questions in PART 2. Answer Yes if there will be any impact.
- b. Maybe answers should be considered as Yes answers.
- c. If answering Yes to a question then check the appropriate box (column 1 or 2) to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.
- d. Identifying that an impact will be potentially large (column 2) does not mean that it is also necessarily significant. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.
- e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.
- f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the Yes box in column 3. A No response indicates that such a reduction is not possible. This must be explained in Part 3.

### IMPACT ON LAND

1. Will the proposed action result in a physical change to the project site?  
 NO     YES

#### Examples that would apply to column 2

- Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.
- Construction on land where the depth to the water table is less than 3 feet.
- Construction of paved parking area for 1,000 or more vehicles.
- Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.
- Construction that will continue for more than 1 year or involve more than one phase or stage.
- Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year.
- Construction or expansion of a sanitary landfill.
- Construction in a designated floodway.
- Other impacts \_\_\_\_\_

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)  NO     YES

- Specific land forms: \_\_\_\_\_

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No

**IMPACT ON WATER**

3. Will proposed action affect any water body designated as protected?  
(Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)  
 NO  YES

Examples that would apply to column 2

- Developable area of site contains a protected water body.
- Dredging more than 100 cubic yards of material from channel of a protected stream.
- Extension of utility distribution facilities through a protected water body.
- Construction in a designated freshwater or tidal wetland.
- Other impacts: \_\_\_\_\_

4. Will proposed action affect any non-protected existing or new body of water?  
 NO  YES

Examples that would apply to column 2

- A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease.
- Construction of a body of water that exceeds 10 acres of surface area.
- Other impacts: \_\_\_\_\_

5. Will Proposed Action affect surface or groundwater quality or quantity?  
 NO  YES

Examples that would apply to column 2

- Proposed Action will require a discharge permit.
- Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action.
- Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity.
- Construction or operation causing any contamination of a water supply system.
- Proposed Action will adversely affect groundwater.
- Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.
- Proposed Action would use water in excess of 20,000 gallons per day.
- Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions.
- Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.
- Proposed Action will allow residential uses in areas without water and/or sewer services.
- Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities.
- Other impacts: \_\_\_\_\_

6. Will proposed action alter drainage flow or patterns, or surface water runoff?  
 NO  YES

Examples that would apply to column 2

- Proposed Action would change flood water flows.

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No







**NOISE AND ODOR IMPACTS**

17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action? NO YES

Examples that would apply to column 2

- Blasting within 1,500 feet of a hospital, school or other sensitive facility.
- Odors will occur routinely (more than one hour per day).
- Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.
- Proposed Action will remove natural barriers that would act as a noise screen.
- Other impacts: \_\_\_\_\_

**IMPACT ON PUBLIC HEALTH**

18. Will Proposed Action affect public health and safety? NO YES

Examples that would apply to column 2

- Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.
- Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)
- Storage facilities for one million or more gallons of liquified natural gas or other flammable liquids.
- Proposed action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.
- Other impacts: \_\_\_\_\_

**IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD**

19. Will proposed action affect the character of the existing community? NO YES

Examples that would apply to column 2

- The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.
- The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.
- Proposed action will conflict with officially adopted plans or goals.
- Proposed action will cause a change in the density of land use.
- Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.
- Development will create a demand for additional community services (e.g. schools, police and fire, etc.)
- Proposed Action will set an important precedent for future projects.
- Proposed Action will create or eliminate employment.
- Other impacts: \_\_\_\_\_

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

20. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts? NO YES

If any action in Part 2 is identified as a potential large impact or if you cannot determine the magnitude of impact, proceed to Part 3

## Part 3—EVALUATION OF THE IMPORTANCE OF IMPACTS

### Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

#### Instructions

Discuss the following for each impact identified in Column 2 of Part 2:

1. Briefly describe the impact.
2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

To answer the question of importance, consider:

- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact.

(Continue on attachments)



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**  
33 AIRPORT CENTER DRIVE  
SUITE 202  
NEW WINDBOR, NEW YORK 12559

(845) 567-3100  
FAX: (845) 567-3232  
E-MAIL: MKENY@MHEPC.COM

WRITER'S E-MAIL ADDRESS:  
MJE@MHEPC.COM

**MEMORANDUM**

(via fax)

17 June 2004

**TO: GEORGE J. MEYERS, TOWN SUPERVISOR**  
**FROM: MARK J. EDSALL, P.E., PLANNING BOARD ENGINEER**  
**SUBJECT: PROJECT NAME**  
**PLANNING BOARD APPLICATION NO. 01-51**  
**REVIEW OF PROJECT WORK ESTIMATE – PUBLIC IMPROVEMENTS**

On 24 March 2004 the Planning Board granted conditional approval to the subject project. The project work includes certain public improvements which are required as a condition of the approval granted by the Planning Board. Based on the plans approved, a Public Improvements Cost Estimate has been submitted by the applicant's consultant. A marked-up copy is attached hereto.

Based on my review, some corrections were required to the cost estimate. I have marked up the estimate, and it is my recommendation that the Town Board approve a Public Improvement Performance Bond amount of \$688,950.00. Based on that amount, the applicant will be required to pay an inspection fee to the Town in the amount of \$27,558.00. The form of the security should be as acceptable to the Attorney for the Town.

Please contact me if you have any questions concerning the above.

cc: Phil Crotty, Town Attorney (via fax)  
Myra Mason, PB Secretary (via fax)  
Dave Higgins, Lanc & Tully (via fax)

**REGIONAL OFFICES**

• 507 BROAD STREET • MILFORD, PENNSYLVANIA 18307 • 610-295-2765 •  
• 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

Project: Fox Meadows

Date: 5/20/04

	TOTAL PRICE	
STREETS	<del>395,500.00</del>	433,900
STORM DRAINAGE	254,650.00	
WATER SUPPLY	.	
SANITARY SEWER	.	
ACCESSORY	400.00	
TOTAL	<del>650,550.00</del>	688,950

49% fee 27,558.00

fjcest.xls created 6/19/03



Description	Type	Qty Req'd	Unit	Unit Price	Total Price
<b>STORM DRAINAGE</b>					
a. Catch basins w fr & grate 0'-6' deep	Pre-cast Concrete	28	ea	1,500.00	42,000.00
Out let control		2		5,000.00	10,000.00
b. Manholes: w fr & grate 0'-6' deep	Pre-cast Concrete	3	ea	1,500.00	4,500.00
End sections	With Rip Rap	3		300.00	900.00
c.					-
d.					-
e. Pipe:					-
15"	HDPE	1600	lf	30.00	48,000.00
18"	HDPE	664	lf	35.00	23,240.00
24"	HDPE	1026	lf	50.00	51,300.00
30"	HDPE	64	lf	100.00	6,400.00
Culvert Crossing	RCP 18"	1	ls	20,000.00	20,000.00
f. Swales	6' top x 2' bot x 1' deep	380	lf	12.00	4,560.00
g. Detention Ponds	Excavate, grade & seed	6000	cy	2.50	15,000.00
h.	Structures	1	ls	5,000.00	5,000.00
i. Miscellaneous	Erosion Control	1500	lf	15.00	22,500.00
	Sediment Trap	50	ea	25.00	1,250.00
					-
					-
					-
<i>Subtotal: \$</i>					254,650.00



PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/24/2005

PAGE: 1

LISTING OF PLANNING BOARD ACTIONS

STAGE:

STATUS [Open, Withd]  
A [Disap, Appr]

FOR PROJECT NUMBER: 1-51

NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION

APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	MEETING-PURPOSE-----	ACTION-TAKEN-----
02/18/2005	PLANS STAMPED	APPROVED
09/08/2004	REQUEST EXT OF APPROVAL	GRANTED 2-90 DAY EXT
03/24/2004	P.B. APPEARANCE . ADDRESS MARKS COMMENTS - NEED OFFERS OF DEDICATION - OK TO . START ROADWAY IF FEES PAID AND MEETING WITH HENRY & MARK	COND APPR.
09/24/2003	REQUEST FOR PRELIM APPR EXT . EXPIRES MARCH 26, 2004	GRANTED 6 MONTHS
03/26/2003	REQUEST FOR PRELIM APPR EXT	GRANTED 6 MONTHS
10/23/2002	P.B. APPEARANCE	ND: PRELIM APPR
08/28/2002	P.B. APPEARANCE- PUBLIC HEAR . CLOSED PUBLIC HEARING; NEED SWALE ON LOT #9 - MARK TO MEET . WITH HENRY TO REVIEW GUIDERAIL - SHOW SKETCH PLAN OF . SCREENING ON SOUTH SIDE - ADD NOTE ON PLAN -STONE WALL TO . REMAIN ON SOUTH SIDE	REVISE & RETURN
06/26/2002	P.B. APPEARANCE . RESOLVE EASEMENT FOR CONNECTION TO MOBILE HOME PARK BEFORE . SCHEDULING PUBLIC HEARING - NEED SIDEWALK ON ONE SIDE OF . STREET	LA: SCH PH
01/23/2002	P.B. APPEARANCE . NEED LETTER FROM AT&T FOR EASEMENT CROSSING THEIR PROPERTY . NOW 23 LOTS	REVISE & RETURN
11/14/2001	P.B. APPEARANCE . NEED MORE DETAIL FOR ROADWAYS - TRY TO PUT EASEMENT FOR . EMERGENCY ENTRANCE TO TOP OF CUL-DE-SAC - NEED OVER ALL . GRADING PLAN - ADDRESS OUTLET FOR DRAINAGE	RETURN TO WS
08/08/2001	P.B. APPEARANCE . DRAINAGE DIST. TO BE ESTABLISHED WITH TOWN ATTORNEY - NEED . PLANS AND FULL EAF TO SEND WITH COORDINATION LETTER . (RECEIVED 8/13/01) - MEET WITH HIGHWAY SUPT FOR SLOPES - . NEED LANDSCAPING ON REAR OF LOTS ABUTTING THE HORSE FARM, AT . BOTH ENTRANCES AND NEED LANDSCAPING PLAN	REVISE & RETURN

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/24/2005

PAGE: 2

LISTING OF PLANNING BOARD ACTIONS

STAGE:

STATUS [Open, Withd]  
A [Disap, Appr]

FOR PROJECT NUMBER: 1-51

NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION

APPLICANT: FOX MEADOW ESTATES LLC

--DATE-- MEETING-PURPOSE-----ACTION-TAKEN-----

06/20/2001 WORK SESSION APPEARANCE SUBMIT

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/24/2005

PAGE: 1

LISTING OF PLANNING BOARD AGENCY APPROVALS

FOR PROJECT NUMBER: 1-51  
 NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
 APPLICANT: FOX MEADOW ESTATES LLC

DATE-SENT	AGENCY-----	DATE-RECD	RESPONSE-----
REV1	03/24/2004 MUNICIPAL HIGHWAY	03/24/2004	SEE MEMO . CONSTRUCTION OF ROADWAY IS ACCEPTABLE TO ME PROVIDING A . MEETING BE HELD WITH THE DEVELOPER IN THE FIELD PRIOR TO . WORK STARTING ON PROJECT. MEETING TO BE WITH MARK EDSALL AND . HENRY KROLL.
REV3	10/21/2002 MUNICIPAL HIGHWAY	10/22/2002	CONCEPTUAL APP . CONCEPTUALLY APPROVED
REV3	10/21/2002 MUNICIPAL WATER	/ /	
REV3	10/21/2002 MUNICIPAL SEWER	/ /	
REV3	10/21/2002 MUNICIPAL FIRE	10/21/2002	APPROVED
REV3	10/21/2002 NYS DOT	/ /	
REV2	06/20/2002 MUNICIPAL HIGHWAY	06/26/2002	UNDER REVIEW
REV2	06/20/2002 MUNICIPAL WATER	06/21/2002	APPROVED
REV2	06/20/2002 MUNICIPAL SEWER	07/05/2002	APPROVED
REV2	06/20/2002 MUNICIPAL FIRE	06/22/2002	APPROVED
REV2	06/20/2002 NYS DOT	10/21/2002	SUPERSEDED BY REV3
REV1	01/18/2002 MUNICIPAL HIGHWAY	01/23/2002	APPROVE CONCEPT . I WILL TAKE NO ACTION AT THIS TIME. THE CONCEPT OF THE PLAN . IS ACCEPTABLE BUT MORE DETAIL WILL BE REQUIRED FOR DRAINAGE, . ROAD SPEC AND THE ENTRANCE. (SHOULDERS ALONG TOLEMAN ROAD . FOR ENTRANCE AND EXIT AS PREVIOUSLY DISCUSSED WITH MARK . EDSALL.
REV1	11/13/2001 MUNICIPAL HIGHWAY	11/10/2001	APPROVE CONCEPT . APPROVED CONCEPTUALLY - PROVIDE ADDITIONAL DETAILS
ORIG	07/17/2001 MUNICIPAL HIGHWAY	07/24/0101	DISAPPROVED . NO COMMENT AT THIS TIME, NEED MORE DRAINAGE DETAILS
ORIG	07/17/2001 MUNICIPAL WATER	07/19/2001	APPROVED
ORIG	07/17/2001 MUNICIPAL SEWER	06/20/2002	SUPERSEDED BY REV2

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/24/2005

PAGE: 2

LISTING OF PLANNING BOARD AGENCY APPROVALS

FOR PROJECT NUMBER: 1-51

NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION

APPLICANT: FOX MEADOW ESTATES LLC

	DATE-SENT	AGENCY-----	DATE-RECD	RESPONSE-----
ORIG	07/17/2001	MUNICIPAL FIRE	07/17/2001	APPROVED
		. THE STREET NAME PALOMINO CONFLICTS WITH THE NAME IN USE IN		
		. THE TOWN OF NEW WINDSOR AND WILL NEED TO BE CHANGED		
ORIG	07/17/2001	NYS DOT	06/20/2002	SUPERSEDED BY REV2

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/24/2005

PAGE: 1

LISTING OF PLANNING BOARD SEQRA ACTIONS

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

	DATE-SENT	ACTION-----	DATE-RECD	RESPONSE-----
ORIG	07/17/2001	EAF SUBMITTED	07/16/2001	WITH APPLIC
ORIG	07/17/2001	CIRCULATE TO INVOLVED AGENCIES	08/08/2001	AUTH. LETTER
ORIG	07/17/2001	LEAD AGENCY DECLARED	06/26/2002	TOOK LA
ORIG	07/17/2001	DECLARATION (POS/NEG)	10/23/2002	DECL NEG DEC
ORIG	07/17/2001	SCHEDULE PUBLIC HEARING	06/26/2002	SCHED PH
ORIG	07/17/2001	PUBLIC HEARING HELD	08/28/2002	CLOSED PH
ORIG	07/17/2001	WAIVE PUBLIC HEARING	/ /	
ORIG	07/17/2001	AGRICULTURAL NOTICES	/ /	
ORIG	07/17/2001	BUILDING DEPT REFER NUMBER	/ /	

PB # 01-51

**Town of New Windsor**  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#174-2005**

02/17/2005

Fox Meadow Estates

Received \$ 800.00 for Planning Board Fees, on 02/17/2005. Thank you for stopping by the Town Clerk's office.

As always, it is our pleasure to serve you.

Deborah Green  
Town Clerk

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
APPROVAL

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
02/10/2005	APPROVAL FEES	CHG	800.00		
			-----	-----	-----
		TOTAL:	800.00	0.00	800.00

10-01-51-7004-001-1-55  
FOX MEADOW ESTATES, LL  
294-7944

UNION STATE BANK  
GOSHEN, NY 10924  
50-597/219

1618

2/10/2005

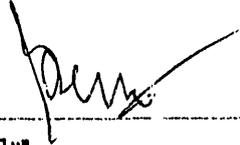
Pay to the  
Order of Town Of New Windsor

\$ 800.00

Eight Hundred and 00/100\*\*\*\*\*

Dollars

Town Of New Windsor



memo \_\_\_\_\_

⑈001618⑈ ⑆021905977⑆ 029⑈01051⑈9⑈

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
RECREATION

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
02/10/2005	23 LOTS @2000.00	CHG	46000.00		
02/10/2005	REC CK. #1569 FROM FOX ME	PAID		4000.00	
02/10/2005	REC CK. #23982 ROLLING AC	PAID		42000.00	
		TOTAL:	46000.00	46000.00	0.00

*[Handwritten signature]*  
2/10/05

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
4% FEE

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
02/10/2005	4% OF 688,950.00 INSP FEE	CHG	27558.00		
02/10/2005	REC. CK. #23981	PAID		27558.00	
		TOTAL:	27558.00	27558.00	0.00

*Handwritten:*  
2/10/05

LAW OFFICES  
**FABRICANT & LIPMAN**  
ONE HARRIMAN SQUARE  
POST OFFICE BOX 60  
GOSHEN, NEW YORK 10924  
E-Mail: info@lipmanlaw.net

TELEPHONE (845) 294-7944  
FAX (845) 294-7889

ALAN S. LIPMAN  
HERBERT J. FABRICANT (1915-1987)  

---

ALBERT P. PACIONE, JR., OF COUNSEL

LEGAL ASSISTANTS  

---

MARGARET ANDRYSHAK  
BRIAN M. GIBSON  
LYNETTE RUDKIN

February 7, 2005

Philip A. Crotty, Esquire  
Attorney for Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553

Re: Fox Meadow Estates Subdivision

Dear Phil:

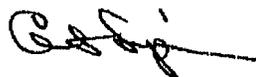
I am transmitting herewith by hand the following items:

1. Letter of Credit issued by Union State Bank in form which I understand is now acceptable to you;
2. Two checks, - one from Fox Meadow Estates, LLC (N<sup>o</sup> 1569) in the sum of \$4,000.00 and one from Rolling Acres Developers, Inc. (N<sup>o</sup> 23982) in the sum of \$42,000.00, each payable to the Town of New Windsor, representing recreation fees; and
3. Check N<sup>o</sup> 23981 of Rolling Acres Developers, Inc. in the sum of \$27,558.00, representing inspection fees for the Town Engineer.

This is the subdivision about which we spoke a couple of weeks ago, the approval for which will expire, I believe, on March 7, 2005. I also believe that the enclosures are the last items needed to satisfy the conditions of the Resolution of Final Approval.

Please call me if there are any issues.

Very truly yours,



ALAN S. LIPMAN

ASL/bl  
Enclosures

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
PERFORMANCE BND

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
02/10/2005	PERF BOND EST	CHG	668950.00		
02/10/2005	REC LOC	PAID		668950.00	
		TOTAL:	668950.00	668950.00	0.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
APPROVAL

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
02/10/2005	APPROVAL FEES	CHG	800.00		
			-----	-----	-----
		TOTAL:	800.00	0.00	800.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/16/2001	REC. CK. #6412	PAID		2775.00	
08/08/2001	P.B. ATTY. FEE	CHG	35.00		
08/08/2001	P.B. MINUTES	CHG	22.50		
11/14/2001	P.B. ATTY. FEE	CHG	35.00		
11/14/2001	P.B. MINUTES	CHG	40.50		
06/26/2002	P.B. ATTY. FEE	CHG	35.00		
06/26/2002	P.B. MINUTES	CHG	31.50		
08/28/2002	P.B. ATTY. FEE	CHG	35.00		
08/28/2002	P.B. MINUTES	CHG	16.50		
10/23/2002	P.B. ATTY. FEE	CHG	35.00		
10/23/2002	P.B. MINUTES	CHG	18.00		
03/24/2004	P.B. ATTY. FEE	CHG	35.00		
03/24/2004	P.B. MINUTES	CHG	22.00		
02/08/2005	P.B. ENGINEER FEE	CHG	1189.40		
02/10/2005	RET. TO APPLICANT	CHG	1224.60		
		TOTAL:	2775.00	2775.00	0.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/10/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: FOX MEADOW ESTATES LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/16/2001	REC. CK. #6412	PAID		2775.00	
08/08/2001	P.B. ATTY. FEE	CHG	35.00		
08/08/2001	P.B. MINUTES	CHG	22.50		
11/14/2001	P.B. ATTY. FEE	CHG	35.00		
11/14/2001	P.B. MINUTES	CHG	40.50		
06/26/2002	P.B. ATTY. FEE	CHG	35.00		
06/26/2002	P.B. MINUTES	CHG	31.50		
08/28/2002	P.B. ATTY. FEE	CHG	35.00		
08/28/2002	P.B. MINUTES	CHG	16.50		
10/23/2002	P.B. ATTY. FEE	CHG	35.00		
10/23/2002	P.B. MINUTES	CHG	18.00		
03/24/2004	P.B. ATTY. FEE	CHG	35.00		
03/24/2004	P.B. MINUTES	CHG	22.00		
02/08/2005	P.B. ENGINEER FEE	CHG	1189.40		
02/10/2005	RET. TO APPLICANT	CHG	1224.60		
		TOTAL:	2775.00	2775.00	0.00

# TOWN OF NEW WINDSOR

## MAJOR SUBDIVISION FEE SCHEDULE

APPLICATION FEE: \$ 150.00

ESCROW:

RESIDENTIAL:

\_\_\_\_\_ LOTS @ \$200.00 EACH LOT (FIRST FOUR LOTS) \$ \_\_\_\_\_

\_\_\_\_\_ LOTS @ \$100.00 EACH LOT OVER FOUR LOTS \$ \_\_\_\_\_

COMMERCIAL:

\_\_\_\_\_ LOTS @ \$500.00 EACH LOT (FIRST FOUR LOTS) \$ \_\_\_\_\_

\_\_\_\_\_ LOTS @ \$200.00 EACH LOT OVER FOUR LOTS \$ \_\_\_\_\_

TOTAL ESCROW DUE: \$ \_\_\_\_\_

### APPROVAL FEES:

PRE-PRELIMINARY PLAT APPROVAL \$ 200.00

PRELIMINARY PLAT APPROVAL (200.00 OR 20.00/LOT) \$ 480.00

FINAL PLAT APPROVAL FEE (\$100.00 + \$5.00/LOT) \$ 120.00

FINAL PLAT SECTION FEE \$ 100.00

TOTAL APPROVAL FEES: \$ 800.00

### RECREATION FEES:

23 LOTS @ <sup>2,000</sup>~~1,500.00~~ / LOT \$ 46,000.00 Pd

### TO BE DEDUCTED FROM ESCROW:

ESCROW POSTED: \$ \_\_\_\_\_

P.B. ENGINEER FEE \$ \_\_\_\_\_

P.B. ATTY. FEE \$ \_\_\_\_\_

MINUTES OF MEETING \$ \_\_\_\_\_

OTHER \$ \_\_\_\_\_

TOTAL DEDUCTION: \$ \_\_\_\_\_

REFUND: \$ \_\_\_\_\_

AMOUNT DUE: \$ \_\_\_\_\_

PERFORMANCE BOND AMOUNT \$ 688,950.00

### INSPECTION FEE:

2% PRIVATE IMPROVEMENTS \$ \_\_\_\_\_

4% PUBLIC IMPROVEMENTS \$ 27,558.40 Pd

# **USB UNION STATE BANK**

Do business with us, do better with us.

IRREVOCABLE LETTER OF CREDIT NO. 2110

February 1, 2005

Letter of Credit No. 2110

Town of New Windsor 555 Union Avenue New Windsor, N.Y. 12553	Applicant: Rolling Acres Fox Meadow, L.L.C. Amount: \$688,950.00 Expiration: February 1, 2006
--	---

Re: Fox Meadow Subdivision

To the Town Board of the Town of New Windsor:

We hereby establish an Irrevocable Standby Letter of Credit in your favor for the account of Rolling Acres Fox Meadow, L.L.C. in an amount not to exceed six hundred eighty-eight thousand nine hundred fifty and 00/100 \$688,950.00 dollars available by our drafts at sight on us accompanied by:

1. This original Letter of Credit.
2. Four written, signed sworn and notarized statement that Rolling Acres Fox Meadow, L.L.C. has not completed the necessary Public Improvements to the roadways and improvements to service Fox Meadow Subdivision as approved by the Town of New Windsor Planning Board.

Drafts must be negotiated no later than the expiration date shown above, and must state "DRAWN UNDER UNION STATE BANK IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER 2110".

It is a condition of this letter of credit that it shall be deemed automatically extended without amendment for at least 12 months from the present or any future expiration date thereof, unless thirty (30) days prior to any such expiration date we shall notify the Town of New Windsor by registered mail that we elect not to consider this Letter of Credit renewed for any such additional period.

This Letter of Credit may be drawn against one time only.

---

**Corporate Headquarters**

USB Financial Center

100 Dutch Hill Road, Orangeburg, NY 10962

845-365-4600

[www.unionstate.com](http://www.unionstate.com)

Convenient Locations Throughout the Metropolitan Area

Customer Service Center

845-365-4811

1-800-616-491

24 Hour Telephone Banking

845-624-2008

1-800-ASK-USB1

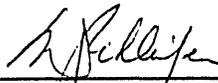
(Outside 845 Area Code)





6. **THAT** individual wells and sewage treatment systems shall no longer be constructed or used for household domestic purposes when public facilities become available. Connection to the public sewerage system is required within one year of the system becoming available.
7. **THAT** plan approval is limited to 5 years. Time extensions for plan approval may be granted by the Orange County Department of Health based upon development facts and the realty subdivision regulations in effect at that time. A new plan submission may be required to obtain a time extension.
8. **THAT** the approved plans must be filed with the Orange County Clerk prior to offering lots for sale and within 90 days of the date of plan approval.

**December 27, 2004**  
Date

  
\_\_\_\_\_, P.E.  
M.J. Schleifer, P.E.  
Assistant Commissioner

**ORANGE COUNTY DEPARTMENT OF HEALTH  
Division of Environmental Health**

**CERTIFICATE OF APPROVAL OF REALTY SUBDIVISION PLANS**

**TO: Toleman Partners, LLC  
133 So. MacQuesten Pkwy.  
Mt. Vernon, NY 10550**

The Orange County Department of Health certifies that a realty subdivision map entitled Fox Meadow Estates, dated June 19, 2002, latest revision August 31, 2004, located in the Town of New Windsor showing plans for providing satisfactory and adequate water supply and sewage facilities for said subdivision have been filed with and approved by the Department on this date pursuant to Article II of the Public Health Law.

The following information was furnished in the application for approval of plans:

Total area: 82.4 acres                      Number of lots: 24

Water supply: Individual wells

Sewage disposal: Individual subsurface sewage disposal system

The owner intends to build on some lots and sell other lots without buildings.

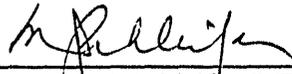
Approval of the proposed water supply and sewage facilities is granted subject to the following conditions:

1. **THAT** the proposed facilities are installed in conformity with said plans.
2. **THAT** no lot or remaining lands shall be subdivided without plans for such resubdivision being filed with and approved by the Orange County Department of Health.
3. **THAT** the purchaser of a lot sold without water supply and/or sewage disposal facilities installed thereon will be furnished with a reproduction of the approved plans and shall be notified of the necessity of installing such facilities in accordance with the approved plans.
4. **THAT** the purchaser of a lot sold with water supply and/or sewage disposal facilities installed thereon will be furnished with a reproduction of the approved plans and an accurate as-built plan depicting all installed sanitary facilities.
5. **THAT** the sanitary facilities on these lots shall be inspected for compliance with the approved plans at the time of construction by a licensed professional engineer and written certification to that effect shall be submitted to this Department and the local Building Code Enforcement Officer prior to occupancy.

6. **THAT** individual wells and sewage treatment systems shall no longer be constructed or used for household domestic purposes when public facilities become available. Connection to the public sewerage system is required within one year of the system becoming available.
7. **THAT** plan approval is limited to 5 years. Time extensions for plan approval may be granted by the Orange County Department of Health based upon development facts and the realty subdivision regulations in effect at that time. A new plan submission may be required to obtain a time extension.
8. **THAT** the approved plans must be filed with the Orange County Clerk prior to offering lots for sale and within 90 days of the date of plan approval.

December 27, 2004

Date

 , P.E.  
M.J. Schleifer, P.E.  
Assistant Commissioner



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**  
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Writer's e-mail address:  
mje@mhepc.com

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 24 MARCH 2004  
**DESCRIPTION:** THE APPLICATION PROPOSES THE MAJOR SUBDIVISION OF THE 82.4 +/- ACRE PARCEL, WITH A HORSE FARM TO REMAIN. THE PLAN WAS PREVIOUSLY REVIEWED AT THE 8 AUGUST 2001, 14 NOVEMBER 2002, 23 JANUARY 2002, 26 JUNE 2002, 28 AUGUST 2002 AND 23 OCTOBER 2002 PLANNING BOARD MEETINGS.

1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the “horse farm” are correct for the zone and uses. The project is one of the “active” applications that is grandfathered with the former zoning. They have now received Health Dept. approval and are waiting to have the plans stamped by the County. They are before the Board seeking Conditional Final Approval.
2. If the Board believes a conditional approval is appropriate, I recommend the following conditions:
  - Receipt of stamped plans from the Orange County Department of Health.
  - Final modifications to stormwater system to update same for current requirements of DEC.
  - Creation of Stormwater District in support of the project (Town Board Action).
  - Correct roadway detail to note 4000 psi concrete (minimum) for the curb and sidewalk.
  - Submit the Public Improvement Bond Estimate to the Town for review, and subsequent approval of the Town Board.

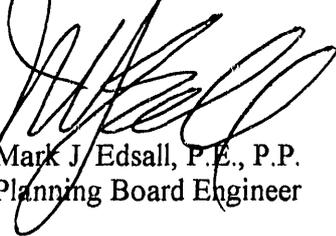
**REGIONAL OFFICES**

• 507 Broad Street • Milford, Pennsylvania 18337 • 570-296-2765 •  
• 540 Broadway • Monticello, New York 12701 • 845-794-3391 •

- Submit the descriptions and Offers of Dedication to the Town Attorney (with copy to the Planning Board Engineer), for necessary review.
- Payment of fees.

3. If the Board has any other concerns regarding the subdivision, I will be pleased to discuss them at the Boards convenience.

Respectfully Submitted,



Mark J/Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW01-51-24Mar04.doc

AS OF: 02/08/2005

PAGE: 2

CHRONOLOGICAL JOB STATUS REPORT

JOB: 87-56

NEW WINDSOR PLANNING BOARD (Chargeable to Applicant)

CLIENT: NEWWIN - TOWN OF NEW WINDSOR

TASK: 1- 51

FOR WORK DONE PRIOR TO: 02/08/2005

										-----DOLLARS-----		
TASK-NO	REC	--DATE--	TRAN	EMPL	ACT	DESCRIPTION-----	RATE	HRS.	TIME	EXP.	BILLED	BALANCE
1-51	193701	10/22/02	TIME	MJE	MC	TC/KROLL RE FOX MEAD	88.00	0.40	36.20			
1-51	193705	10/23/02	TIME	MJE	MC	TC/KROLL RE FOX MDW	88.00	0.40	35.20			
1-51	193707	10/23/02	TIME	MJE	MC	FOX MEADOW REVIEW	88.00	0.60	52.80			
									220.00			
1-51	193677	10/24/02				BILL 02-1231					-272.80	
1-51	195366	11/20/02				BILL 02-1316					-123.20	
											-396.00	
1-51	231998	03/24/04	TIME	MJE	MM	FOX MEA COND SUB APP	99.00	0.10	9.90			
1-51	232990	03/24/04	TIME	MJE	MC	FOX MEADOW	99.00	0.60	59.40			
1-51	232992	03/24/04	TIME	MJE	PM	FOX MEADOW W/HK	99.00	0.40	39.60			
									108.90			
1-51	235357	04/28/04				BILL 04-459					-108.90	
											-108.90	
1-51	241070	06/14/04	TIME	MJE	MC	EMC/HIGGINS RE BOND	99.00	0.30	29.70			
1-51	243202	06/14/04	TIME	CNH	MR	FOX MEADOW	45.00	0.50	22.50			
1-51	241088	06/17/04	TIME	MJE	MC	BOND REC	99.00	0.70	69.30			
1-51	245562	08/03/04	TIME	MJE	MC	FOX SUB W/PAC	99.00	0.40	39.60			
									161.10			
1-51	245328	08/04/04				BILL 04-852 8/4/04					-121.50	
											-121.50	
1-51	249713	09/17/04	TIME	MJE	MC	EMC/FOX MEADOW PAC	99.00	0.20	19.80			
1-51	250805	09/20/04	TIME	MJE	MC	NW FOX MEADOW	99.00	0.40	39.60			
1-51	250820	09/23/04	TIME	MJE	MC	FOX MEADOW-ORG & MTG	99.00	0.30	29.70			
									89.10			
1-51	255258	11/10/04				BILL 04-1266					-128.70	
											-128.70	
								TASK TOTAL	1189.40	0.00	-1189.40	0.00
								GRAND TOTAL	1189.40	0.00	-1189.40	0.00

*MIRA*

AS OF: 02/08/2005

PAGE: 1

CHRONOLOGICAL JOB STATUS REPORT

JOB: 87-56

NEW WINDSOR PLANNING BOARD (Chargeable to Applicant)

CLIENT: NEWWIN - TOWN OF NEW WINDSOR

TASK: 1- 51

FOR WORK DONE PRIOR TO: 02/08/2005

TASK-NO	REC	--DATE--	TRAN	EMPL	ACT	DESCRIPTION-----	RATE	HRS.	TIME	-----DOLLARS-----		
										EXP.	BILLED	BALANCE
1-51	161794	04/04/01	TIME	MJE	PM	FOX FARM W/TULLY	85.00	0.40	34.00			
1-51	162235	04/30/01	TIME	MJE	MC	TC/TULLY RE FOX FARM	85.00	0.20	17.00			
1-51	167146	08/08/01	TIME	MJE	MC	FOX MEADOW	85.00	0.40	34.00			
1-51	172517	11/07/01	TIME	MJE	WS	FOX MEADOW	85.00	0.40	34.00			
1-51	172537	11/14/01	TIME	MJE	MC	FOX MEADOW	85.00	0.50	42.50			
									161.50			
1-51	172647	11/27/01				BILL 1-1089 11/27/01						-161.50
1-51	175519	01/16/02	TIME	MJE	WS	FOX MEADOW	88.00	0.40	35.20			
1-51	176117	01/23/02	TIME	MJE	MC	FOX MEADOW SUB	88.00	0.40	35.20			
1-51	176118	01/23/02	TIME	MJE	MC	FOX MEADOW W/KROLL	88.00	0.30	26.40			
									96.80			
1-51	177829	02/25/02				BILL 02-323 2/25/02						-96.80
1-51	186238	06/19/02	TIME	MJE	WS	FOX MEADOW	88.00	0.40	35.20			
1-51	186076	06/25/02	TIME	MJE	MC	FOX MEADOW	88.00	0.50	44.00			
1-51	188717	08/07/02	TIME	MJE	MC	TC/HIGGINS RE FOX MD	88.00	0.30	26.40			
1-51	189521	08/28/02	TIME	MJE	MC	FOX MEADOW SUB	88.00	0.50	44.00			
1-51	189522	08/28/02	TIME	MJE	MC	TC/HIGGINS RE FOX MD	88.00	0.30	26.40			
									176.00			
1-51	187829	08/01/02				BILL 02-897						-79.20
1-51	191494	09/17/02	TIME	PJH	MR	FOX MEADOW ESTATES	88.00	2.00	176.00			
									176.00			
1-51	191213	09/20/02				BILL 02-1119						-96.80
1-51	192388	10/02/02	TIME	MJE	MC	FOX MEADOW	88.00	0.40	35.20			
1-51	193387	10/16/02	TIME	MJE	WS	TC/HK DISC FOX MEADOW	88.00	0.30	26.40			
1-51	193389	10/16/02	TIME	MJE	WS	FOX MEADOW	88.00	0.40	35.20			

REGULAR ITEMS:

FOX MEADOW ESTATES 01-51

Mr. Dave Higgins appeared before the board for this proposal.

MR. PETRO: Application proposes major subdivision of 82.4 acre parcel with the horse farm to remain. Plan was previously reviewed at the 8 August, 2001, 14 November, 2002, 23 January, 2002, 26 June, 2002, 28 August, 2002 and 23 October, 2002 planning board meetings. Who says we don't look at this stuff? Property is located in an R-1 zoning district of the Town, bulk requirements indicated for the SFR use and the horse farm are correct for the zone uses. Active application that's grandfathered in from the former zoning they have now received health department approval and are waiting to have the plans stamped by the County. They're before the board seeking conditional final approval tonight. Gentlemen, if the board believes conditional approval is appropriate, I recommend the following conditions, receipt of stamped plans, final modification to the storm water system and update DEC, create storm water district in support of the project, that's a Town Board action which you're going to that once we do a preliminary.

MR. EDSALL: Yes, they have been around long enough that they actually began before that procedure was fully in place so they're going to catch up now.

MR. PETRO: Concrete roadway detail 4,000 pound concrete.

MR. EDSALL: That's just for the curbs and the sidewalk.

MR. PETRO: You're going to have to change that, you're making notes? Why am I wasting my time reading all

this then? You submit descriptions of offers of dedication to the Town attorney with a copy to the planning board engineer. I always like that, payment of fees, you can't forget that.

MR. EDSALL: Myra doesn't let me.

MR. PETRO: We've seen this I think this is the 6th time or 7th time we have, let's look at highway, see memo, construction of roadways acceptable to me, meeting to be held with the developer in field prior to work starting on the project, meeting to be held with Mark Edsall and Henry Kroll, that's between you and them. Fire, we have approval on 10/21/2002. We looked at, I want to ask the members of the board look at the plan, is there anything else, I know that Jerry had a comment about the guardrail, it's now up, we talked about I remember at the public hearing some swales, you were going to implement for some water going down to the back.

MR. HIGGINS: I believe those are on.

MR. PETRO: Anything else that came out of the public hearing? We talked about the water a number of times, also the retention pond in this, I asked you to give me some information about the outflow of the retention pond cause you're taking in the water, I know you're letting it out, I asked where does it go.

MR. HIGGINS: I know we spoke about that actually I think that was at the preliminary, there was a large ravine that goes along Toleman Road and into a large wetland further down Toleman Road, we show a structure underneath Melissa Lane.

MR. PETRO: I realize you're telling us the way the retention pond works you're letting out at the same pace it's going out now, that's the function of the retention pond, but I still would like to know where it

goes downstream, so it's going into the large wetlands probably a little northeast of the site?

MR. EDSALL: South.

MR. HIGGINS: Yes, south, right, actually, I think it crosses the railroad if I remember going back a year and a half but--

MR. PETRO: Show a sketch plan of the screening on the south side. Stone wall to remain on the south side. Is there a note to that effect? We can always add that. I'm going to give you these comments.

MR. HIGGINS: I think the stone wall on the south side we have a conservation easement area that covers actually 30 feet from the stone wall and there's a note on the first sheet that says no disturbance of any kind to be done.

MR. PETRO: Very good. This is for conditional final approval, we have everything in order here as far as highway, fire and Mark, the comments that you're going to have to address will be Mark's few comments, such as the 4,000 pound concrete you have to add it to the plans and I know you're going to come back for final so we have plenty of time to get them on here. Entertain a motion for conditional final approval?

MR. ARGENIO: So moved.

MR. KARNAVEZOS: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning Board grant conditional final approval for the Fox Meadow Estates on Toleman Road proposed 24 lot residential subdivision.

ROLL CALL

MR. SCHLESINGER      AYE  
MR. KARNAVEZOS      AYE  
MR. ARGENIO          AYE  
MR. LANDER           AYE  
MR. PETRO            AYE

MR. HIGGINS: I'd also request that we anticipate that it's going to take several months to get the creation of the district with the Town Board, the owner would request that the board consider allowing us to begin construction assuming that we make all the payments and inspection fees.

MR. PETRO: Construction of what?

MR. HIGGINS: The road and it would only be road at this point and the storm water detention.

MR. PETRO: Well again you have to meet with Mr. Kroll and Mr. Edsall, I would suggest what you want to do with them and they can report back to the board and we'll let you know that, all right, I don't think that the board would say no as long as Mr. Edsall and Mr. Kroll are in agreement and they're going to monitor what you're doing there, does anybody disagree with that?

MR. ARGENIO: No.

MR. PETRO: Okay.

MR. HIGGINS: Thank you.

**LANC & TULLY**  
ENGINEERING AND SURVEYING, P.C.

*P.B. # 01-51*

September 7, 2004

*Fox Meadow requesting 90-day extension  
of Conditional Approval*

Mr. James Petro, Chairman  
Town of New Windsor Planning Board  
555 Union Avenue  
New Windsor, NY 12553

RE: Fox Meadow Estates  
Toleman Road

Dear Mr. Petro:

You may recall that the Planning Board granted a Conditional Final Approval for the above referenced subdivision on March 24, 2004. It is my understanding that the conditions for approval consisted of the following:

- Receipt of stamped plans from the Orange County Health Department
- Updating the design of the stormwater facilities to conform to new DEC requirements
- Creation of a stormwater district (Action of the Town Board)
- Modifications to curb and sidewalk details
- Approval of the bond estimate for public improvements by the Town Board
- Descriptions and Offers of Dedication to the Town Attorney
- Payment of fees

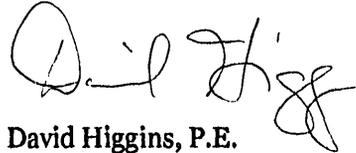
At this time, we are coordinating the signing of plans with the Orange County Health Department and expect to have the plans signed shortly. The drainage design has been revised to meet the current DEC requirements and has been submitted to the Town Planning Board Engineer. An engineer's map, plan and report have been provided to the Town Board in connection with the petition for the creation of the stormwater district. The requested revisions to the concrete curb and sidewalk details have been made. It is my understanding that the Town has accepted the bond estimate, though the actual bond has not yet been posted by the applicant. Descriptions and Offers of Dedication have been provided to the Town Attorney for his review. In short, the applicant is diligently pursuing the completion of the conditions.

It has come to our attention, however, that the conditional approval that was granted by the Planning Board is valid for a period of 180 days, up to September 20, 2004. Considering the time that it may take to finalize some of the items, such as the approval of the drainage district, we anticipate that the applicant may not be able to have all of the items complete by September 20, 2004. We therefore respectfully request that the Planning Board place the project on the agenda for September 8th for consideration of granting a 90-day extension of conditional final approval.

I trust that this letter is sufficient for the Planning Board to consider the extension of approval. If you have any questions or require any materials, please do not hesitate to contact me. Your consideration in this matter is greatly appreciated. With your consent, we will attend the meeting to discuss this matter with you.

Very truly yours,

*LANC & TULLY, P.C.*

A handwritten signature in black ink, appearing to read "David Higgins". The signature is written in a cursive style with a large initial "D".

David Higgins, P.E.

DH/gjl

Enc.

cc: Mark Edsall, P.E.  
Alan Lipman Esq.  
Asher Sussman

FOX MEADOW ESTATES

MR. PETRO: We have a request here that the planning board grant conditional final approval for the above-referenced subdivision, which is Fox Meadow Estates on Toleman Road on March 24, 2004. It's my understanding that the conditions for approval consisted of the following and he's looking for valid up to 180 days and he's looking for a second 90 day, another first 90 day extension. Why don't we do two 90's so let's give him a second 180. Any problem?

MR. EDSALL: I suggest you do both 90's.

MR. PETRO: Motion?

MR. ARGENIO: Make the motion.

MR. LANDER: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning board grants 180 day extension to the Fox Meadow Estates on Toleman Road. Any further discussion from the board members? Myra pick it up from the date that it expired, which is September 20, 2004 and run it out. Okay?

ROLL CALL

MR. LANDER	AYE
MR. SCHLESINGER	AYE
MR. KARNAVEZOS	AYE
MR. ARGENIO	AYE
MR. PETRO	AYE



**LANC & TULLY**  
ENGINEERING AND SURVEYING, P.C.

---

February 27, 2004

Mr. James Petro  
Chairman of Planning Board  
Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553

RE: Fox Meadow Estates

Dear Mr. Petro:

You may recall that on September 24, 2003, the Planning Board granted a six month extension of preliminary approval for the Fox Meadow Estates Subdivision. We are still however, working towards obtaining approval from the Orange County Department of Health. We have completed the drilling and testing of wells and soils to the satisfaction of the Health Department and only minor technical comments remain. We anticipate obtaining Department of Health approval within the next month or two. Therefore, we respectfully request an additional six-month extension of preliminary approval be granted so that we can continue our application with the Health Department, and subsequently apply to the Planning Board for Final Subdivision Approval.

Additionally, the applicant has expressed interest in beginning the construction of the proposed public improvements prior to obtaining Final Approval. I have been informed by Mark Edsall that this should not be a problem, as long as all Town Department approvals have been obtained, especially the Town Highway Department. By copy of this letter, I am advising the Highway Superintendent of the applicant's interest in starting construction and would appreciate any recommendations that he might provide. Other than the preparation of a stormwater pollution prevention plan and obtaining a SPDES Permit from the New York State Department of Environmental Conservation, I am not aware of other approvals or items that may be required for construction to begin.

Therefore, we ask that the project be placed on the next available Planning Board agenda so that we would have the opportunity to discuss these matters with the Planning Board and their consultants. If you have any questions or comments, please do not hesitate to contact me.

Very truly yours,

LANC & TULLY, P.C.

  
David Higgins, P.E.

DH/gjl

cc: Mark Edsall, P.E.  
Henry Kroll  
Asher Sussman  
Alan Lipman, Esq.

*3/11/04 Sent copy to Henry asking his recommendation.*

foxmedw-ext.dh.doc

(845) 294-3700 • P.O. Box 687, Route 207, Goshen, N.Y. 10924 • FAX (845) 294-8609  
eng@lanetully.com

FOX MEADOW ESTATES (01-51)

MR. PETRO: Extension of preliminary. Gentlemen: I write this letter to request 180 day preliminary approval for Fox Meadow Estates. Current preliminary status is due to expire December 26, 2003. We'd like an extension of 180 days. This is preliminary approval so Mark, any comments?

MR. EDSALL: Normally, you'd do a 6 month, just 6 months from this meeting to one that would occur 6 months from now.

MR. LANDER: Can't we do 100?

MR. PETRO: Motion for 6 month extension. You'll change the numbers, right, to correspond with--

MR. BRESNAN: So moved.

MR. LANDER: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning Board grant a 6 month extension to the Fox Meadow Estates preliminary approval. Is there any further discussion? If not, roll call.

ROLL CALL

MR. LANDER	AYE
MR. BRESNAN	AYE
MR. KARNAVEZOS	AYE
MR. ARGENIO	AYE
MR. PETRO	AYE

8/28/02

FOX MEADOW SUBDIVISION (01-55)

MR. PETRO: OK – next on tonight's agenda is a public hearing, Fox Meadow Subdivision on Toleman Road represented by Mr. Higgins. This application proposes the major subdivision of the 82.4 acre parcel with a horse farm to remain. Is the horse farm still remaining? At one time it was gone.

MR. HIGGINS: It is lot 24.

MR. PETRO: Ok. The plan has been previously been previously reviewed at the August 8, 2001, 14 November 2002, 23 January 2002, 26 June 2002 Planning Board meetings. The property is located in an R-1 zoning district. Is there anyone here for this public hearing. All right what we do first is that we review it as a Board and then I'll open it up to the public, OK? Then you will have time to comment. All right, give us a quick overview. We've seen this at least six times, so, bring us up to date.

MR. HIGGINS: Well, basically, the layout hasn't changed substantially since the last time we were here. What we are proposing is a subdivision into 24 lots with 23 of those being single-family residential and lot 24, as I mentioned earlier, will be a single family residential with also the use of a horse farm. Originally the subdivision proposed was 33 lots but, in order to more properly lay out the lots .....inaudible.....down to 24 lots. The lots are to be serviced by individual wells and sub-surface sewage disposal systems as will be reviewed by Orange County Department of Health upon preliminary approval. We submitted drainage reports for analysis for peak discharge off the site for 2, 10, 25 and 100 year storms and also submitted the report that shows the design and analysis of the proposed systems for the storm drainage. There are two parcels that are being proposed for storm water quality management. These parcels will be offered to the town for maintenance.

MR. PETRO: We had asked a number of times for some information on the water after it is discharged from the storm water quality management basin. Have you done any down stream calculations as to where it is going and give us some idea of where it is going. I mean you are collecting 82 acres here of water in that storm basin and I realize you are going to be letting it out supposedly at the same rate, but, sometimes in theory it works better than reality.

MR. HIGGINS: Basically, that is all discussed in the drainage report. I will say that in general the drainage .....inaudible.....are unchanged.

There are, there should be an area that comes from across Toleman Road and the area of Little Brook Court and Toleman Court up in this area. There is a contributing area that comes on to the site and there is a high point located right about where the cul-de-sac is. This all drains down to a low area that are wetlands. It drains across the site and through an existing 48" reinforced concrete pipe which goes under Melissa Lane. What the drainage report addresses, as is standard for this type of development, we must maintain the post development peak discharge be less than the pre-development peak discharge ..... inaudible.....

MR. PETRO: Let me ask you this again, where does it go when it leaves the storm water basin?

MR. HIGGINS: I don't know downstream where it goes. I know there is a very large...

MR. PETRO: Now you are saying downstream where it already goes and not at a greater rate.

MR. HIGGINS: Exactly.

MR. PETRO: Does anybody know where it goes?

.....inaudible..... refer to tape.

MR. PETRO: Do any of the members want to say anything or should we hear from the public first? If not, this is a public hearing and we will open it up to the public. On August 15, 2002 35 addressed envelopes were mailed out for the notice of public hearing and 18 for the agricultural notice. If someone is here that would like to speak for or against this application, please stand and be recognized by the chair, come forward and state your name and address and your concern.

MR. SEAGAL: My name is Brian Seagal and I live at 28 Melissa Lane in Washingtonville. ....inaudible..... spoke regarding drainage.

MR. PETRO: If you look at the plan, see the topo lines, do you know what they are on the plan, all those little lines. Show him what the topo lines are. OK. If you notice that just that lot basically is effecting your rear yard. Most of the water, see how those numbers get smaller as they go towards you, that means the land is sloping toward you. You notice most of the numbers are going the other way. Show him where the water is flowing from there.

MR. HIGGINS: Basically,.....inaudible.....

Discussion between Mr. Seagal and Mr. Higgins held .... inaudible...

MR. PETRO: I would say, from looking at this plan, the way it's prepared now, that you would either not have an increase or benefit from the construction.

MR. SEAGAL: Ok.

MR. PETRO: Because if you notice, most of it is being taken in the opposite direction.

MR. SEAGAL: ....inaudible.....

MR. PETRO: Are you talking about your drinking well water?

MR. SEAGAL: What with 24 more homes.... is there any measurement of those.

MR. PETRO: I love this question.

MR. SEAGAL: Yeah, I'm sorry, I never had a well before and I wanted to know.....my point is that I got a lot of water above the ground and I don't know how much water is below the ground.

MR. PETRO: It's not really a Planning Board question because everybody has a right to drill a well. To give you more of a realistic answer, there is a lot of different aquifers in the land and there is no way of knowing. You could drill one well 5' away from another well and have a completely different source of water. There is no way to predetermine that by drilling other wells whether it would have an affect on your or it won't. The law states that everybody who has these lot has a right to drill the well, the same as they drilled a well for your house. That is the way this Board has to review it and look at that, we can not determine that it may or may not have an affect on your well. Again, in reality, I doubt it will have any affect because there is so many different streams under the earth that I don't think it will have an affect. The groundwater that you see running around on the top and the water that we are talking about, has no affect on your well water.

MR. SEAGAL: .....inaudible.....

REFER TO TAPE: DISCUSSION INAUDIBLE.

**REFER TO TAPE FOR REMAINDER OF MEETING**

REGULAR ITEMS:

FOX MEADOW SUBDIVISION (01-51)

Mr. David Higgins appeared before the board for this proposal.

MR. PETRO: Proposed 24 lot residential subdivision. Application proposes major subdivision of 82.4 acre parcel with the horse farm to remain. Plan was previously reviewed at the 8 August, 2001, 14 November, 2002, 23 January, 2002, 26 June, 2002 and 28 August, 2002 planning board meetings. R-1 zoning, which is a permitted use in the zone. We had a public hearing on this already, correct?

MS. MASON: Yes.

MR. HIGGINS: Good evening, David Higgins from Lanc and Tully Engineering. As the chairman mentioned, we were here last month for a public hearing which was closed I believe and we made some changes to the plans that we have requested some of the changes actually that were made weren't requested at the meeting, however, I had a work session last week with Mr. Edsall when we made a few changes, among them we moved the sidewalk to the opposite side of the road. The reason for that was there was, there has been some concern expressed in the past about the sharp turn, sharp grade up in the area of lots 16 through 19. So we moved the sidewalk to the inside to keep pedestrians out of that area. As requested, we showed a guiderail along that turn and I have indicated that the pavement is to be super elevated in that area, again, that is to keep the vehicles from sliding off the road, not that we see that as a serious issue because the vehicles will be traveling slowly through there. And we have also provided a note on sheet 1 that indicated that the area in the right-of-way and just outside the right-of-way will be graded to provide 250 feet of sight distance looking left and 200 feet looking right. We also at the request of the town engineer provided a table of zoning requirements showing that each of the lots meets the town zoning ordinance. It was requested at the public hearing that we provide a conservation easement

on the south side of lots 1 and 2 which we show, a 30 foot conservation easement, there's a note, note number 11 on sheet 1 indicates that no disturbance of any kind will be permitted within that conservation easement area.

MR. LANDER: Now, does that easement run all the way to the top of, does it run to lot 10 or no?

MR. HIGGINS: No, the reason for that we just ran in through lots 1 and 2 and I discussed this with the town engineer, if you look at the plan, the wooded area pretty much ends. What they wanted to do was protect the trees that were there. The tree line pretty much ends at the back of lot 2, anything passed that would be lawn, so we want to be able to give them an opportunity to mow the lawn on the lots that are up the hill from there.

MR. LANDER: Was there something discussed about a swale running through 9 and 10 was it or was it just 10?

MR. HIGGINS: Yes, it was requested I believe by Mr. Segal who's downhill from lots 9 and 10 that we provide some drainage swale to cut off any runoff that was coming off the property. Mr. Keen had said that he did not have a problem with us showing a swale and discharging basically to that stone wall shown on sheet 3.

MR. LANDER: It's not on the plan, is it the swale or--

MR. HIGGINS: Yeah, it's shown on sheet 3.

MR. PETRO: I see it here, okay. I guess that's it.

MR. LANDER: So far, so good.

MR. PETRO: Okay, detail on the map showing 4,000 psi concrete in the curbing. Can you add that?

MR. HIGGINS: That would be on the construction details indicating that the concrete of the curb is to be 4,000 psi.

MR. PETRO: Motion for negative dec.

MR. LANDER: So moved.

MR. BRESNAN: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning Board declare negative dec on the Fox Meadow Estates major subdivision on Toleman Road. Is there any further discussion? If not, roll call.

ROLL CALL

MR. ARGENIO	AYE
MR. BRESNAN	AYE
MR. KARNAVEZOS	AYE
MR. LANDER	AYE
MR. PETRO	AYE

MR. PETRO: 911 numbering that's has been completed and approved by the fire inspector. Applicant provided final storm water management plan and dealt with water quality issues. We have no objection to their proposal. Guardrails have been added, talked about the concrete and you're going to Orange County Board of Health so you need preliminary approval. Would you like one?

MR. HIGGINS: Certainly would, yes.

MR. EDSALL: Mr. Chairman, just one other item which I don't have in my comments, actually, I do under number 3, before he can obtain approvals once he goes to the health department, they're going to be interested in SEQRA. At this point, all the issues have been resolved so the negative dec we should get a copy of the minutes and ship that on. I don't know whether we have been doing that on response from the County Health Department or cause I had a couple people call back and say that the health department doesn't get a copy of it, can we, do you want us to start doing a standard letter or do you want us to get a copy of the minutes? What's your preference?

MS. MASON: I usually give the applicant a copy of the minutes.

MR. EDSALL: Cause I had gotten one case where DEC said they wouldn't act without the minutes so maybe they lost them.

MS. MASON: If they ask me, I usually give them a copy.

MR. PETRO: Any other comments from board members?  
Motion for preliminary approval.

MR. LANDER: So moved.

MR. ARGENIO: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning Board grant preliminary approval to the Fox Meadow Estates major subdivision on Toleman Road. Any further comments from any of the board members? If not, roll call.

ROLL CALL

MR. ARGENIO	AYE
MR. BRESNAN	AYE
MR. KARNAVEZOS	AYE
MR. LANDER	AYE
MR. PETRO	AYE





McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)

WILLIAM J. HAUSER, P.E. (NY & NJ)

MARK J. EDSALL, P.E. (NY, NJ & PA)

JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**

33 Airport Center Drive  
Suite 202  
New Windsor, New York 12553

(845) 567-3100

fax: (845) 567-3232

e-mail: mheny@mhepc.com

Writer's e-mail address:

mje@mhepc.com

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 23 OCTOBER 2002  
**DESCRIPTION:** THE APPLICATION PROPOSES THE MAJOR SUBDIVISION OF THE 82.4 +/- ACRE PARCEL, WITH A HORSE FARM TO REMAIN. THE PLAN WAS PREVIOUSLY REVIEWED AT THE 8 AUGUST 2001, 14 NOVEMBER 2002, 23 JANUARY 2002, 26 JUNE 2002, AND 28 AUGUST 2002 PLANNING BOARD MEETINGS.

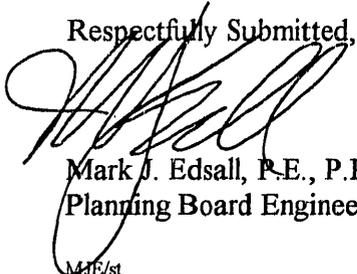
1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the "horse farm" are correct for the zone and uses.
2. Based on my review of the file, note the following updates:
  - The applicant has prepared a final stormwater management plan, and has dealt with the mandated water quality issues. We have no objection to their proposal.
  - Sight distances are now indicated for lots 16-19, 23 and 24. Each value appears to meet or exceed AASHTO standards for Stopping Sight distance for wet pavements at 30 mph (although some minor grading is required, and should be a condition of the road construction).
  - Guiderails have been added to the north side of the road in the turn area.
  - The roadway details now reflect curbs with sidewalks (one side). The details should be corrected to note 4000 psi concrete (minimum).
  - Road name and 911 numbering has been completed and approved by the Fire Inspector.

**REGIONAL OFFICES**

- 507 Broad Street • Milford, Pennsylvania 18337 • 570-296-2765 •
- 540 Broadway • Monticello, New York 12701 • 845-794-3391 •

3. The Planning Board may wish to make a determination regarding the type action this project should be classified under SEQRA, and make a determination regarding environmental significance. I believe there is adequate information in support of a "neg dec".
4. This project requires Preliminary Approval to proceed to the Orange County Department of Health. I believe the plans are in acceptable shape and the issues previously noted have been addressed.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW01-51-23Oct02.doc

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (914) 563-4615  
Fax: (914) 563-4693

## PLANNING BOARD APPLICATION

### TYPE OF APPLICATION (check appropriate item):

Subdivision  Lot Line Change  Site Plan  Special Permit

Tax Map Designation: Sec. 52 Block 1 Lot 20

BUILDING DEPARTMENT REFERRAL NUMBER \_\_\_\_\_

- Name of Project SUBDIVISION FOR FOX MEADOW ESTATES  
ESTATES
- Owner of Record FOX MEADOW LLC Phone 917-337-4733  
Address: 1107 KINGS HWY CHESTER N.Y. 10918  
(Street Name & Number) (Post Office) (State) (Zip)
- Name of Applicant FOX MEADOW LLC Phone 917-337-4733  
ESTATES  
Address: 1107 KINGS HWY CHESTER N.Y. 10918  
(Street Name & Number) (Post Office) (State) (Zip)
- Person Preparing Plan LANE & TULLY ENGINEERING Phone 845-294-3700  
Address: P.O. BOX 687 ROUTE 207 GOSHEN N.Y. 10924  
(Street Name & Number) (Post Office) (State) (Zip)
- Attorney ALAN LIPMAN Phone 845-294-7941  
Address ONE HARRIMAN SQ GOSHEN N.Y. 10924  
(Street Name & Number) (Post Office) (State) (Zip)
- Person to be notified to appear at Planning Board meeting:  
DAVID HIGGINS, PE 845-294-3700  
(Name) (Phone)
- Project Location: On the EAST side of TOCKMAN ROAD \_\_\_\_\_ feet  
(Direction) (Street) (No.)  
ACROSS FROM of LITTLE BROOK COURT  
(Direction) (Street)
- Project Data: Acreage 82.4 Zone R-1 School Dist. WASHINGTONVILLE  
CENTRAL

9. Is this property within an Agricultural District containing a farm operation or within 500 feet of a farm operation located in an Agricultural District? Yes X No \_\_\_\_\_

\*This information can be verified in the Assessor's Office.

\*If you answer yes to question 9, please complete the attached Agricultural Data Statement.

10. Description of Project: (Use, Size, Number of Lots, etc.) SUBDIVISION OF 82.4 ACRES PARCEL INTO 24 RESIDENTIAL (SINGLE FAMILY DETACHED) LOTS WITH ON LOT TO REMAIN ACTIVE AS A HORSE FARM.

11. Has the Zoning Board of Appeals Granted any Variances for this property? yes \_\_\_\_\_ no X

12. Has a Special Permit previously been granted for this property? yes \_\_\_\_\_ no X

ACKNOWLEDGMENT:

IF THIS ACKNOWLEDGMENT IS COMPLETED BY ANYONE OTHER THAN THE PROPERTY OWNER, A SEPARATE NOTARIZED STATEMENT OR PROXY STATEMENT FROM THE OWNER MUST BE SUBMITTED, AT THE TIME OF APPLICATION, AUTHORIZING THIS APPLICATION.

STATE OF NEW YORK)

SS.:

COUNTY OF ORANGE)

THE UNDERSIGNED APPLICANT, BEING DULY SWORN, DEPOSES AND STATES THAT THE INFORMATION, STATEMENTS AND REPRESENTATIONS CONTAINED IN THIS APPLICATION AND SUPPORTING DOCUMENTS AND DRAWINGS ARE TRUE AND ACCURATE TO THE BEST OF HIS/HER KNOWLEDGE AND/OR BELIEF. THE APPLICANT FURTHER ACKNOWLEDGES RESPONSIBILITY TO THE TOWN FOR ALL FEES AND COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

SWORN BEFORE ME THIS:

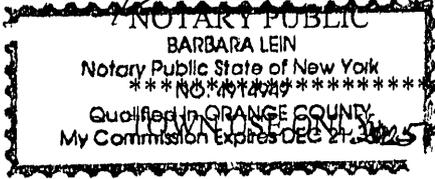
9<sup>th</sup> DAY OF September 2003

FOX MEADOWS PAPER, LLC

by A. Sussman  
APPLICANT'S SIGNATURE

Barbara Lein

ASHER SUSSMAN  
Please Print Applicant's Name as Signed  
MANAGER



DATE APPLICATION RECEIVED

APPLICATION NUMBER

#01-51

**FOX MEADOW ESTATES, LLC**

1107 Kings Highway  
Chester, New York 10918  
(917) 337-4733

September 12, 2003

Town of New Windsor Planning Board  
Town of New Windsor  
555 Union Avenue  
New Windsor, New York 12553

Re: Fox Meadow Estates, LLC  
Preliminary Approval

Gentlemen:

I write this letter to request for a 180 day extension of the preliminary approval status at the Fox Meadow Estates located at Toleman Road, New Windsor. The current preliminary approval status is due to expire on September 26, 2003, and we would like an extension of 180 days.

Please place this matter on your September 24<sup>th</sup> agenda for such purpose. Please notify me if there is anything further needed from us.

Should you have any questions or concerns regarding this matter, feel free to contact me at the above mentioned telephone number.

Very truly yours,

Asher Sussman



/pld  
cc: Alan S. Lipman, Esquire

*Approved*  
*6 month*  
*9/24/03*

March 13, 2003

Mr. James Petro  
Chairman of Planning Board  
Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553

RE: Fox Meadow Estates

Dear Mr. Petro:

On October 23, 2002 the Planning Board granted preliminary approval for the Fox Meadow Estates Subdivision. It is my understanding that the preliminary approval is valid for six months and is scheduled to expire in April. As we are still in the process of obtaining approvals from the Orange County Department of Health for water supply and sewage disposal, we respectfully request that an additional six month extension of preliminary approval be granted so that we can continue our applications with the Orange County Department of Health.

Please advise as to whether an appearance at the Town Planning Board meeting will be necessary for this extension to be made. If you have any questions or comments, please do not hesitate to contact me. Thank you for assistance in this matter.

Very truly yours,

LANC & TULLY, P.C.



David E. Higgins, P.E.

DH/gms

cc: Mark Edsall, P.E.  
Peter Serpico  
Alan Lipman, Esq.

*3/26/03*  
*Approved six-month extension.*



Toleman Partners  
133 South MacQuesten Parkway  
Mt. Vernon, NY 10550  
914-663-8633

March 3, 2003

Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553

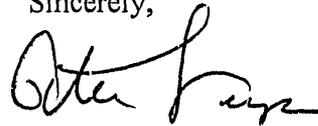
Re: Fox Meadow Estates  
Preliminary Approval

To Whom It May Concern:

Let this letter serve as a request for a (180) day extension for the preliminary approval status at the Fox Meadow Estates located at Toleman Road New Windsor. The current preliminary approval status is due to expire in April 22, 2003 and we would like an extension of 180 days.

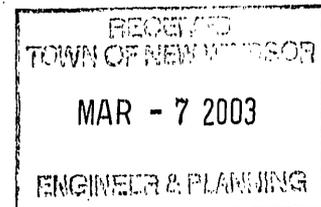
Please notify me when the extension is granted, and also if there are any necessary measures to be taken. Should you have any questions or concerns regarding this matter, feel free to contact me at the above-mentioned telephone number.

Sincerely,



Peter Serpico

PS/gs

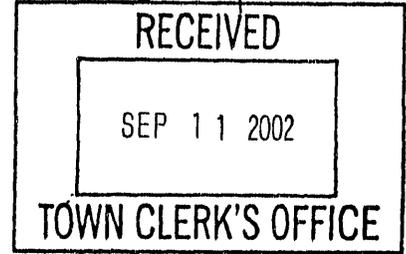


# TOWN OF NEW WINDSOR



TOWN CLERK'S OFFICE  
555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (845) 563-4611  
Fax: (845) 563-4670

cc: ~~BWP/B~~



01-51

## REQUEST FOR PUBLIC RECORDS

(Please specify or describe item (s) requested)

SUB-DIVISION map Fox Hollow Meadow

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Date Records Requested: 9/17/02

Name: CLARENCE DRAKE

Address: 807 TOWN RD. MUNZIE

Phone: (845) 590-3607

Representing: \_\_\_\_\_

*Documents may not be taken from this office.*

RESULTS OF P.B. MEETING OF: *August 28, 2002*

PROJECT: *Fox Meadows Sub.* P.B.# *01-51*

LEAD AGENCY:

NEGATIVE DEC:

1. AUTHORIZE COORD LETTER: Y  N

M)  S)  VOTE: A  N

2. TAKE LEAD AGENCY: Y  N

CARRIED: YES  NO

M)  S)  VOTE: A  N

CARRIED: YES  NO

*Close*  
~~WAIVE PUBLIC HEARING:~~ M) *A* S) *B* VOTE: A *5* N *0* *Closed*  
WAIVED: Y  N

SCHEDULE P.H. Y  N

SEND TO O.C. PLANNING: Y

SEND TO DEPT. OF TRANSPORTATION: Y

REFER TO Z.B.A.: M)  S)  VOTE: A  N

RETURN TO WORK SHOP: YES  NO

APPROVAL:

M)  S)  VOTE: A  N  APPROVED: \_\_\_\_\_

M)  S)  VOTE: A  N  APPROVED CONDITIONALLY: \_\_\_\_\_

NEED NEW PLANS: Y  N

DISCUSSION/APPROVAL CONDITIONS:

*Need swale on lot #9  
Mark to Meet w/ Henry as to guardrail*

<i>Dave Higgins - spoke</i>
<i>Give Mark copy of AT+T Letter</i>
<i>Brian Seagal 28 Melissa Lane - Spoke re: drainage</i>
<i>John Davies 38 Melissa Lane - Drainage &amp; Buffer Area</i>
<i>Bill Malady 17 Little Brook Ct. - Drainage + Traffic</i>
<i>Mrs. Malady - Spoke - roadway + Tunnel</i>
<i>Peter Kear - Spoke - leach field adjoining his property</i>

*Show sketch plan of screening on south side.  
Note on plan: Stone wall to remain (south side)*

RECEIVED  
JUN 26 2002  
LANC & TULLY P.C.

Encroachment:  
Route: Airmont - Clarksville  
Marker No.: PA3 - PA19R  
Date: May 16, 2002

**ENCROACHMENT PERMIT**

---

THIS PERMIT is issued by AT&T Corp., a New York corporation, which has a place of business at 1200 Peachtree St., N.E., Atlanta, GA 30309 (hereinafter called "AT&T") in favor of David Higgins of Lanc & Tully Eng. (c/o Peter Serpico of Toleman Partners, LLC.) whose address is P.O. Box 687, Route 207, Goshen, NY 10924 hereinafter called "Permittee").

**WITNESSETH THAT**

AT&T hereby allows and permits Permittee the non-exclusive use of certain lands hereinafter described for the purpose and subject to the conditions and stipulations herein set forth:

1. **PURPOSE AND SCOPE OF PERMIT:**  
Permittee will cross the existing AT&T easement with a road for residential development. No other physical structures shall be placed on the Right of Way.
  
2. **ENCROACHMENT LOCATION(S):**  
Toleman Road, New Windsor, (Orange County) New York

3. **RISK OF ENTRY:**

AT&T makes no warranty whatsoever as to physical conditions which exist now, or may exist hereafter, at said encroachment location(s) and Permittee accepts said encroachment location(s) "AS IS" and agrees to enter thereupon at Permittee's own risk.

**4. PERMITEE'S DUTIES:**

By accepting this Encroachment Permit, Permittee agrees, without qualification or limitation:

- (a) to make no modifications or additions to its facilities at the encroachment location(s) without first obtaining AT&T's prior written consent;
- (b) to notify AT&T by telephone forty-eight (48) hours prior to performing any construction, demolition or repairs at the encroachment location(s);
- (c) to not use at the encroachment location(s) any tool, equipment, or machinery capable of being operated within ten (10) feet of cable lines;
- (d) to perform construction, demolition, repair, modifications, additions and any other activities in compliance with all applicable laws and regulations and in a manner that does not interfere with the operations of AT&T;
- (e) that it, its successors and assigns assume full responsibility for injuries to or death of any persons and for damages to property including property and services of AT&T and all claims, losses, or expense which may, in any way, arise out of the exercise of this Encroachment Permit, whether caused by negligence or otherwise, and Permittee, its successors and assigns shall indemnify and save AT&T harmless from all claims, losses, expense or suits for such injuries, death or damages and from all liens, losses, expense (including reasonable attorneys' fees) or claims of any sort which may arise out of the permit herein granted;
- (f) to neither cause nor permit use of the rights herein granted by any other person except Permittee's lawful successors, and if Permittee is a utility company, any transferee of the utility system (or operating component of a utility system) of which the Permittee's facilities at the encroachment location(s) are a part;
- (g) that AT&T retains all of its rights with respect to its property, right-of-way or easement. Specifically, AT&T retains the right to access its telecommunications cable to repair, maintain or augment its telecommunications network. Any damage to Permittee's facilities as a result of AT&T's exercise of its rights with respect to its property, right-of-way or easement shall be the sole responsibility of Permittee; and

- (h) that it shall not use, have present nor transport on or about the encroachment location(s) any hazardous or toxic materials, wastes or substances or any pollutants or contaminants ("Hazardous Substances"), without the prior express written consent of AT&T. If at any time during the term of this Encroachment Permit, Permittee knows or has reason to believe that any Hazardous Substances have come, or will come, to be located upon, about, or underneath the encroachment location(s), then Permittee shall, as soon as reasonably possible, give verbal and written notice of that condition to AT&T. Permittee covenants to investigate, clean-up and otherwise remediate any release of such Hazardous Substances by Permittee, its agents, employees, representatives, contractors, permitted assigns, or those under Permittee's control at Permittee's cost and expense. Permittee shall notify AT&T prior to commencing any clean-up or remediation.

**5. INCOMPATIBLE FACILITIES:**

This permit is issued by AT&T and accepted by Permittee with the mutual belief that the facilities of each can exist at the encroachment location(s) in the form contemplated when this permit was issued without disruption to the other. If at anytime for any reason Permittee's facilities are determined in AT&T's judgment to be incompatible with AT&T's then existing or then proposed facilities, Permittee agrees it shall cure any such incompatibility by modifying its facilities, by removing its facilities or by taking whatever other action which in AT&T's judgment is necessary.

**6. FEE TITLE: SUPERIORITY OF PRIOR INTEREST:**

If neither AT&T nor Permittee own fee simple title to the lands at the encroachment location(s), the authorization required by Permittee from the fee simple owner shall be obtained at Permittee's sole cost. In any judicial construction of this permit, it shall be recognized that AT&T, by virtue of prior rights and prior possession and by virtue of this permit, shall enjoy with respect to the encroachment location(s) rights superior to those of Permittee.

**7. COST:**

This permit is issued by AT&T and accepted by Permittee with the understanding that Permittee's use of the permission herein granted shall not result in any cost to AT&T. No claims for payment or performance shall be made of AT&T by Permittee and any expenses incurred by AT&T related to Permittee's exercise of the rights herein permitted shall be promptly reimbursed to AT&T by Permittee. In enforcing this permit against Permittee, AT&T shall be entitled to collect reasonable attorney's fees, court costs and interest on the principal sum.

8. NOTICES:

All notices given or made by either party shall be as follows:

AT&T

D. Keith Tillman  
1200 Peachtree St.  
Prom. I - 2045  
Atlanta, Georgia

PERMITTEE

David Higgins  
Route 207  
P.O. Box 687  
Goshen, NY 10924

The permission hereby given shall be binding upon the heirs, administrators, executors and assigns of both parties.

ISSUED this 16<sup>th</sup> day of  
May, 2002.

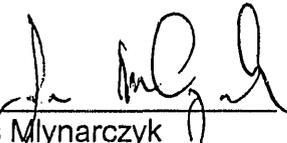
ACCEPTED this 24<sup>th</sup>  
June, 2002.

AT&T COMMUNICATIONS, INC.  
as agent for AT&T CORP.

PERMITTEE:

By:   
Name: D. Keith Tillman  
Title: AT&T - Right of Way Engineer  
Date: May 16, 2002  
Phone: (404) 810-2421

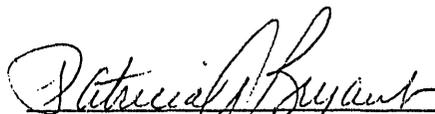
By:   
Name: PETER SERPICO  
Title: V. P. Tolman Partners  
Date: 6/24/02.

Concurred By:   
Name: James Mlynarczyk  
Title: AT&T OSWF Technician  
Date: JUNE 20, 2002

Corporate Acknowledgment

STATE OF GEORGIA )  
COUNTY OF FULTON ) SS:

On this 17<sup>th</sup> day of May, 2002, before me, the subscriber, personally appeared D. Keith Tillman to me known, who, being by me duly sworn, did depose and say that he resides in Atlanta, Georgia, that he is the Right of Way Engineer of AT&T Corp., the corporation described in, and which executed the within instrument, and that he signed his name thereto by order of the Board of Directors.

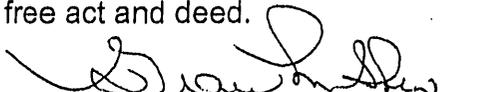
  
Notary Public

Patricia A. Bryant  
Notary Public, Cobb County, Georgia  
My Commission Expires October 14, 2002

Individual(s) Acknowledgment

STATE OF New York )  
COUNTY OF Westchester ) SS:

On this 24 day of June, 2002, before me personally appeared to me Peter Scipio who executed the foregoing instrument, and acknowledged that he (or they) executed the same as his (or their) free act and deed.

  
Notary Public

GRACE M. SHAW  
Notary Public State of New York  
No. D1SH5050941  
Qualified in Westchester County  
Commission Expires 10/23 2005

PLANNING BOARD : TOWN OF NEW WINDSOR  
COUNTY OF ORANGE : STATE OF NEW YORK

-----x  
In the Matter of Application for Site Plan/Subdivision of  
Fox Meadow Sub. #01-51

Applicant.

AFFIDAVIT OF  
SERVICE  
BY MAIL

-----x  
STATE OF NEW YORK )  
                          ) SS.:  
COUNTY OF ORANGE )

MYRA L. MASON, being duly sworn, deposes and says:

That I am not a party to the action, am over 18 years of age and reside at 350 Bethlehem Road, New Windsor, NY 12553.

On August 15, 2002, I compared the 35 addressed envelopes containing the attached Notice of Public Hearing with the certified list provided by the Assessor regarding the above application for Site Plan/Subdivision and I find that the addressees are identical to the list received. I then mailed the envelopes in a U.S. Depository within the Town of New Windsor.

Myra L. Mason  
Myra L. Mason, Secretary for  
the Planning Board

Sworn to before me this  
15 day of August, 2002

[Signature]  
Notary Public

JENNIFER MEAD  
Notary Public, State Of New York  
No. 01ME6050024  
Qualified In Orange County  
Commission Expires 10/30/ 2002



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4631  
Fax: (845) 563-4693

## Assessors Office

July 1, 2002

Fox Meadow Estates  
Toleman Road  
New Windsor, NY 12553

Attn: John Lanc

Re: 52-1-20

Dear Mr. Lanc:

According to our records, the attached list of properties owners are abutting to the above referenced property.

Parcels marked with one asterisk(\*)represents abutting parcels, two(\*\*) represent that the parcel is within an Agricultural District and three(\*\*\*) represents the parcels is both abutting and in an Agricultural District.

Please be advised that the subject parcel 52-1-20 is also in and Agricultural District.

The charge for this service is \$55.00, minus your deposit of \$25.00.

Please remit the balance for \$30.00 to the Town Clerk's Office.

Sincerely,

A handwritten signature in cursive script, appearing to read "L. Cook".

Leslie Cook  
Sole Assessor

LC/srr  
Attachments

CC: Myra Mason, PB

52-1-15.211 52-1-15.212 *** Harry Roosje Jr. & Lambertus Roosje 403 Toleman Road Rock Tavern, NY 12575 ✓	52-1-27.2 *** Kelly DiBernardo 41 Burnett Way Washingtonville, NY 10992 ✓	52-2-3 * Steven Longo & Tara McElrath 34 Melissa Lane Washingtonville, NY 10992 ✓
52-1-107 ** Lester Clark & Henry VanLeeuwen 400 BaMar Drive Stony Point, NY 10980 ✓	52-1-44.3 ** Linda & Arthur Nadas Bull Road Rock Tavern, NY 12575 ✓	52-2-4 * Donna Huston 32 Melissa Lane Washingtonville, NY 10992 ✓
52-1-18 *** Peter & Joan Kean One Brittany Terrace Rock Tavern, NY 12575 ✓	52-1-75 ** Carlos & Jennie Moreno 421 Toleman Road Rock Tavern, NY 12575 ✓	52-2-5 * Thomas & Donna Jacarus 30 Melissa Lane Washingtonville, NY 10992 ✓
52-1-21 ** Jack & Marion Decker 462 Toleman Road Rock Tavern, NY 12575 ✓	52-1-76 *** James Schneider 425 Toleman Road Rock Tavern, NY 12575 ✓	52-2-6 * Brian & Jodie Siegel 28 Melissa Lane Washingtonville, NY 10992 ✓
52-1-22 <sup>1</sup> ** Harold Jr. & Ana Fossum 380 Breezeway Lane NE Palm Bay, Fl 32907 ✓	52-1-77 ** Dennis & Robyn Morgan 433 Toleman Road Rock Tavern, NY 12575 ✓	74-1-1 * Clifford & Arlene Randall 32 Little Brook Court Rock Tavern, NY 12575 ✓
52-1-23 *** Ronald Shipman 448 Toleman Road Rock Tavern, NY 12575 ✓	52-1-78.1 ** Joseph Berry 439 Toleman Road Rock Tavern, NY 12575 ✓	74-1-13 * Oswaldo Angulo & Darnell Angulo 2 Little Brook Ct. Rock Tavern, NY 12575 ✓
52-1-24 *** Angela Cabri 34-19 Irwin Avenue Apt. 511 Bronx, NY 10463 ✓	52-1-78.21 52-1-78.22 ** Angelo & Michele Sakadelis 445 Toleman Road Rock Tavern, NY 12575 ✓	74-2-5 * Bankers Trust Co. of California C/o Countrywide Home Loans SV-24 400 Countrywide Way Simi Valley, CA 92065 ✓
52-1-25 ** Lambertus & Susan Roosje 415 Toleman Road Rock Tavern, NY 12575 ✓	52-1-79 *** Foxwood Enterprises, LLC 229 Route 32 Central Valley, NY 10917 ✓	74-2-6 * Raymond & Barbara McEntee 3 Toleman Ct. Rock Tavern, NY 12575 ✓
52-1-26 *** Jeffrey Lobb & Arthur & Sadie Lobb 436 Toleman Road Washingtonville, NY 10992 ✓	52-2-1 * John & Janet Davies 38 Melissa Lane Washingtonville, NY 10992 ✓	74-3-3 * John III & Frances Coughlin 4 Toleman Ct. Rock Tavern, NY 12575 ✓
52-1-27.1 *** Edward Ritterbusch & Barbara McPartland 8 Meadowlark Place Upper Saddle River, NJ 07458 ✓	52-2-2 * Vito & Lisa Denaro 36 Melissa Lane Washingtonville, NY 10992 ✓	74-3-4 * Richard Abbruzzio 19 Little Brook Ct. Rock Tavern, NY 12575 ✓

George J. Meyers Supervisor  
Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553 ✓

Deborah Green, Town Clerk  
Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553 ✓

Andrew Krieger, ESQ.  
219 Quassaick Avenue  
New Windsor, NY 12553 ✓

James Petro, Chairman  
Planning Board  
555 Union Avenue  
New Windsor, NY 12553 ✓

Mark J. Edsall, P.E.  
McGoey and Hauser  
Consulting Engineers,  
33 Airport Center Drive Suite 202  
New Windsor, NY 12553 ✓

8/15/02  
30  
5  
-----  
35 Mailed

## AGRICULTURAL DISTRICT NOTICE

NOTICE IS HEREBY GIVEN that the PLANNING BOARD of the TOWN OF NEW WINDSOR, County of Orange, State of New York has before it an application for Subdivision for the proposed subdivision of 82.43± acre parcel into twenty-four (24) lots. As this project may be located within 500' of a farm operation located within an Agricultural District, the TOWN OF NEW WINDSOR is required to notify property owners of property containing a farm operation with this Agricultural District and within 500' of the proposed project.

Owner/Applicant: Fox Meadow Estates  
Toleman Partners, LLC

Address: 133 South MacQuesten Parkway  
Mt. Vernon, NY 10550

Project Location: Tax Map #Section 52, Block 1, Lot 20

Street: Toleman Road

A map of this project is on file and may be inspected at the Planning Board Office, Town Hall, 555 Union Avenue, New Windsor, New York.

Date: August 12, 2002

TOWN OF NEW WINDSOR PLANNING BOARD

James R. Petro, Jr.  
Chairman

LEGAL NOTICE

NOTICE IS HEREBY GIVEN that the PLANNING BOARD of the  
TOWN OF NEW WINDSOR, County of Orange, State of New York will hold a  
PUBLIC HEARING AT Town Hall, 555 Union Avenue, New Windsor, New York  
on August 28, 2002 at 7:30 P.M. on the approval of the  
date

proposed SITE PLAN / SUBDIVISION / SPECIAL PERMIT approval

for Fox Meadow Estates located at \_\_\_\_\_  
name of project

Toleman Road Tax Map # 52- 1- 20  
Address of project section, block, lot

Map of the project is on file and may be inspected at the PLANNING BOARD  
OFFICE, Town Hall, 555 Union Avenue, New Windsor, NY prior to Public  
Hearing.

August 12, 2002  
Date

By Order of

TOWN OF NEW WINDSOR PLANNING BOARD

James R. Petro, Jr., Chairman

\*This form to be completed only if you answer "yes" to question #9 on the application form.

AGRICULTURAL DATA STATEMENT

1. Name and Address of Applicant:

Toleman Partners, LLC

133 South MacQuesten Parkway, Mt. Vernon, NY 10550

2. Description of proposed project and its locations:

Subdivision of an existing 82.4± acre parcel located on Toleman Road

into 24 single family residential lots to be served by individual

wells and septic systems.

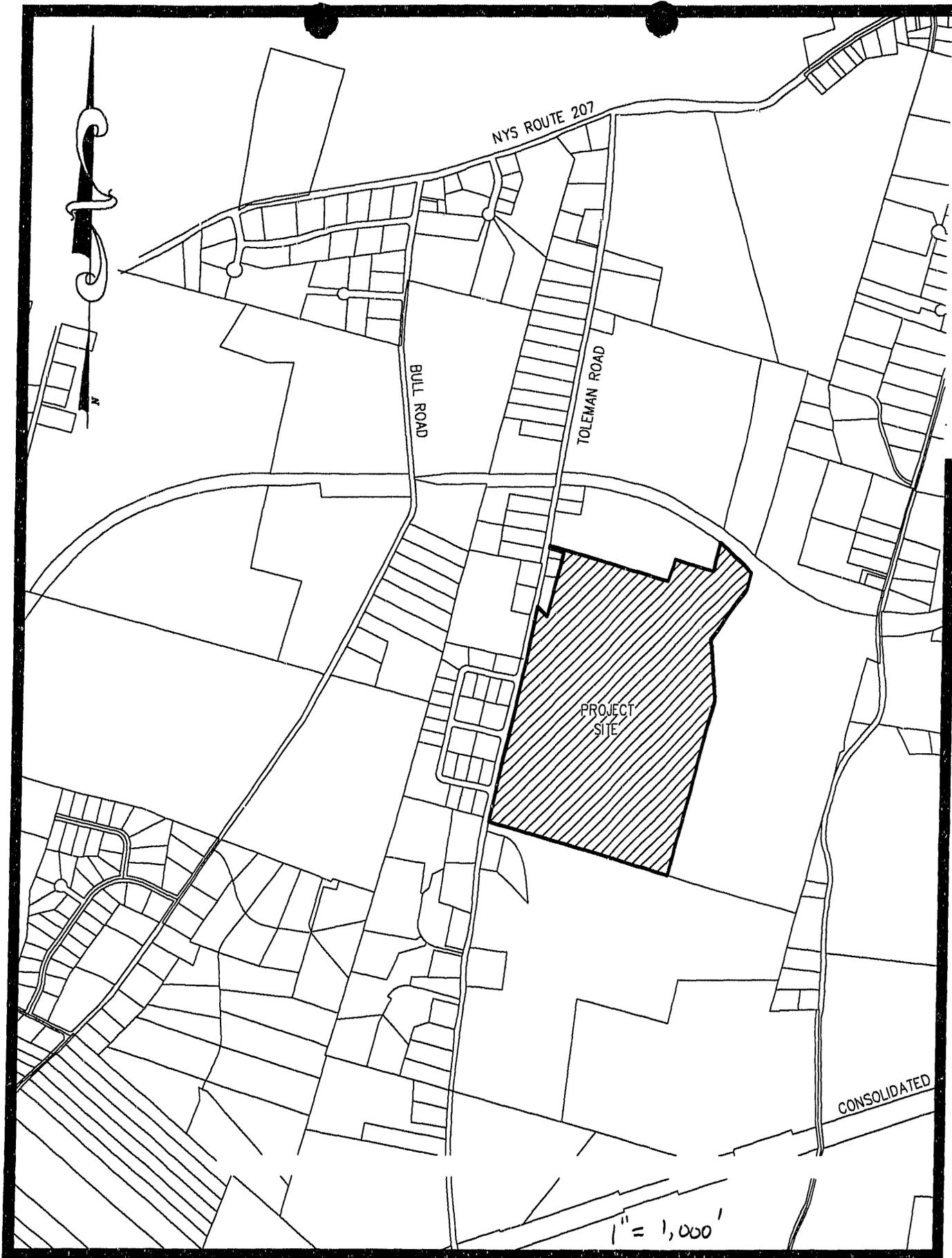
3. Name and address of any owner of land within the Agricultural District:

See attached list of owners.

4. Name and address of any owner of land containing farm operations located within 500 feet of the boundary of the subject property.

None known of.

5. A map is submitted herewith showing the site of the proposed project relative to the location of farm operations identified in this statement.



REGULAR ITEMS:

FOX MEADOW SUBDIVISION (01-51)

Mr. John Lanc appeared before the board for this proposal.

MR. PETRO: This application proposes major subdivision of 82.4 acre parcel with a horse farm to remain. Plan was previously reviewed at the 8 August, 2001, 14 November, 2002, 23 January, 2002 planning board meetings. Property is in an R-1 zone, bulk requirements indicated are correct. Mr. Lanc?

MR. LANC: It's 24 lots including the farm.

MR. PETRO: Did we assume lead agency?

MS. MASON: No.

MR. PETRO: Can I have a motion to assume lead agency, please?

MR. LANDER: So moved.

MR. BRESNAN: Second it.

MR. PETRO: Motion has been made and seconded that the New Windsor Planning Board assume lead agency under the SEQRA process for the Fox Meadow Estates on Toleman Road. Is there any further discussion? If not, roll call.

ROLL CALL

MR. KARNAVEZOS	AYE
MR. BRESNAN	AYE
MR. LANDER	AYE
MR. ARGENIO	AYE
MR. PETRO	AYE

MR. LANC: I'm at a little bit of a loss in that Dave Higgins is usually presenting the subdivision. I believe at this time, he might be a new father or he's on the way to becoming a new father, they're expecting

today.

MR. PETRO: Does his wife know? I'm only kidding.

MR. LANC: I think it's supposed to be a girl. The only problem is you might want to ask him next time because as of this morning, they still didn't know what they were going to name it.

MR. PETRO: Okay.

MR. LANC: We have a subdivision total of 82 acres located on the easterly side of Toleman Road. This is Toleman Road, this would be on the easterly side, we're proposing to subdivide it in total of 24 lots, this is R-1 which is rural residential, minimum lot area is one acre. We have four lots that are one acre, all of the other ones are larger usually around 2, 2 plus acres. We have 2 large lots, one 12 1/2 and the other one the 27.3 acres. We received comments from your engineer. We satisfied I believe most of them at this time. We moved, for example, the property line, proposed property line here away from the paddock. We also contacted AT&T and we have received permission from them to encroach on the easement, this is a permit that is executed by AT&T and the applicant. At this time, we're basically in front of the board to ask for scheduling the public hearing so we can receive approval and go to the health department for their review.

MR. PETRO: Mark, two things that come real quick, one was the topo of the road, are they conforming because I know it goes up quickly and sight distance?

MR. EDSALL: They have decreased some of the slopes and I believe Henry's okayed this layout but--

MR. PETRO: He has under review.

MR. LANDER: Is this going to be a boulevard coming down to Toleman Road, we discussed that last time.

MR. EDSALL: I don't know that this one ended up desiring that layout.

MR. LANC: Thirty feet wide road.

MR. EDSALL: I think he just wanted the 30 foot road.

MR. PETRO: When the applicant creates this new lot line around the horse farm wasn't there some buildings or something that was too close to the property line and he was going to make a variance?

MR. EDSALL: Yeah, there was one location at least I know there was a fence that we were concerned about.

MR. PETRO: Is that the only one?

MR. LANC: We moved the line about ten feet from the--

MR. EDSALL: We'll check that as well.

MR. PETRO: I'd also ask the applicant to look and just let us know anyway once the water leaves your basin, where is it going to go and somewhat of a flow there because you're going to be collecting a lot of water in that basin. Now I realize that the way the basin is supposed to work, supposed to let it out the same way it's always been going out.

MR. LANC: We have a total of two basins, one's in this area behind number 17 and 18 and the other one is right next to lot number 1, this basin will discharge into the culvert that's under the existing road of the subdivision next door. We'll provide Mark with calculations showing that that's a zero increase in the flow.

MR. ARGENIO: I don't often say a lot of commentary but I specifically remember mentioning to someone around station 1,400 or 1,500 left looking into the possibility of putting a piece of maybe a wood guardrail to protect the two lots from somebody coming down the hill, losing control of their car in the winter and the ice and snow, landing in somebody's front yard or their house worse yet. Do you know anything about that, Mr. Lanc? Maybe you don't think it's necessary for some reason.

MR. LANC: I don't think it's necessary, we have curbs on that road so I believe that--

MR. ARGENIO: Which side of the road is the sidewalk on?

MR. LANC: I'm not sure that we have sidewalk on this subdivision.

MR. EDSALL: There was a--

MR. LANC: I have to apologize, I don't know.

MR. EDSALL: There was an open issue whether or not they were going to pursue a waiver on the sidewalks, it's listed as a question mark on my old sheet.

MR. ARGENIO: Do you know the status of that?

MR. LANC: I don't, it's a cul-de-sac, it's a dead-end street, so I would assume everybody who's coming downhill went first uphill so they're aware of the curb and they would not go hopefully too fast, curve is a sharp curve, so you're not going to go your regular 30 miles an hour in the curve. And from my own experience because I have to go to these planning board meetings at night when it's icy, I know when I sometimes slide, I go to the curb and that curb basically will stop you unless you go excessive speed.

MR. ARGENIO: Well, I think it was a combination of the radius and downhill grade that made me make the commentary.

MR. LANC: If your highway superintendent believes that we should have some kind of a guiderail, I believe we could provide it. But I really don't think that's necessary when you have a six inch reveal on the curb because it's icy, you'll not go fast and if you start to slide, you basically you'll hit the curb, you might need alignment of your tires after that, but I don't think you'll be over the curb to need a guiderail. But again, it's your highway superintendent and he has the final say on it, but that would be my recommendation,

it would be different if there was a swale, if there was a swale, I would definitely recommend it.

MR. ARGENIO: Okay.

MR. PETRO: Mark, what was the easement we were talking about at the last meeting?

MR. EDSALL: The AT&T that John mentioned.

MR. PETRO: No, to have another access to the lands of Keans, maybe off the cul-de-sac, we discussed it, it's in the minutes here, Myra's showing me, I'm trying to recall.

MR. EDSALL: It might be that you wanted to reserve the ability to extend that road.

MR. PETRO: Yes, it was up there.

MR. EDSALL: It's tough terrain up there.

MR. LANC: I remember talking about with Dave and what comes back to my mind was that he mentioned something that terrain is so steep that it's not really feasible to make another access through that area.

MR. PETRO: I'm going basically through here, right?

MR. LANC: Yes, contours are very close here all the way through.

MR. ARGENIO: Where is that, Jim?

MR. PETRO: If you take the cul-de-sac and just go to the top of the plan between 10 and 11.

MR. BABCOCK: It's 40 feet difference in elevation.

MR. PETRO: On 3008, so it's close.

MR. BABCOCK: Yeah, that's true, a little over 12 percent. You know what I think we should have Mr. Keans' final plan to lay alongside of this so that it would if we're going to ask him to have one where it

would come out, it would come out that it would benefit.

MR. PETRO: Can you look at that, Mark?

MR. EDSALL: Yeah.

MR. PETRO: Wouldn't take from your lot any, the lot is certainly big enough to take 50 feet off, if you're under one acre zoning, you have 2.6 acre lot, you can certainly relocate the house. So Mark, you're going to look into that?

MR. EDSALL: I'm looking to pull his plan out.

MR. PETRO: If it does make sense then we'll ask again for the 50 feet. Let us know about the topo later.

MR. LANC: Okay.

MR. BABCOCK: The sidewalks was an issue, too, he's, if he wants to go to the Town Board for a waiver, I think he has to have your blessing to do that, if you want him to have sidewalks on one side, both sides or a recommendation.

MR. LANDER: He can go for the waiver whether he has our blessing or not, but whether he gets it after he gets there is another thing.

MR. BABCOCK: That's correct.

MR. PETRO: Why would he not want a sidewalk on at least one side?

MR. BABCOCK: That's why I want to talk about that.

MR. PETRO: Who would want a sidewalk on one side? Why would we did any different, at least one side, that's it, you don't want to do that and want to go to the Town Board, we'd give a negative recommendation to the Town Board. That's all.

MR. LANC: Don't have a problem. I have designed a lot of subdivisions one side of the road sidewalks kind of

satisfies everybody, I heard other people saying we don't want any other people saying why it's not on my side also until the winter comes.

MR. PETRO: Okay, motion to have a public hearing.

MR. LANDER: So moved.

MR. BRESNAN: Second it.

MR. PETRO: Motion has been made and seconded to schedule a public hearing for the Fox Meadow Estates major subdivision. Is there any further discussion? If not, roll call.

ROLL CALL

MR. KARNAVEZOS	AYE
MR. BRESNAN	AYE
MR. LANDER	AYE
MR. ARGENIO	AYE
MR. PETRO	AYE

MR. PETRO: That's as far as we're going to go tonight. Get together with Myra, whenever you're ready, you'll be on.

MR. LANC: Thank you.

MR. PETRO: I'd like to get that resolved with the easement prior to the public hearing though to have that on the plan.

MR. LANC: Mark, I will talk to Mark about that.

MR. PETRO: Mark, I'd like that resolved before the public hearing, okay?

MR. EDSALL: We'll work on that.



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

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(570) 296-2765  
e-mail: mhepa@mhepc.com

*Writer's E-mail Address:*  
*mje@mhepc.com*

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 26 JUNE 2002  
**DESCRIPTION:** THE APPLICATION PROPOSES THE MAJOR SUBDIVISION OF THE 82.4 +/-  
ACRE PARCEL. WITH A HORSE FARM TO REMAIN. THE PLAN WAS  
PREVIOUSLY REVIEWED AT THE 8 AUGUST 2001, 14 NOVEMBER 2002,  
AND 23 JANUARY 2002 PLANNING BOARD MEETINGS.

1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the "horse farm" are correct for the zone and uses.
2. The original submittal was for a 32-lot single-family residential subdivision with loop road. At the November meeting the applicant presented a revised application with 23-lots subdivision with a single dead-end (cul-de-sac) road. The applicant has further refined the plan.
3. We should confirm that the Board has assumed the Lead Agency position under SEQRA.
4. It is my opinion that the plan is sufficient to schedule the Public Hearing. The Planning Board should consider authorizing the mandatory Public Hearing for this Major Subdivision, as required under Paragraph 4 of the Subdivision Regulations. Prior to the public hearing, the applicant should have the final stormwater management plan and updated full EAF submitted.
5. As per the 911 Policy of the Town, this project will require the assignment of a street name and 911 address numbering at the Preliminary approval stage of the subdivision review.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

RESULTS OF P.B. MEETING OF: June 21, 2002

PROJECT: Fox Meadow Subdivision P.B.# 01-51

LEAD AGENCY:

NEGATIVE DEC:

1. AUTHORIZE COORD LETTER: Y \_\_\_ N \_\_\_

M) \_\_\_ S) \_\_\_ VOTE: A \_\_\_ N \_\_\_

2. TAKE LEAD AGENCY: Y  N \_\_\_

CARRIED: YES \_\_\_ NO \_\_\_

M) L S) B VOTE: A 5 N 0

CARRIED: YES  NO \_\_\_

WAIVE PUBLIC HEARING: M) L S) B VOTE: A 5 N 0 WAIVED: Y \_\_\_ N

SCHEDULE P.H. Y  N \_\_\_

SEND TO O.C. PLANNING: Y \_\_\_

SEND TO DEPT. OF TRANSPORTATION: Y \_\_\_

REFER TO Z.B.A.: M) \_\_\_ S) \_\_\_ VOTE: A \_\_\_ N \_\_\_

RETURN TO WORK SHOP: YES \_\_\_ NO \_\_\_

APPROVAL:

M) \_\_\_ S) \_\_\_ VOTE: A \_\_\_ N \_\_\_ APPROVED: \_\_\_\_\_

M) \_\_\_ S) \_\_\_ VOTE: A M APPROVED CONDITIONALLY: \_\_\_\_\_

NEED NEW PLANS: Y \_\_\_ N \_\_\_

DISCUSSION/APPROVAL CONDITIONS:

*Look into the easement for connection to Mobile Home PK.  
Need sidewalk on one side of street.*

*Resolve easement before P.H.*



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
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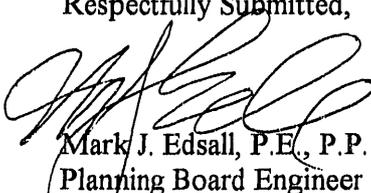
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e-mail: mhepa@ptd.net

**TOWN OF NEW WINDSOR  
PLANNING BOARD  
REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 23 JANUARY 2002  
**DESCRIPTION:** THE APPLICATION PROPOSES THE SUBDIVISION OF THE 82.4 +/-  
ACRE PARCEL INTO 32 SINGLE-FAMILY RESIDENTIAL LOTS  
PLUS A HORSE FARM (EXISTING, TO REMAIN). THE PLAN WAS  
PREVIOUSLY REVIEWED AT THE 8 AUGUST 2001 AND  
14 NOVEMBER 2001 PLANNING BOARD MEETINGS.

1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the "horse farm" are correct for the zone and uses.
2. The original submittal was for a 32-lot single-family residential subdivision with loop road. At the November meeting the applicant presented a 23-lot subdivision, with a single dead-end (cul-de-sac) road. Both applications include an additional lot as a horse farm.
3. The applicant is before the Board to further review the conceptual layout of the subdivision, since some revisions have been made based on worksession discussions and input from the Highway Superintendent.
4. The appearance is for general discussion only. No action need be taken at this meeting.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

FOX MEADOW ESTATES SUBDIVISION (01-51)

Mr. David Higgins appeared before the board for this proposal.

MR. PETRO: Proposed residential subdivision. This application proposes subdivision of 82.4 acre parcel into 32 single family residential lots.

MR. EDSALL: The number, Mr. Chairman, is wrong, I apologize, the lot count has gone down, it's 23.

MR. PETRO: Plan was previously reviewed at the 8 August, 2001 and 14 November planning board meetings. This is the one with the horse farm?

MR. HIGGINS: Yes.

MR. PETRO: It's R-1 zone, it's a permitted use, now you're grandfathered in under the old zoning so that's what we're doing here, correct, some of the lots I know are larger but--

MR. HIGGINS: We did have a note on the plan that we said listing the zoning regulations at the time when the initial application was made, I don't know if the note needs to be reworded that it's grandfathered or if that's sufficient.

MR. LANDER: What number would that be on your notes?

MR. EDSALL: It's underneath the bulk table.

MR. PETRO: That's fine, okay, what's changed and what are we doing here?

MR. HIGGINS: Well, at the last planning board meeting that we were at, we had talked about the initial application had two proposed roadways come off Toleman Road and because of the results that we had with the soil testing over behind the farm and also on lot 25, we didn't find that many areas of good soil, so we dropped that road location. We had talked about providing an emergency access roadway off of Toleman Road to come up and I believe the board had requested

it to come between lots 18, 19 or 20, we took a look at feasibility of putting emergency access lane which is the grass path to get up to the road and didn't think that it was really feasible. The reason for that being that it would be grass, it would be steep and it wouldn't be maintained, so we didn't think that that was a viable alternative. I met with the town engineer and town highway superintendent at a work session last week and discussed what we would do and we had proposed a boulevard for the entranceway, but the town highway superintendent had indicated that he would prefer to just have a 30 foot wide road as opposed to the boulevard with a median between it that would need to be maintained. So based on than meeting, we revised the road only in the sense that the verticals and the alignments and the steepness of the road were revised so we had reduced slopes. We didn't have a ten percent slope coming down at the entrance, we revised that to 9 percent and reduced the amount of grading required to get the road in, so the plan that you have shows the grading that would be required to put the road in and it's less than what the previous applications were.

MR. PETRO: Mark, the storm water detention basins to be offered for dedication to the Town of New Windsor we're taking those, amending them?

MR. EDSALL: That would be in line with the town's adopted policy on storm water management that would create a storm water improvement district here and those basins would be taken as dedications to the town, that's the policy that the, to be adopted.

MR. PETRO: Where is the outflow of those basins going?

MR. HIGGINS: Actually, I will, I brought two copies of the plans, I made some revisions today, I apologize not having them in time, but basically just made available today, but the plan I'm looking at and I brought one of each, what it shows is some information that we have gotten since this subdivision that we made to the town, it shows among other things the wetland locations that we had delineated by Robert Torgeson and these are federal jurisdictional wetlands, we'll have to get a jurisdictional determination from the Army Corps prior

to final approval. But one of the things it shows you can see this pipe, it's not labeled, but it's just to the left of the lands of Durbinski (phonetic), which is to the right of lot 1, there's a 48 inch reinforced concrete pipe there that crosses under, there's a road that comes off Toleman here.

MR. EDSALL: Do you remember the Blooming Grove Operating Company subdivision that has a large diameter culvert near the bottom of the road? That's the adjoining property.

MR. PETRO: Crosses there and goes where?

MR. BABCOCK: That's Lisa Lane.

MR. HIGGINS: Yes, that sounds familiar, it crosses under Lisa Lane and opens to a large gully, I believe kind of flows straight down passed lands of Durbinski, it's probably the rear yard of Durbinski, it's a very large gully.

MR. PETRO: I suggest that you do a little downstream investigation because when you have a public hearing for this application, you're going to have people in here and they're going to want to know and we're going to have to answer them, so might as well do it now.

MR. HIGGINS: The town's regulations with regards to storm water itself?

MR. EDSALL: Zero net increase so you'll be, unless you can demonstrate that down stream has adequate capacity and no need to attenuate the flow, you'll be holding back the peak.

MR. HIGGINS: One of the other things that I would point out if you notice the location of the wetlands on the plans, we still have room for the storm water management basin on the right here, on the left, however, is where the wetlands are. So we may lose that basin so what we're go to try to do is have our first flush in our detention on this one side and we need more, we will split off the flow and put a parcel maybe back here, but we haven't done the analysis.

MR. PETRO: It's not all going there, that whole site we have some going in the opposite direction over here?

MR. HIGGINS: All the road flow is going to come down here.

MR. PETRO: When you cross the cable utility easement, have you contacted AT&T?

MR. HIGGINS: No, we haven't.

MR. PETRO: Do you need permission to do it? You're crossing it with the road, Andy, should they contact AT&T to cross the easement, they're crossing it with a road?

MR. KRIEGER: Yes.

MR. PETRO: So we'd need a letter from them. Also, when you're creating lot number 21 number 22, going up the lane, I think I mentioned this last time, looks like there's probably a stretch of a corral or fence or something you may be creating a zoning problem there. Mike, do you see lots 21 in the rear and 20? He's right on the fence, right on top of it, basically.

MR. HIGGINS: You wanted ten foot off there? I apologize for that.

MR. PETRO: Also the name of the lane, you have to pick a different name because the highway or the fire inspector here, which one is telling me it's already in use, the fire, street name Palomino conflicts with the name in use already in the town, that will need to be changed.

MR. HIGGINS: Palomino does?

MR. PETRO: Yes.

MR. HIGGINS: We changed that to Trotter, don't know if that's acceptable.

MR. PETRO: Why is he reading that?

MR. EDSALL: Previous plan showed Palomino.

MR. PETRO: Sounds like everybody is right up to date, okay, Mark, what else do you have?

MR. EDSALL: It's real preliminary at this time, Dave is correct that we met with Henry and they have made some changes as per our request, so I think at this point, Dave is looking for some input from the board so they can proceed with the more detailed drawings, so if you, I guess if you have no objection to the conceptual layout, they can move forward.

MR. PETRO: The frontage, did we do anything with that with the zoning laws?

MR. EDSALL: No.

MR. PETRO: Do you have anything else to ask us?

MR. HIGGINS: As Mark said, what we're looking for, we'd like to go forward with further engineering plans, what I wanted to do is hopefully nail down the road location so that we can comfortably do the septic designs and the grading plan knowing that the road location is okay.

MR. PETRO: I, personally, I like this application from the start because of the size of your lots, you had made larger lots even before you were required to which is, which I think we all liked and appreciated, so I have no objection at all to the layout. I think making the topo work you have to do that with the engineer, your perc tests I don't have any clue, you have to get that done.

MR. HIGGINS: We have done preliminary soil testing for every one of the lots.

MR. PETRO: Need to find out about the downstream because that's going to be an important issue tonight at the public hearing, if you're not going, if you have a net zero increase, we understand that the person living down the road is not going to understand it,

wants to know why your water is going in their back yard. So come up with a couple answers, I guess, gentlemen, anything else at this time?

MR. LANDER: The driveway for lot 24, are we going to use that driveway that's existing on lot 25?

MR. HIGGINS: No, I think what we'd do is the driveway would probably cross the wetlands which we'd need a permit for, but would come across its own property onto Toleman Road.

MR. LANDER: Okay, so we'll have to show that because I think before we had said we were going to look into an easement to use the same driveway but now you're going to, you're crossing the wetlands with that driveway.

MR. HIGGINS: That's what we'd like to do is have driveways for each particular, because this one will be a farm and this could be single family residential home.

MR. PETRO: If you look at lot number 16 maybe 17 your driveway locations may or may not be a problem for sight distance on that tight radius, so again, that's going to be the highway department is going to tell you that, but I'd look at that while you're doing your layout.

MR. ARGENIO: Is that a cut coming up the road, the numbers are small, coming up around the curve bending back to the right, is that all through a cut there?

MR. HIGGINS: Up here?

MR. ARGENIO: Yes.

MR. HIGGINS: It's a fill on this side, on the left-hand side.

MR. ARGENIO: Continue up the road with your pen, what's that?

MR. HIGGINS: That's a cut. What we're looking to do is cut the knoll down and get the houses slightly

higher than the road as opposed to the houses up there being lower than the road.

MR. EDSALL: One of the things that we worked, Henry and I, with the applicant on is one of the scenarios of the development resulted in a fairly significant cut on the right side of the road as you were coming up the hill and we wanted to end up with more of a balance situation where we didn't have such a steep cut, so they raised or modified the location of the road and the cut and fill configuration such that we got more of a balance.

MR. PETRO: Anything else, gentlemen?

MR. ARGENIO: No.

MR. PETRO: Thank you.





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**TOWN OF NEW WINDSOR  
PLANNING BOARD  
REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 14 NOVEMBER 2001  
**DESCRIPTION:** THE APPLICATION PROPOSES THE SUBDIVISION OF THE 82.4 +/-  
ACRE PARCEL INTO 32 SINGLE-FAMILY RESIDENTIAL LOTS  
PLUS A HORSE FARM (EXISTING, TO REMAIN). THE PLAN WAS  
PREVIOUSLY REVIEWED AT THE 8 AUGUST 2001 PLANNING  
BOARD MEETING.

1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the "horse farm" are correct for the zone and uses.

The previous submittal was for a 32-lot single-family residential subdivision with loop road.

The plan is now 23-lot subdivision, with a single dead-end (cul-de-sac) road.

Both applications include an additional lot as a horse farm.

2. The applicant is before the Board to review the change in the conceptual layout of the subdivision. The appearance is for general discussion only. No action need be taken at this meeting.

Respectfully Submitted,

Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

FOX MEADOW SUBDIVISION (01-51)

Mr. David Higgins appeared before the board for this proposal.

MR. PETRO: This is for a 34 lot residential subdivision.

MR. EDSALL: Actually, it's less, it's 32 plus a farm.

MR. PETRO: This application proposes subdivision of 82.4 acres into 32 single family residential lots, plus a horse farm that's existing and to remain, it's already there. The plan was previously reviewed at the 8 August, 2001 planning board meeting. Again, folks, this is not the public hearing for this I'm sure we'll have a public hearing for this, so those notices will go out.

MR. EDSALL: It's 23 lots, I have a typo on the top.

MR. PETRO: Plus the farm.

MR. EDSALL: No, I'm sorry, they have split the last one, it's 25, I'm sorry, the horse farm was going to be kept as a single item.

MR. PETRO: Mark, I'm running out of lead, which one is it?

MR. HIGGINS: It's 25 lots, including the horse farm.

MR. PETRO: The horse farm is one of the lots is what you're saying?

MR. HIGGINS: Yes, 24 is the horse farm, 27 acres. David Higgins from Lanc and Tully Engineering. As you mentioned, we came in for a sketch plan review, I think it was two months ago. At that time, we presented a plan that had total of 33 lots and we were seeking an approval from the planning board to continue with our engineering. On that former plan, we had two proposed road accessways coming in off Toleman Road. There was an accessway coming over near the existing horse farm drive and coming up into the property and intersecting

with what we're calling Palomino Drive coming up through here and intersecting at a T intersection indicating a cul-de-sac here. Based on the board's approval at that time, we began doing engineering for each of the lots. At that time, there were 33 and we did soil testing throughout the site and unfortunately, the soil testing that we completed on this portion of the property didn't work out very well. So, it seemed that to put this length of road in without getting any development on either side of the road didn't seem to make sense. So what we did was we developed a plan where we'd come with a cul-de-sac up through the property, Palomino Drive, and ending at a cul-de-sac. We met with the town highway superintendent approximately a month ago to discuss this layout and get the town highway superintendent's feedback. Originally, we had planned a cul-de-sac off of this section to pick up some lots here, but according to the town highway superintendent, he didn't want to see a T intersection and he also did not like the cul-de-sac that we had shown on that plan. However, he did recommend that we could put in a cul-de-sac up in this portion of the property where the soils are very good as long as we avoid a stop intersection here. So we have provided a 150 foot center line radius to come up the proposed road. And the other revision we made was to widen then entry radius into the cul-de-sac so that the plow equipment would have an easier time of clearing the cul-de-sac. So we made that edge of pavement radius 50 feet as opposed to the standard 35 to accommodate the plowing equipment. We have also met with the town engineer, I believe it was last week to discuss this and I believe there were, I don't believe there were any issues with regard to this roadway. The maximum grade on it is ten percent and what we have come tonight to get some feedback from the planning board that this roadway lot layout is acceptable to the town, so we can proceed further with our engineering.

MR. PETRO: This layout here seems to be a little bit less involved with the horse farm, in other words, seems to me now that the horse farm just happens to be next to it and occupying one of the lots. The other plan had engineered I think the horse farm into part of the subdivision, correct?

MR. HIGGINS: I believe in that plan, the horse farm was going to have its own driveway access off of Toleman Road, yes. There was a proposed lot surrounding the entirety of the horse farm up along this side with the horse farm occupying this area in here and lots would, there'd be, the road would loop around and there'd be lots on both sides, I guess you could look at it that way.

MR. PETRO: Basically, you're just dividing the farm that the horse farm was on, not that that matters one way or the other. I kind of always liked the idea and it was pitched to me that it was a horse farm, upscale houses and larger houses. Now I see six or seven of the lots are down to one acre which was the minimum at the time and we don't have the 2 1/2 acre lots, we have, you have a couple of them because they happen to be on the radius probably.

MR. HIGGINS: These have remained relatively unchanged, these are the smallest of them but I think actually, most of the lots have gotten bigger, particularly these here. The reason that these lots have gotten bigger was to maintain separations between the areas where we got acceptable soils and where the wells for these lots were going to be proposed so I think actually the majority of the lots have gotten bigger. The ones that were the smallest I don't think really changed.

MR. PETRO: How are you going to cut and fill on the ten percent? I looked at the map with the highway superintendent, he was a little concerned with the ten percent grade. We understand you're making ten percent grade, some of the lots where the contours are very tight, are you going to have retaining walls, how are you going to do that and maintain the integrity of the land?

MR. HIGGINS: I think what we'd look to do just come off the edge of the road with a probably three foot or five foot shoulder, then come down to existing grade or up on a three on one slope.

MR. EDSALL: One on three.

MR. HIGGINS: One on three, and retaining walls for the roadway.

MR. PETRO: I would suggest this to you and I also I know that the highway superintendent has the same view, you need more detail, quite a bit more detail to satisfy him and I think also our engineer as to how you're going to accomplish some of what you're talking about. Conceptually, obviously, you're meeting all the requirements of the lots and I guess the radius is okay on the cul-de-sac. So I don't necessarily see anything wrong with the concept, actually you just have a lot more work to do to fine tune this plan. And I think that's as far as we're going to go tonight. You're going to have to meet with Mark, come up with some of his questions and answer them.

MR. HIGGINS: Definitely, the main thing that we were looking for, I understand the concern with the grading, we just haven't done a grading plan but before we got further into the engineering, we wanted to make sure that the cul-de-sac of this length we reduced from two entrances on Toleman to one, we wanted to get some feedback before we continue with any of the engineering.

MR. PETRO: I don't think 23 or 24 houses on the cul-de-sac is outrageous, I mean, at some point, it will become that, you like to see the road looped around but unless somebody disagrees, I don't think that's an outrageous number of houses. The problem with having it the way you have it if something happens on the hill going up and a car goes out of control on fire, an ambulance has to get to lot number 10, you've got a real problem. Correct?

MR. HIGGINS: Yes, if something blocked the road, yes, I mean, there would be some ways around that, you can put a--

MR. PETRO: Is there any way to put a, between maybe lot number say 19 and 20, a crash gate road down to somewhere else? I'm just thinking out loud, just look around, is there any other access point anywhere on the

site?

MR. HIGGINS: Right now, what we're proposing for lot 25 is to use the existing horse farm driveway, but also the horse farm will have a new driveway off Toleman Road, it may be possible to provide a crash gate entrance somewhere between the properties. Another alternative would be to make this a boulevard, but what that would do is make the road wider.

MR. PETRO: No, that's, I don't think that's the answer, there's not enough lots for a boulevard. I'd rather like to see something between 19 and 18, maybe a 20 foot wide easement between those two lots.

MR. LANDER: Then you're going to need an easement over lot 24.

MR. PETRO: To get to Toleman but if they can get to that point.

MR. LANDER: Then where?

MR. PETRO: Why don't you explore that idea, I'm not an engineer, I'm just coming up with an idea.

MR. HIGGINS: Then you'd have to create an easement for access, a dirt drive or grass drive?

MR. LANDER: Grass drive. But how wide is this roadway, 30 feet?

MR. HIGGINS: Yes, easement is 50, I believe the pavement shown is 30.

MR. PETRO: Mark, what do you have to say about that? We did it at Washington Green.

MR. EDSALL: Mike and I were just looking at some possible reservations of 50 foot strips to tie into adjoining properties, but there's really none that make any sense to tie into the entire property on the right side of the plan, south side is all developed to the east is the mobile home park which would be private roads, so there's really not a good place to loop it

around but we'll continue to look at that. The other couple items which I'm going to note so it gives him some ideas as they continue with the design of the project, where I got confused was the original discussions were that the whole horse farm which is lot 24 plus 25 is not going to be split. Now it is. One of the difficulties is your access for lot 25 overlaps with the continued drive for lot 24 which constitutes now a private road, in all likelihood, unless you create your access through the narrow strip, but then there are frontage issues. So we need to resolve that as well. Jim's point is very well taken on the fill because the maximum fill seems to be occurring in front of lot 19, so you're basically going to be filling up and what's now a fairly steep slope going onto lot 19 is going to get worse. So we'll need to have an overall grading plan so we cannot only understand how it affects the road but also how it affects the development of the lots.

MR. ARGENIO: I'm going to add something to that, Jim, I thought you were going here before, but you weren't, the steepness of that curve there is ten percent, is that the outer cusp of what we allow?

MR. EDSALL: Ten is the maximum permissible slope where you don't need a waiver. Anything above that, you need a waiver.

MR. ARGENIO: Coming down the road from the cul-de-sac making that left hand bend around there, I think what you just said, Mark, exacerbates my thought there should be some kind of guardrail there, some kind of wood rail or something because coming down that ten percent slope in a snow storm or ice, you can end up in the guy's living room on lot 20 or lot 19.

MR. HIGGINS: One possibility would be if we were to obtain a waiver to go over ten percent along some of the straightaways which would allow to us reduce the slope coming around the curves and would reduce cuts and fills along much of the roadway as well.

MR. EDSALL: Again, the highway super will not grant a waiver above ten percent, if that road is the sole

access to the lots. In other words, if you need a waiver and it was loop road and you wanted to go to 13 percent on one access, as long as the other is ten or less, he will usually grant it. But since this is the only access to these lots, I'm doubtful that he will grant you a waiver for over ten percent.

MR. ARGENIO: What's Ephiphany?

MR. EDSALL: You know what I'm talking about, that's a straight run. I see you're right because the curve in the road is roughly between stations 13 and 17 which a portion of it is as you're coming out of the one percent slope for the plateau this is not a constant ten but the inner portion from maybe 15 to 17 there's about 200 foot where you're getting into a ten percent slope and you're in the curve. So it's a little tricky.

MR. PETRO: Where does the proposed storm water quality management basin come out to?

MR. HIGGINS: Well, the natural drainage pattern right now everything comes down from here and runs generally in this direction. So what we attempted to do is maintain its existing drainage pattern and what we'd do with the storm water management basin is size the outlet or possibly a level spreader at the outlet of that to release the water at the same rate as pre-development conditions currently allow.

MR. PETRO: Where does it go?

MR. HIGGINS: I don't know offhand where it goes from there.

MR. EDSALL: That's all going to be--

MR. PETRO: Where is the outlet?

MR. HIGGINS: Right now, all the storm water runoff comes down here and comes off the property in this low region, it's like a bit of a--

MR. PETRO: So there's no defined area right now, just

goes in that general direction?

MR. HIGGINS: Right, we'll release it at no greater than the pre-development rate in that same general area.

MR. PETRO: So you're going to be releasing it in more of a defined area probably right in the lands of, I don't know how to say the names, it's going to be one of the lots and they're not going to be very happy, you have to come up with an idea for the outflow there.

MR. EDSALL: Jim, I think the discharge runs in a southerly direction and goes to wetlands and the box culvert of the Blooming Grove Operating subdivision which is just to the south so there's a fairly large drainage course running through there.

MR. PETRO: Easily fixed, but it's got to be shown.

MR. EDSALL: They're going to have to give us a storm water management report and deal with it in detail.

MR. PETRO: What's this area on the horse farm like a big square, looks like barbed wire, that's not a structure on it, big white area?

MR. HIGGINS: It's a horse paddock.

MR. PETRO: Because your property line is close to that, want to make sure we're not creating a variance problem there.

MR. HIGGINS: They have setbacks for paddocks.

MR. BABCOCK: How high is it?

MR. PETRO: I don't think it's very high, four or five feet.

MR. BABCOCK: Then it's ten foot.

MR. PETRO: You're obviously right on it, so it may be a variance problem, take a look at that.

November 14, 2001

21

MR. HIGGINS: We can probably move the property line in a bit.

MR. PETRO: Or move the fence. Is it one owner at this time?

MR. HIGGINS: Yes.

MR. PETRO: Ask him to put a little angle on the paddock. That's enough for me, I'm getting a headache. Meet with Mark, come up with some ideas.

MR. HIGGINS: Thank you.

RESULTS OF P.B. MEETING OF: November 14 2001

PROJECT: Fox Meadow Sub. P.B.# 01-51

**LEAD AGENCY:**

**NEGATIVE DEC:**

- 1. AUTHORIZE COORD LETTER: Y\_\_ N\_\_
- 2. TAKE LEAD AGENCY: Y\_\_ N\_\_

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_  
CARRIED: YES\_\_ NO\_\_

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_  
CARRIED: YES\_\_ NO\_\_

WAIVE PUBLIC HEARING: M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ WAIVED: Y\_\_ N\_\_

SCHEDULE P.H. Y\_\_ N\_\_

SEND TO O.C. PLANNING: Y\_\_

SEND TO DEPT. OF TRANSPORTATION: Y\_\_

REFER TO Z.B.A.: M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_

RETURN TO WORK SHOP: YES\_\_ NO\_\_

**APPROVAL:**

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ APPROVED: \_\_\_\_\_

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ APPROVED CONDITIONALLY: \_\_\_\_\_

NEED NEW PLANS: Y\_\_ N\_\_

**DISCUSSION/APPROVAL CONDITIONS:**

<i>Need more detail for roadway</i>
<i>Try to put easement for emergency entrance to Top of cul-de-sac.</i>
<i>Need over-all grading plan</i>
<i>Address outlet for drainage</i>



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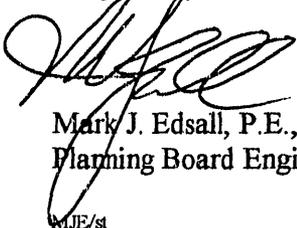
**TOWN OF NEW WINDSOR  
PLANNING BOARD  
REVIEW COMMENTS**

**PROJECT NAME:** FOX MEADOW ESTATES MAJOR SUBDIVISION  
**PROJECT LOCATION:** TOLEMAN ROAD  
SECTION 52 – BLOCK 1 – LOT 20  
**PROJECT NUMBER:** 01-51  
**DATE:** 8 AUGUST 2001  
**DESCRIPTION:** THE APPLICATION PROPOSES THE SUBDIVISION OF THE 82.4 +/-  
ACRE PARCEL INTO 32 SINGLE-FAMILY RESIDENTIAL LOTS  
PLUS A HORSE FARM (EXISTING, TO REMAIN). THE PLAN WAS  
REVIEWED ON A CONCEPT BASIS ONLY.

1. The property is located in the R-1 Zoning District of the Town. The bulk requirements indicated for the SFR use and the “horse farm” are correct for the zone and uses. The next plan submitted should include a complete bulk table (providing “proposed” values for each lot) to verify compliance of each lot to the zoning law. Once submitted, I will complete my review regarding the bulk compliance.
2. The general configuration of the roadways appears reasonable and the roads each have sections at the 10% maximum (limit) without waivers requested. Profiles have been provided for the roadways. Subsequent plans should include proposed grading (proposed contours) on the plan view.
3. The plan notes (conceptually) a stormwater water quality basin, to be dedicated to the Town. This will require the establishment of a District. Contact the Town Attorney.
4. Current plans are at 1” = 100 ft. scale. Preliminary plans must be at a more detailed scale.
5. The Planning Board may wish to authorize a Lead Agency coordination letter to begin the SEQRA review process. The applicant should submit eight (8) copies of the plans and full EAF to our office for this purpose.

6. A mandatory Public Hearing is required for this Major Subdivision. I do not believe sufficient information is available at this time to consider scheduling same.
7. Submittal of this application/plan to the Orange County Department of Health for Realty Subdivision will be required (after preliminary approval). Applications may also be required to the NYSDEC and ACOE.
8. The plan notes proposed Town road names. This will require review of the Fire Inspector.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW01-51-08Aug01.doc

FOX MEADOW SUBDIVISION (01-51)

Mr. David Higgins appeared before the board for this proposal.

MR. PETRO: This application proposes subdivision of 82.4 acre into 33 single family residential lots, plus a horse farm existing to remain. Plan was reviewed on a concept basis only.

MR. HIGGINS: Yes, what we have is an 82 plus or minus acre parcel on the east side off Toleman Road. What we're proposing to do is to subdivide existing property into 33 residential lots to be served by individual drilled wells and septic systems. The land currently is occupied by a single family residence, which is shown here on the plan and there are also several barns and stables where there currently are a few horses that are being taken care of. What we have done is we have proposed two road accesses onto Toleman Road leading up to an intersection and cul-de-sac that would come off that intersection. Right now, what we have done is the 33 lots I believe all comply with the zoning and we're still in the process of doing soil testing and fine tuning the design to get septic system areas and dwelling locations and well locations. But our main intention tonight was to just bring this conceptual development to the board and get feedback on the overall development scheme and the road locations and any concerns or recommendations that they might have.

MR. PETRO: Well, I'm going to start right off the bat, I want to give you a compliment which I haven't been doing all night in the size of the lots because we have been getting some real doozies in here, I realize it's one acre zoning without water and sewer but at least you have two acres lots and it's nice to see in this day and age where people are building bigger houses a little upscale instead of trying to cram every last house that you can and it's just nice to see.

MR. HIGGINS: Thank you. One thing that I left out was a large lot, lot 33 we intent to keep that as a horse farm, in fact, what they'll do is clean up the areas, probably remove some of the stables that are in a

little shotty condition and clean up the ones that are still would require a little built of renovation to improve, talk about putting a nice fence area along Toleman Road, it would look really nice when it was done.

MR. PETRO: Parcel number A, that's where the storm water basin's going to be?

MR. HIGGINS: That's where we plan on having it, yes.

MR. PETRO: And you're going to dedicate that to the town so the town can take care of it?

MR. HIGGINS: Yes and there's also a parcel B which is at the lowest point, the second access which we're calling Palomino Drive, I understand I had gotten a letter after we submitted these plans that Palomino Drive was a conflict with the town's existing highway system and we'll have to change the name. I don't know if the board has any suggestions or if they want us to come up with an alternate name, but down at the bottom of Palomino Drive is parcel B where we'd put a second flush basin for water treatment.

MR. PETRO: Do you have a copy of Mark's comments?

MR. HIGGINS: No, I don't.

MR. PETRO: I think we can authorize lead agency coordination letter, begin the SEQRA review. This applicant should submit 8 copies of the plans and full EAF to our office for this purpose.

MR. EDSALL: Dave, you can send that directly over to me and then I'll--

MR. HIGGINS: In addition to the regular, original copies that we sent?

MR. EDSALL: Yes, these go out to everyone for the coordination.

MR. PETRO: I know the scale is big on the map and the topo you say that it's correct or approximately

correct, some of the lots coming up on Palomino, are they going uphill?

MR. EDSALL: Yeah, profile on the second drawing which shows the roads, both roads are at the ten percent maximum, meaning that they're not requesting any waivers.

MR. PETRO: But the lots themselves, some of them look like they have a pretty strong topo as Jerry shows here lot number 18, are they going to be buildable with those type of topos, look at lot number 18 up on the top.

MR. ARGENIO: 18, 17.

MR. HIGGINS: Yes, I believe that they're given the topo that there should be areas to site a house and septic system, again, we're still doing soil testing out there and if we get good results and the topo is less than I believe the county will approve up to 20 percent slope, we intend again if the soil tests are adequate, we intend to use the areas for septic systems.

MR. PETRO: Keep in mind too where you set the house on one of these higher knobs off the roads, even the driveway is 12 percent maximum, you know, we like to keep it around ten percent but--

MR. HIGGINS: Would it be appropriate then to just show proposed grading for the lots where it seems topo would be difficult to work with.

MR. PETRO: I think so because if you can't put a driveway in.

MR. EDSALL: Comment 2 is requesting what you start doing your larger scale drawings that you actually show the grading for the roadways that's consistent with the profiles but then you can carry that back into, if it's part of the rough grading on to the lot then you can show where the drive was going, you can give us a driveway slope and we can tie everything together because we've had a couple subdivisions that it was

critical that it be determined up front because some of the lots were right on the threshold of being unbuildable so we'll find it out now.

MR. HIGGINS: I was going to ask you a question because I did look at the profiles and some of the sections do have considerable cuts or fills. My understanding, though, is that the town doesn't provide any waivers on the slope, I guess what I'm getting at to go to something like an 11 percent roadway slope would minimize the volumes of cuts and fills and reduce the amount of disturbance to the property. I don't know if that's something that the board considers or ten percent and that's set in stone.

MR. EDSALL: What you need to do is if you have alternate plans, to go set up a meeting with myself and the highway superintendent, ultimately, the highway superintendent is going to make a recommendation that's going to--

MR. PETRO: I don't think it's cut in stone, but we like to stick to that but we're open for review.

MR. EDSALL: I'll tell you since there's two accesses to the subdivision, he will not grant a waiver on both of them, if anything, he'd want to keep one ten percent or less and maybe consider a waiver on another one, so keep that in mind when you figure it out.

MR. HIGGINS: I was concerned about Trotter Lane, if we can to go something like 11 percent slope, I think it would make a large difference on the amount of grading but certainly I'll meet with you.

MR. EDSALL: If he goes up on one, he likes to bring the other one down because the problem is in the winter during poor weather conditions maintaining emergency access.

MR. PETRO: I think on lots 26, 28, 29 and 30 all the ones that face the farm, I'd like to see some, you might see some of this, some landscaping on the rear of the lots because you're going to have a horse farm and residential, I'd like to see some sort of barrier

August 8, 2001

48

between the residential and horse farm. Also on both entrances, it would be a good idea to come up with a little scheme down there. I'd like to see a little landscaping plan, if you can do that. But you're here for a conceptual nod, I like the idea of it, it's nice, nice that you're keeping the farm, not knocking it down. Any of the other members have any comments or information?

MR. ARGENIO: I agree.

MR. BRESNAN: It's a nice spot.

MR. PETRO: You have Mark's comments, you can get started and we'll see you whenever you're ready.

RESULTS OF P.B. MEETING OF: August 8, 2001

PROJECT: Fox Meadow Sub. P.B.# 01-51

**LEAD AGENCY:**

- 1. AUTHORIZE COORD LETTER: Y\_\_ N\_\_
- 2. TAKE LEAD AGENCY: Y\_\_ N\_\_

**NEGATIVE DEC:**

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_  
 CARRIED: YES\_\_ NO\_\_

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_  
 CARRIED: YES\_\_ NO\_\_

WAIVE PUBLIC HEARING: M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ WAIVED: Y\_\_ N\_\_

SCHEDULE P.H. Y\_\_ N\_\_

SEND TO O.C. PLANNING: Y\_\_

SEND TO DEPT. OF TRANSPORTATION: Y\_\_

REFER TO Z.B.A.: M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_

RETURN TO WORK SHOP: YES\_\_ NO\_\_

**APPROVAL:**

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ APPROVED: \_\_\_\_\_

M)\_\_\_ S)\_\_\_ VOTE: A\_\_ N\_\_ APPROVED CONDITIONALLY: \_\_\_\_\_

NEED NEW PLANS: Y\_\_ N\_\_

**DISCUSSION/APPROVAL CONDITIONS:**

Drainage District to be established with Town Atty.
Need S Plans and full EAF for coordination Letter
Meet w/ Hwy Dept. for slopes
Landscaping on rear of lots abutting the horse farm
" at both entrances
Need Landscaping plan



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553

## NEW WINDSOR PLANNING BOARD REVIEW FORM

TO: FIRE INSPECTOR, D.O.T., WATER, SEWER, HIGHWAY

**RECEIVED**

PLEASE RETURN COMPLETED FORM TO:

JUL 17 2001

MYRA MASON, SECRETARY FOR THE PLANNING BOARD

**N.W. HIGHWAY DEPT.**

PLANNING BOARD FILE NUMBER: 01-51

*Please return  
by 8/6/01*

DATE PLAN RECEIVED: \_\_\_\_\_

**RECEIVED**

JUL 16 2001

The maps and plans for the Site Approval \_\_\_\_\_

Subdivision \_\_\_\_\_ as submitted by

\_\_\_\_\_ for the building or subdivision of

\_\_\_\_\_ has been

reviewed by me and is approved \_\_\_\_\_,

disapproved  \_\_\_\_\_.

If disapproved, please list reason no comment

at this time need more

drainage details.

Albert Canty 7/24/01  
HIGHWAY SUPERINTENDENT DATE

\_\_\_\_\_  
WATER SUPERINTENDENT DATE

\_\_\_\_\_  
SANITARY SUPERINTENDENT DATE

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 07/17/2001

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 1-51  
NAME: PA2001 0597 FOX MEADOW ESTATES SUBDIVISION  
APPLICANT: TOLEMAN PARTNERS, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/16/2001	REC. CK. #6412	PAID		2775.00	
		TOTAL:	0.00	2775.00	-2775.00





McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

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Writer's E-mail Address:  
mje@mhepc.com

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

TOWN/VILLAGE OF: New Windsor P/B APP. NO.: 01-51

WORK SESSION DATE: 16 OCT 02 PROJECT: NEW      OLD X

REAPPEARANCE AT W/S REQUESTED: No RESUB. REQ'D: new plan

PROJECT NAME: fox meadow 5

REPRESENTATIVES PRESENT: Dave H

MUNICIPAL REPS PRESENT: BLDG INSP.      FIRE INSP. Bob  
ENGINEER X PLANNER       
P/B CHMN      OTHER     

ITEMS DISCUSSED:     

STND CHECKLIST:

PROJECT TYPE

APPROVAL BOX:     

DRAINAGE ✓

SITE PLAN

- working on super elevation, turn

DUMPSTER N/A

SPEC PERMIT

- also grading within ROW, start slope outside

SCREENING Y/A

L L CHG.

- adding guardrail. 4'-5' setback

LIGHTING \*

- treated wood - ok to HK.

(Streetlights) N/A

- 16-19 right dist.

LANDSCAPING N/A

SUBDIVISION

- note re adj. well

BLACKTOP N/A

OTHER

- add 2 4' @ culverts

ROADWAYS

→ street lights. P/S discuss where

PROJECT STATUS:

Myra ask HK for comment

ZBA Referral:      Y      N

when next plan submitted.

Ready For Meeting X Y      N

THEY NEED Prelim APP. TO GO

Recommended Mtg Date next

TO DOH

for Prelim App'l

- also need ?

INTER-OFFICE CORRESPONDENCE

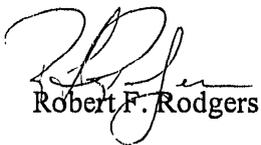
TO: Town Planning Board  
FROM: Town Fire Inspector  
SUBJECT: Fox Meadow Estates  
DATE: 21 October 2002

Planning Board Reference Number: PB-01-051  
Dated: 21 October 2002  
Fire Prevention Reference Number: FPS-02-063

A review of the above referenced subdivision plan was conducted on 21 October 2002.

This subdivision plan is acceptable.

Plans Dated: 18 October 2002, Rev. 2

  
Robert F. Rodgers



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

TO:  FIRE INSPECTOR,  WATER DEPT.,  
 SEWER DEPT.,  HIGHWAY DEPT.

P.B. FILE # 01-51 DATE RECEIVED: 10/21/02

PLEASE RETURN COMPLETED FORM TO MYRA BY: \_\_\_\_\_

THE MAPS AND/OR PLANS FOR:

Fox Meadow  
Applicant or Project Name

SITE PLAN , SUBDIVISION , LOT LINE CHANGE , SPECIAL PERMIT

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

APPROVED: Conceptually

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DISAPPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: [Signature] 10/22/02  
Reviewed by: \_\_\_\_\_ Date



McGOEY, HAUSER and EDSALL  
 CONSULTING ENGINEERS P.C.  
 RICHARD D. McGOEY, P.E. (NY & PA)  
 WILLIAM J. HAUSER, P.E. (NY & NJ)  
 MARK J. EDSALL, P.E. (NY, NJ & PA)  
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 e-mail: mhepa@mhepc.com

Writer's E-mail Address:  
 mje@mhepc.com

**PLANNING BOARD WORK SESSION  
 RECORD OF APPEARANCE**

TOWN / VILLAGE OF: New Windsor P/B APP. NO.: 01-51  
WORK SESSION DATE: 10-2-02 PROJECT: NEW OLD X  
REAPPEARANCE AT W/S REQUESTED: NO RESUB. REQ'D: new plans  
PROJECT NAME: Fox Meadow Estates.  
REPRESENTATIVES PRESENT: Dave Higgins

MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ FIRE INSP. Exp.  
 ENGINEER X PLANNER \_\_\_\_\_  
 P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED: \_\_\_\_\_

STND CHECKLIST: PROJECT TYPE  
 DRAINAGE \_\_\_\_\_ SITE PLAN  
 DUMPSTER \_\_\_\_\_ SPEC PERMIT  
 SCREENING \_\_\_\_\_ L L CHG.  
 LIGHTING \_\_\_\_\_ SUBDIVISION  
 (Streetlights) LANDSCAPING \_\_\_\_\_ OTHER  
 BLACKTOP \_\_\_\_\_  
 ROADWAYS \_\_\_\_\_

APPROVAL BOX: \_\_\_\_\_

- Stormwater comments from PSH rec'd  
- reviewed 8/28/02 comments  
- rec start stormwater district  
9/12 - email 30 mph wet clogging #  
- super elevate road.  
- s/w inside  
- add guide rail  
- dei 30' conc. curb lot 1+2  
- Pete Kean well.

PROJECT STATUS:  
 ZBA Referral: Y X N  
 Ready For Meeting X Y N  
 Recommended Mtg Date next avail



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

TO:  FIRE INSPECTOR,  WATER DEPT.,  
 SEWER DEPT.,  HIGHWAY DEPT.

RECEIVED  
TOWN OF NEW WINDSOR  
JUN 20 2002  
ENGINEER & PLANNING

P.B. FILE # 01-51 DATE RECEIVED \_\_\_\_\_

PLEASE RETURN COMPLETED FORM TO MYRA BY: 06-25-02

THE MAPS AND/OR PLANS FOR:

Fox Meadow Estates  
Applicant or Project Name

SITE PLAN , SUBDIVISION , LOT LINE CHANGE , SPECIAL PERMIT

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

APPROVED:

Notes: Septic systems  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DISAPPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: [Signature] 7-5-02  
Reviewed by: \_\_\_\_\_ Date

INTER-OFFICE CORRESPONDENCE

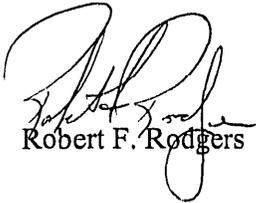
TO: Town Planning Board  
FROM: Town Fire Inspector  
SUBJECT: Fox Meadow Estates  
DATE: 22 June 2002

Planning Board Reference Number: PB-01-051  
Dated: 20 June 2002  
Fire Prevention Reference Number: FPS-02-045

A review of the above referenced subdivision plan was conducted on 22 June 2002.

The subdivision plan is acceptable.

Plans Dated: 19 June 2002

  
Robert F. Rodgers



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

TO:  FIRE INSPECTOR,  WATER DEPT.,  
 SEWER DEPT.,  HIGHWAY DEPT.

RECEIVED  
TOWN OF NEW WINDSOR  
JUN 20 2002  
ENGINEER & PLANNING

P.B. FILE # 01-51 DATE RECEIVED: \_\_\_\_\_

PLEASE RETURN COMPLETED FORM TO MYRA BY: 06-25-02

THE MAPS AND/OR PLANS FOR:

Fox Meadow Estates

Applicant or Project Name

SITE PLAN , SUBDIVISION , LOT LINE CHANGE , SPECIAL PERMIT

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

APPROVED:

Notes:

There is no town water in this area

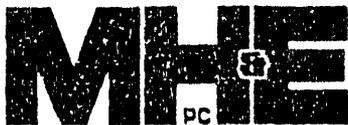
DISAPPROVED:

Notes:

Signature: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

Date: 6-21-02



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

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e-mail: mhempa@ptd.net

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

TOWN/VILLAGE OF: New Windsor P/B APP. NO.: 01-51  
WORK SESSION DATE: 19 June 02 PROJECT: NEW OLD X  
REAPPEARANCE AT W/S REQUESTED: later RESUB. REQ'D: new plans  
PROJECT NAME: Fox Meadow  
REPRESENTATIVES PRESENT: Carmine + Dave Higgins  
MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ FIRE INSP. Bob  
ENGINEER X PLANNER \_\_\_\_\_  
P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED:

- awaiting AT & T OK to cross road
- will add conduit for future
- Stormwater study Submittal needed
- SEEC - between public + final
- Detail P/I sheet needed
- add 911 addresses get plan to Bob

STND CHECKLIST:

- DRAINAGE \_\_\_\_\_
- DUMPSTER \_\_\_\_\_
- SCREENING \_\_\_\_\_
- LIGHTING \_\_\_\_\_  
(Streetlights)
- LANDSCAPING \_\_\_\_\_
- BLACKTOP \_\_\_\_\_
- ROADWAYS \_\_\_\_\_

NYCA

⇒ Set on 6/26 agenda to request P/I  
they will get plans by Fri



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553

## NEW WINDSOR PLANNING BOARD REVIEW FORM

RECEIVED

JAN 22 2002

N.W. HIGHWAY DEPT.

TO: FIRE INSPECTOR, D.O.T., WATER, SEWER, HIGHWAY

PLEASE RETURN COMPLETED FORM TO:

MYRA MASON, SECRETARY FOR THE PLANNING BOARD

PLANNING BOARD FILE NUMBER: 01-51

DATE PLAN RECEIVED: JAN 18 2002

*Please return  
by 1/22/02*

The maps and plans for the Site Approval \_\_\_\_\_

Subdivision \_\_\_\_\_ as submitted by

\_\_\_\_\_ for the building or subdivision of

\_\_\_\_\_ has been

reviewed by me and is approved \_\_\_\_\_,

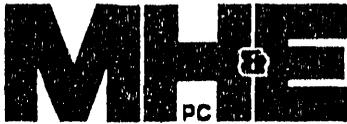
disapproved \_\_\_\_\_.

*If disapproved, please list reason. I will take no action  
at this time. The concept of the plan<sup>is</sup> acceptable but more  
detail will be required for 1. Drainage 2. Road Spec and  
the entrance & (shoulders along Tolman Rd. for  
entrance + exit as previously discussed with Mark Edsal*

*Henry J. Kuel* 1-23-02  
HIGHWAY SUPERINTENDENT DATE

\_\_\_\_\_  
WATER SUPERINTENDENT DATE

\_\_\_\_\_  
SANITARY SUPERINTENDENT DATE



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
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**PLANNING BOARD WORK SESSION**  
**RECORD OF APPEARANCE**

TOWN/VILLAGE OF: New Windsor P/B APP. NO.: 01 51  
WORK SESSION DATE: 16 Jan 2002 PROJECT: NEW OLD X  
REAPPEARANCE AT W/S REQUESTED: Not now RESUB. REQ'D: New plan.  
PROJECT NAME: Fox Meadow Estates  
REPRESENTATIVES PRESENT: Dave Higgins  
MUNICIPAL REPS PRESENT: BLDG INSP.            FIRE INSP. Rich  
ENGINEER X PLANNER             
P/B CHMN            OTHER Henry K.

ITEMS DISCUSSED: @ HHC re road - want or  
not want boulevard entrance  
- he came to PA & reviewed  
(Cava construction)  
Trotter Lane ?

STND CHECKLIST:  
DRAINAGE             
DUMPSTER             
SCREENING             
LIGHTING             
(Streetlights)  
LANDSCAPING             
BLACKTOP             
ROADWAYS           

⇒ Copies of plan to Highway & me only at this point  
Set for next weeks agenda.  
Sketch plan



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553

## NEW WINDSOR PLANNING BOARD REVIEW FORM

TO: FIRE INSPECTOR, D.O.T., WATER, SEWER, HIGHWAY

PLEASE RETURN COMPLETED FORM TO:

MYRA MASON, SECRETARY FOR THE PLANNING BOARD

PLANNING BOARD FILE NUMBER: 01-51

DATE PLAN RECEIVED: 11-13-01

The maps and plans for the Site Approval \_\_\_\_\_  
Subdivision \_\_\_\_\_ as submitted by  
\_\_\_\_\_ for the building or subdivision of  
\_\_\_\_\_ has been  
reviewed by me and is approved \_\_\_\_\_,  
disapproved \_\_\_\_\_.

If disapproved, please list reason \_\_\_\_\_

accepted in concept provide additional details  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Henry Powell 11/14/01  
HIGHWAY SUPERINTENDENT DATE

\_\_\_\_\_  
WATER SUPERINTENDENT DATE

\_\_\_\_\_  
SANITARY SUPERINTENDENT DATE



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

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(570) 296-2765  
e-mail: mhempa@ptd.net

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

TOWN/VILLAGE OF: New Windsor P/B APP. NO.: 01-51  
WORK SESSION DATE: 7 Nov 2001 PROJECT: NEW OLD X  
REAPPEARANCE AT W/S REQUESTED: Not now RESUB. REQ'D: new plan  
PROJECT NAME: Fox Meadow - Telemar  
REPRESENTATIVES PRESENT: Dave Higgins

MUNICIPAL REPS PRESENT: BLDG INSP.        FIRE INSP. Rich  
ENGINEER X PLANNER         
P/B CHMN        OTHER       

ITEMS DISCUSSED:

- > 100  $\phi$  pmt
- > 120  $\phi$  dedication
- revised profile -
- HK - OK'd gen layout
- Myra - we need HK review
- take 4A next mtg.
- add Xsect detail
- drainage later.

STND CHECKLIST:

- DRAINAGE
- DUMPSTER
- SCREENING
- LIGHTING
- (Streetlights)
- LANDSCAPING
- BLACKTOP
- ROADWAYS

Poss 11/14

Palomino name  
NG



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553

## NEW WINDSOR PLANNING BOARD REVIEW FORM

TO: FIRE INSPECTOR, D.O.T., WATER, SEWER, HIGHWAY

PLEASE RETURN COMPLETED FORM TO:

MYRA MASON, SECRETARY FOR THE PLANNING BOARD

PLANNING BOARD FILE NUMBER: 01-51

DATE PLAN RECEIVED: RECEIVED

JUL 16 2001

The maps and plans for the Site Approval \_\_\_\_\_

Subdivision \_\_\_\_\_ as submitted by \_\_\_\_\_

\_\_\_\_\_ for the building or subdivision of  
Fox Meadow Estates \_\_\_\_\_ has been

reviewed by me and is approved L

~~disapproved~~ \_\_\_\_\_

~~If disapproved, please list reason~~

There is no town water in this area.

\_\_\_\_\_  
HIGHWAY SUPERINTENDENT      DATE

Stew D. D.      7-19-01  
WATER SUPERINTENDENT      DATE

\_\_\_\_\_  
SANITARY SUPERINTENDENT      DATE

**INTER-OFFICE CORRESPONDENCE**

**TO: Town Planning Board**

**FROM: Town Fire Inspector**

**DATE: July 17, 2001**

**SUBJECT: Fox Meadow Estate**

**Planning Board Reference Number: PB-01-51**

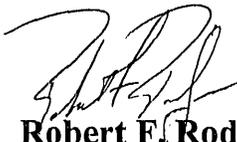
**Dated: 16 July 2001**

**Fire Prevention Reference Number: FPS-01-048**

**A review of the above referenced subject subdivision plan was conducted on 17 July 2001.**

**The subdivision plan is acceptable, however the street name Palomino, conflicts with the name in use in the Town of New Windsor and will need to be changed.**

**Plans Dated: 11 July 2001.**



**Robert F. Rodgers**



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E.  
WILLIAM J. HAUSER, P.E.  
MARK J. EDSALL, P.E.  
JAMES M. FARR, P.E.

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 Branch Office  
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(717) 296-2765

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

1-3

TOWN/VILLAGE OF New Windsor P/B # 01-51

WORK SESSION DATE: 20 JUNE 01 APPLICANT RESUB.  
REQUIRED:

REAPPEARANCE AT W/S REQUESTED: \_\_\_\_\_

PROJECT NAME: Gargiulo - (Tolman Partners)

PROJECT STATUS: NEW X OLD \_\_\_\_\_

REPRESENTATIVE PRESENT: Dave Higgins / Pete Sepico

MUNIC REPS PRESENT: BLDG INSP. \_\_\_\_\_  
FIRE INSP. \_\_\_\_\_  
ENGINEER X \_\_\_\_\_  
PLANNER \_\_\_\_\_  
P/B CHMN. \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_

ITEMS TO BE ADDRESSED ON RESUBMITTAL:

- 29 lot Tolman Road Sub <sup>in just part</sup> CHGE on left
- R-1?
- Lot 33 use lb
- 2 access roads both 10%
- bulk table
- EAF - full - (SEQRA)
- basin
- drainage district
- 911 for prelim

CLOSING STATUS

- Set for agenda
- possible agenda item 7/25
- Discussion item for agenda
- ZBA referral on agenda

pbwsform 10MJE98

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (914) 563-4615  
Fax: (914) 563-4693

## PLANNING BOARD APPLICATION

### TYPE OF APPLICATION (check appropriate item):

Subdivision  Lot Line Change  Site Plan  Special Permit

Tax Map Designation: Sec. 52 Block 1 Lot 20

1. Name of Project SUBDIVISION FOR FOX MEADOW ESTATES

2. Owner of Record TOLEMAN PARTNERS, LLC Phone 914-663-8633

Address: 133 S. MACQUESTEN PKWY, MT. VERNON, NY 10550  
(Street Name & Number) (Post Office) (State) (Zip)

3. Name of Applicant TOLEMAN PARTNERS, LLC Phone 914-663-8633

Address: 133 S. MACQUESTEN PKWY, MT. VERNON, NY 10550  
(Street Name & Number) (Post Office) (State) (Zip)

4. Person Preparing Plan LANK & TULLY ENGINEERING PC Phone 845-294-3700

Address: P.O. BOX 687, ROUTE 207 GOSHEN, NY 10924  
(Street Name & Number) (Post Office) (State) (Zip)

5. Attorney N/A Phone \_\_\_\_\_

Address \_\_\_\_\_  
(Street Name & Number) (Post Office) (State) (Zip)

6. Person to be notified to appear at Planning Board meeting:

DAVID HIGGINS, PE 845-294-3700  
(Name) (Phone)

7. Project Location:

On the EAST side of TOLEMAN ROAD 0 feet  
(Direction) (Street) (No.)  
ACROSS FROM OF LITTLE BROOK COURT  
(Direction) (Street)

8. Project Data: Acreage 82.4 ± Zone R-1 School Dist. WASHINGTONVILLE CENTRAL

9. Is this property within an Agricultural District containing a farm operation or within 500 feet of a farm operation located in an Agricultural District? Yes X No \_\_\_\_\_

\*This information can be verified in the Assessor's Office.

\*If you answer yes to question 9, please complete the attached Agricultural Data Statement.

10. Description of Project: (Use, Size, Number of Lots, etc.) SUBDIVISION OF 82<sup>1</sup> ACRE PARCEL INTO 33<sup>25</sup> RESIDENTIAL (SINGLE FAMILY DETACHED) LOTS WITH ONE LOT TO REMAIN ACTIVE AS A HORSE FARM.

11. Has the Zoning Board of Appeals Granted any Variances for this property? yes \_\_\_\_\_ no X

12. Has a Special Permit previously been granted for this property? yes \_\_\_\_\_ no X

ACKNOWLEDGMENT:

IF THIS ACKNOWLEDGMENT IS COMPLETED BY ANYONE OTHER THAN THE PROPERTY OWNER, A SEPARATE NOTARIZED STATEMENT OR PROXY STATEMENT FROM THE OWNER MUST BE SUBMITTED, AT THE TIME OF APPLICATION, AUTHORIZING THIS APPLICATION.

STATE OF NEW YORK)

SS.:

COUNTY OF ORANGE)

THE UNDERSIGNED APPLICANT, BEING DULY SWORN, DEPOSES AND STATES THAT THE INFORMATION, STATEMENTS AND REPRESENTATIONS CONTAINED IN THIS APPLICATION AND SUPPORTING DOCUMENTS AND DRAWINGS ARE TRUE AND ACCURATE TO THE BEST OF HIS/HER KNOWLEDGE AND/OR BELIEF. THE APPLICANT FURTHER ACKNOWLEDGES RESPONSIBILITY TO THE TOWN FOR ALL FEES AND COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

**GRACE M. SHAW**  
Notary Public State of New York  
No. 015H5050941  
Qualified in Westchester County  
Commission Expires 12/23 2001

SWORN BEFORE ME THIS \_\_\_\_\_

12<sup>th</sup> DAY OF July 192001

Peter Serrica member  
APPLICANT'S SIGNATURE

Grace M. Shaw  
NOTARY PUBLIC

Peter Serrica  
Please Print Applicant's Name as Signed

\*\*\*\*\*

TOWN USE ONLY: RECEIVED

JUL 16 2001  
DATE APPLICATION RECEIVED

01-51  
APPLICATION NUMBER

APPLICANT/OWNER PROXY STATEMENT  
(for professional representation)

for submittal to the:  
TOWN OF NEW WINDSOR PLANNING BOARD

Peter Seppico, deposes and says that he resides  
(OWNER)

at 12 Linda Court. in the County of N.Y.  
(OWNER'S ADDRESS)

and State of \_\_\_\_\_ and that he is the owner of property tax map

(Sec. \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_)  
designation number (Sec. 52 Block 1 Lot 20) which is the premises described in

the foregoing application and that he authorizes:

LANC & TULLY ENGINEERING AND SURVEYING  
(Applicant Name & Address, if different from owner)

Po Box 687 Route 207 Goshen, NY 10924  
(Name & Address of Professional Representative of Owner and/or Applicant)

to make the foregoing application as described therein.

Date: 7/16/01

[Signature]  
Witness' Signature

[Signature]  
Owner's Signature

\_\_\_\_\_  
Applicant's Signature if different than owner

\_\_\_\_\_  
Representative's Signature

**THIS FORM CANNOT BE WITNESSED BY THE PERSON OR REPRESENTATIVE OF THE COMPANY WHO IS BEING AUTHORIZED TO REPRESENT THE APPLICANT AND/OR OWNER AT THE MEETINGS.**

Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#668-2001**

07/17/2001

01-51 Application Fee  
Cava Construction, Inc.

Received \$ 100.00 for Planning Board Fees on 07/17/2001. Thank you for stopping  
by the Town Clerk's office.

As always, it is our pleasure to serve you.

Deborah Green  
Town Clerk

APPLICANT/OWNER PROXY STATEMENT  
(for professional representation)

for submittal to the:  
TOWN OF NEW WINDSOR PLANNING BOARD

PETER SERPICO, deposes and says that he resides  
(OWNER)

at 12 LINDA COURT in the County of Rockland  
(OWNER'S ADDRESS)

and State of N.Y. and that he is the owner of property tax map

(Sec. \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_)

designation number (Sec. 52 Block 1 Lot 20) which is the premises described in

the foregoing application and that he authorizes:

LANC & TULLY ENGINEERING AND SURVEYING, P.C.

(Applicant Name & Address, if different from owner)

P.O. Box 687 ROUTE 207 GOSHEN, NY 10924

(Name & Address of Professional Representative of Owner and/or Applicant)

to make the foregoing application as described therein.

Date: 7/12/01

Peter Serpico MEMBER  
Owner's Signature

\_\_\_\_\_  
Witness' Signature

\_\_\_\_\_  
Applicant's Signature if different than owner

\_\_\_\_\_  
Representative's Signature

**THIS FORM CANNOT BE WITNESSED BY THE PERSON OR REPRESENTATIVE OF THE COMPANY WHO IS BEING AUTHORIZED TO REPRESENT THE APPLICANT AND/OR OWNER AT THE MEETINGS.**

RECEIVED

JUL 16 2001

01-51

**TOWN OF NEW WINDSOR PLANNING BOARD  
SUBDIVISION/LOT LINE CHANGE CHECKLIST**

The following checklist items shall be incorporated on the Subdivision Plan prior to consideration for being placed on the Planning Board Agenda:

1. ✓ Name and address of Applicant.
  - \* 2. ✓ Name and address of Owner.
  3. ✓ Subdivision name and location.
  4. ✓ Provide 4" wide X 2" high box **(IN THE LOWEST RIGHT CORNER OF THE PLAN)** for use by Planning Board in affixing Stamp of Approval. **(ON ALL PAGES OF SUBDIVISION PLAN)**
- SAMPLE:** 
5. ✓ Tax Map Data (Section, Block & Lot).
  6. ✓ Location Map at a scale of 1" = 2,000 ft.
  7. ✓ Zoning table showing what is required in the particular zone and what applicant is proposing.
  8. ✓ Show zoning boundary if any portion of proposed subdivision is within or adjacent to a different zone.
  9. ✓ Date of plat preparation and/or date of any plat revisions.
  10. ✓ Scale the plat is drawn to and North arrow.
  11. ✓ Designation (in title) if submitted as (sketch) plan, preliminary plan or final plan.
  12. N/A Surveyor's certificate. *N/A FOR SKETCH PLAN*
  13. N/A Surveyor's seal and signature. *N/A FOR SKETCH PLAN*
  14. ✓ Name of adjoining owners.
  15. ✓ Wetlands and 100 foot buffer zone with an appropriate note regarding DEC requirements.
  - \* 16. ✓ Flood land boundaries. *NONE WITHIN SITE*
  17. ✓ A note stating that the septic system for each lot is to be designed by a licensed professional before a building permit can be issued.
  18. N/A Final metes and bounds. *N/A FOR SKETCH PLAN*

19. ✓ Name and width of adjacent streets; the road boundary is to be a minimum of 25 ft. from the physical center line of the street.
20. ✓ Include existing or proposed easements.
21. ✓ Right-of-way widths.
22. ✓ ~~Road profile~~ and typical section (minimum traveled surface, excluding shoulders, is to be 16 ft. wide).
23. ✓ Lot area (in square feet for each lot less than 2 acres). *APPROXIMATE ACREAGE FOR SKETCH PLAN*
24. ✓ Number the lots including residual lot.
25. ✓ Show any existing waterways.
- \*26. N/A A note stating a road (or any other type) maintenance agreement is to be filed in the Town Clerk's Office and County Clerk's Office.
27. N/A Applicable note pertaining to owners review and concurrence with plat together with owners signature.
28. N/A Show any existing or proposed improvements, i.e., drainage systems, water lines, sewer lines, etc. (including location, size and depths).
29. N/A Show all existing houses, accessory structures, existing wells and septic systems within 200 ft. of the parcel to be subdivided.
30. N/A Show all and proposed on-site A septic system and well locations; with percolation and deep test locations and information, including date of test and name of professional who performed test.
31. N/A Provide A septic system design notes as required by the Town of New Windsor.
32. ✓ Show existing grade by contour (2 ft. interval preferred) and indicate source of contour data.
33. ✓ Indicate percentage and direction of grade.
34. ✓ Indicate any reference to previous, i.e., file map date, file map number and previous lot number.
35. N/A Indicate location of street or area lighting (if required).

REFERRING TO QUESTION 9 ON THE APPLICATION FORM, IS THIS PROPERTY WITHIN AN AGRICULTURAL DISTRICT CONTAINING A FARM OPERATION OR WITHIN 500 FEET OF A FARM OPERATION LOCATED IN AN AGRICULTURAL DISTRICT, PLEASE NOTE THE FOLLOWING:

54.  Referral to Orange County Planning Dept. is required for all applicants filing AD Statement.

55.  A disclosure Statement, in the form set below, must be inscribed on all site plan maps prior to the affixing of a stamp of approval, whether or not the Planning Board specifically requires such a statement as a condition of approval.

A Prior to the sale, lease, purchase, or exchange of property on this site which is wholly or partially within or immediately adjacent to or within 500 feet of a farm operation, the purchaser or leaser shall be notified of such farm operation with a copy of the following notification.

It is the policy of this State and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district or within 500 feet of such a district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors.

This list is provided as a guide only and is for the convenience of the Applicant. The Town of New Windsor Planning Board may require additional notes or revisions prior to granting approval.

***PREPARER'S ACKNOWLEDGMENT:***

THE PLAT FOR THE PROPOSED SITE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THIS CHECKLIST AND THE TOWN OF NEW WINDSOR ORDINANCES, TO THE BEST OF MY KNOWLEDGE.

BY: Dail Hiji 7/13/01  
Licensed Professional Date

RECEIVED

JUL 16 2001

# PLANNING BOARD APPLICATION SUBMITTAL CHECKLIST

The following items are to be returned to the Planning Board Secretary, complete as a package, to make application to appear before the Planning Board:

- |  | <u>CHECK OFF</u>   |
|--|--|
| 1. Completed Page 1 and 2 of Application form.   | <input checked="" type="checkbox"/>  |
| 2. Agricultural Data Statement (If you answer yes to #9 on application)  | <i>Please See Cover Letter</i>   |
| 3. Applicant/Owner Proxy Statement ( <b>MUST HAVE</b> ).   | <input checked="" type="checkbox"/>  |
| 4. a. Applicable completed A Check List for subdivision/L.L. Chg. or Site Plan                                     | <input checked="" type="checkbox"/>  |
| b. Approval box on all sheets of plan as described in #4 of Subdivision Check List and #2 of Site Plan Check List. | <input checked="" type="checkbox"/>  |
| 5. Short Form EAF (Unless instructed to prepare long form).  | <i>(LONG EAF FORM)<br/>PART 1 COMPLETED</i><br><input checked="" type="checkbox"/> |
| 6. Flood Hazard Area Development Application.  | <u>N/A</u>   |
| 7. <b>SEPARATE CHECKS AS FOLLOWS:</b> (Choose appropriate category for your project)                               |  |

**SITE PLANS: (INCLUDING SPECIAL PERMIT)**

Two Separate Checks: (One check for application fee and separate check for escrow amount)

Application fee.....	\$100.00	
Escrow (Unless other amount specified at workshop) \$750.00 (Additional escrow due for multi-family dwellings)	\$ _____	

**SUBDIVISIONS:**

Two Separate Checks: (One check for application fee and separate check for escrow amount)

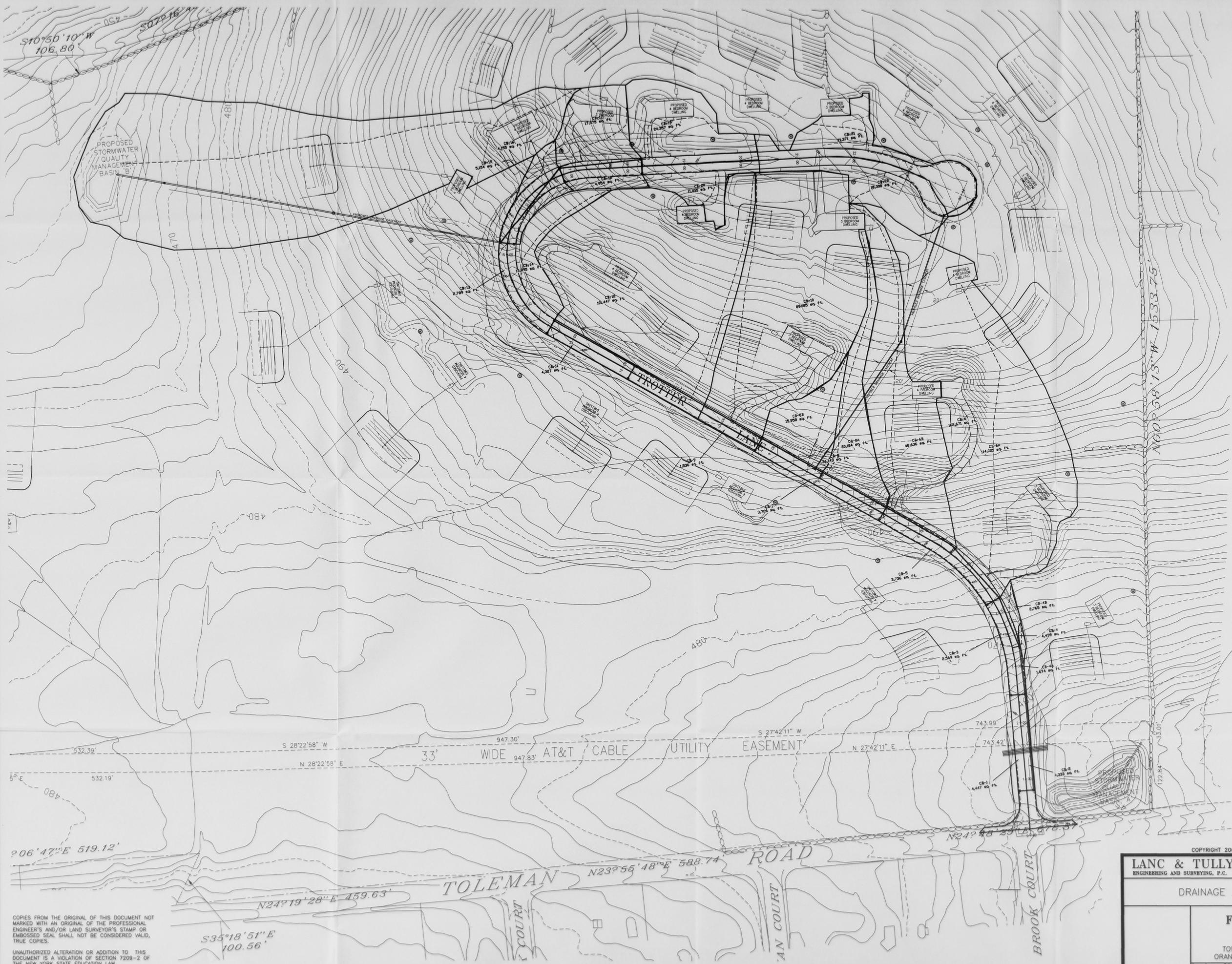
Application Fee...(minor subdivision only).....	\$ 50.00	
Application Fee...(major subdivision only).....	\$100.00	<u>\$100</u>
<b>Escrow:</b>		
<b>Residential:</b> \$150.00 each - for each of first 4 lots \$ 75.00 for each additional lot -	Total: \$ <u>2,775</u>	<u>\$2,775</u>
<b>Commercial:</b> \$400.00 each - for each of first 4 lots \$200.00 for each additional lot -	Total: \$ _____	

**LOT LINE CHANGE:**

Two Separate Checks: (One check for application fee and separate check for escrow amount)

Application fee.....	\$50.00	
Escrow (Unless other amount specified at workshop). ....	\$150.00.....\$ _____	

**PLEASE NOTE: ADDITIONAL FEES DUE UPON COMPLETION OF PLANNING BOARD REVIEW.**

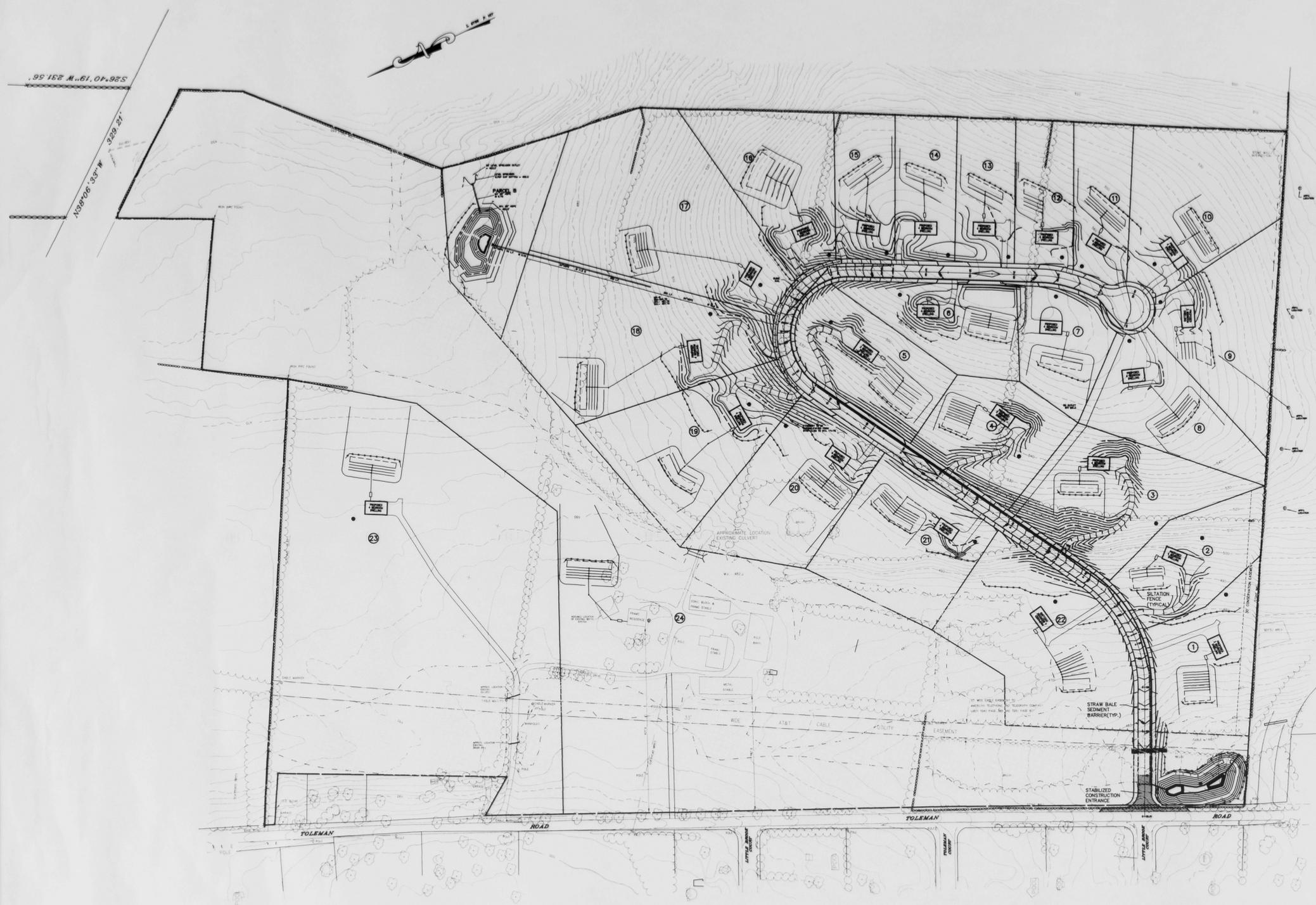


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<b>LANC &amp; TULLY</b> ENGINEERING AND SURVEYING, P.C.		P.O. Box 487, Rt. 207 Goshen, N.Y. 10924 (845) 294-3700	
DRAINAGE AREA MAP		Date: AUGUST 19, 2002	
<b>FOX MEADOW ESTATES</b>		CAD File: DRAINAGE-MAP.DWG	
TOWN OF NEW WINDSOR ORANGE COUNTY, NEW YORK		Sheet No.: 1 OF 1	
Drawn By: DDI	Checked By:	Scale: 1" = 60'	Sheet No.: 52 - 1 - 20
		Drawing No.: A-01 - 043 - 00	



**LEGEND**

-  STABILIZED CONSTRUCTION ENTRANCE
-  STRAW BALE SEDIMENT BARRIER (TYPICAL AT ALL CATCH BASINS)
-  SILTATION FENCE



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THIS SHEET NOT FOR REVIEW OR APPROVAL BY THE ORANGE COUNTY DEPARTMENT OF HEALTH

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**LANC & TULLY**  
ENGINEERING AND SURVEYING, P.C.

P.O. Box 687, Rt. 207  
Goshen, N.Y. 10824  
(845) 294-3700

APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
FEB 18 2005  
*Sam R. [Signature]*

**EROSION CONTROL PLAN**

**FOX MEADOW ESTATES**  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK

Date: APRIL 23, 2004  
Revision: AUGUST 31, 2004

Drawn By: DEH  
Checked By:  
Scale: 1" = 50'  
Tax Map No.: 02 - 1 - 20  
Drawing No.: A- 03 - 0060 - 01

Sheet No.: 13 OF 13  
CAP File: OCHD.DWG



LOCATION PLAN  
1 INCH = 2000 FEET

NOTES:

- TOTAL ACREAGE: 82.432± ACRES
- ZONING DISTRICT: R-1 (RURAL RESIDENTIAL)
- TOTAL NUMBER OF LOTS PROPOSED: 24
- TOPOGRAPHY SHOWN TAKEN FROM A PLAN ENTITLED "PLAN FOR MEDALLION FARMS", DATED JANUARY 4, 1990 AS PREPARED BY GREVAS & HILDRETH LAND SURVEYORS, P.C.
- WETLAND AREAS SHOWN BASED UPON ACTUAL FIELD DELINEATION BY ROBERT TORGENSEN, L.A. ON AUGUST 3, 2004. A LETTER OF JURISDICTIONAL DETERMINATION OF THE WETLAND BOUNDARIES WAS ISSUED BY THE ARMY CORPS OF ENGINEERS.
- ALL SANITARY SEWAGE DISPOSAL SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF HEALTH STANDARDS AND THE PROVISIONS OF THE PUBLIC HEALTH LAW.
- ALL SANITARY SEWAGE DISPOSAL SYSTEMS SHALL BE DESIGNED BY A NEW YORK STATE LICENSED DESIGN PROFESSIONAL AND APPROVED BY THE TOWN OF NEW WINDSOR BUILDING INSPECTOR PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. THE SYSTEM SHALL BE INSPECTED DURING CONSTRUCTION AND CERTIFIED AS TO THE CONFORMANCE TO DESIGN BY THE DESIGN PROFESSIONAL PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- PRIOR TO THE SALE, LEASE, PURCHASE, OR EXCHANGE OF PROPERTY ON THIS SITE WHICH IS WHOLLY OR PARTIALLY WITHIN OR IMMEDIATELY ADJACENT TO OR WITHIN OR IMMEDIATELY ADJACENT TO OR WITHIN 500 FEET OF A FARM OPERATION, THE PURCHASER OR LEASOR SHALL BE NOTIFIED OF SUCH FARM OPERATION WITH A COPY OF THE FOLLOWING NOTIFICATION:  
  
"IT IS THE POLICY OF THIS STATE AND THIS COMMUNITY TO CONSERVE, PROTECT, AND ENCOURAGE THE DEVELOPMENT AND IMPROVEMENT OF AGRICULTURAL LAND FOR THE PRODUCTION OF FOOD AND OTHER PRODUCTS, AND ALSO FOR ITS NATURAL AND ECOLOGICAL VALUE. THIS NOTICE IS TO INFORM PROSPECTIVE RESIDENTS THAT THE PROPERTY THEY ARE ABOUT TO ACQUIRE LIES PARTIALLY OR WHOLLY WITHIN AN AGRICULTURAL DISTRICT OR WITHIN 500 FEET OF SUCH DISTRICT AND THAT FARMING ACTIVITIES OCCUR WITHIN THE DISTRICT. SUCH FARMING ACTIVITIES MAY INCLUDE, BUT NOT BE LIMITED TO, ACTIVITIES THAT CAUSE NOISE, DUST, OR ODORS."
- THIS SURVEY IS SUBJECT TO ANY FINDINGS OF A TITLE SEARCH.
- SUBSURFACE STRUCTURES AND UTILITIES NOT VISIBLE AT THE TIME OF SURVEY HAVE NOT BEEN SHOWN.
- NO DISTURBANCE OF ANY KIND SHALL BE PERMITTED WITHIN THE CONSERVATION EASEMENT AREA SHOWN ON LOTS 1 AND 2.
- INDIVIDUAL WELLS AND SEWAGE TREATMENT SYSTEMS SHALL NO LONGER BE USED FOR HOUSEHOLD DOMESTIC PURPOSES WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN ONE YEAR OF ITS AVAILABILITY.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO FIVE YEARS. TIME EXTENSION FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON DEVELOPMENT FACTS AND THE HEALTH SUBDIVISION REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 62 DAYS OF THE LAST DATE OF FINAL PLAN APPROVAL BY THE TOWN PLANNING BOARD.

TABLE OF ZONING REQUIREMENTS  
TOWN OF NEW WINDSOR R-1 DISTRICT\*  
(RURAL RESIDENTIAL)

	MINIMUM	REQUIRED	REQUIRED **
LOT AREA		43,560 SQ. FT.	20 ACRES
LOT WIDTH		125 FT.	200 FT.
FRONT YARD		45 FT.	100 FT.
ONE SIDE YARD/BOTH		20/40 FT.	50/100 FT.
REAR YARD		50 FT.	50 FT.
STREET FRONTAGE		70 FT.	50 FT.
LIVABLE FLOOR AREA		1,200 SQ. FT.	
<b>MAXIMUM</b>		<b>ALLOWED</b>	
DEVELOPMENT COVERAGE		10%	10%
BUILDING HEIGHT		35 FT.	50 FT.

\* ZONING REQUIREMENTS AT THE TIME OF INITIAL APPLICATION TO THE TOWN OF NEW WINDSOR PLANNING BOARD  
 \*\* EXISTING HORSE FARM ON PROPOSED LOT 24 SHALL REMAIN IN USE AS SUCH. THIS LOT SHALL COMPLY WITH THE BULK REGULATIONS INDICATED.

RECORD OWNER:  
 FOX MEADOW ESTATES, LLC.  
 426 TOLEMAN ROAD  
 NEW WINDSOR, NEW YORK 12553  
 L 11081 P. 1793  
 52-1-20  
 AREA:  
 82.432± AC.  
 ORANGE COUNTY DEPARTMENT OF HEALTH  
 DIVISION OF ENVIRONMENTAL HEALTH  
 1100 N. STATE ST.  
 ALBANY, N.Y. 12207  
 FEB 18 2005  
 ASSISTANT COMMISSIONER  
 [Signature]

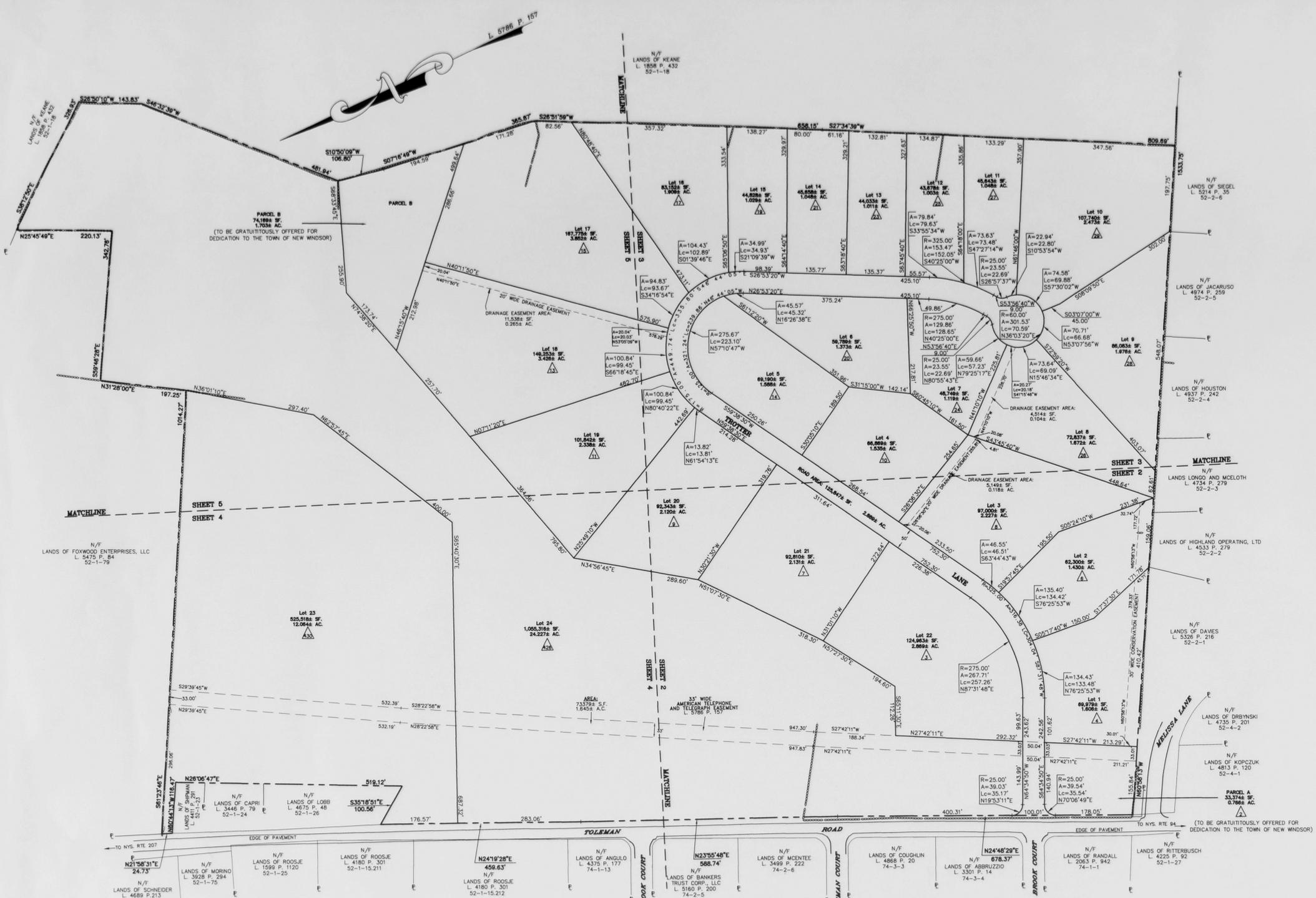
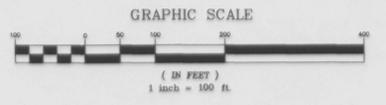
TABLE OF SIGHT DISTANCES

	LEFT	RIGHT
TROTTER LANE	560'±	1000'±
LOT 23	1000'±	2000'±
LOT 24	800'±	500'±
LOT 16	500'±	200'±
LOT 17	250'±	200'±
LOT 18	250'±	600'±
LOT 19	250'±	500'±

\* INDICATES THAT MINOR GRADING IS REQUIRED TO PROVIDE SIGHT DISTANCE SHOWN

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY TO THE PARTIES OF INTEREST LISTED BELOW THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON AUGUST 14, 2002.  
 FOX MEADOW ESTATES, LLC.  
 TOWN OF NEW WINDSOR  
 ROONEY E. KNOWLTON, L.S.  
 N.Y. LICENSE NO. 90276



LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- BUILDING SETBACK LINE
- 911 ADDRESS

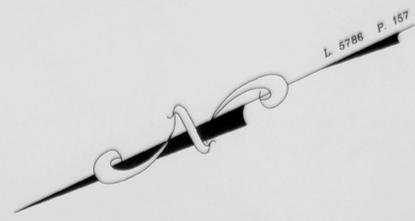
DRAWING INDEX:

- SHEET 1: SUBDIVISION PLAN
- SHEET 2: GRADING & UTILITY PLAN
- SHEET 3: GRADING & UTILITY PLAN
- SHEET 4: GRADING & UTILITY PLAN
- SHEET 5: GRADING & UTILITY PLAN
- SHEET 6: ROAD & DRAINAGE PROFILES (STA 0+00 - STA 14+50)
- SHEET 7: ROAD & DRAINAGE PROFILES (STA 12+50 - STA 24+25)
- SHEET 8: DRAINAGE PROFILES
- SHEET 9: SEWAGE DISPOSAL SYSTEM DESIGN DETAILS
- SHEET 10: SOIL TEST RESULTS AND SEPTIC SYSTEM DESIGN DATA
- SHEET 11: CONSTRUCTION DETAILS
- SHEET 12: STORMWATER MANAGEMENT FACILITIES
- SHEET 13: EROSION CONTROL PLAN

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LANC & TULLY  
 ENGINEERING AND SURVEYING, P.C.  
 P.O. Box 887, Rt. 207  
 Goshen, N.Y. 10954  
 (845) 294-3700  
 SUBDIVISION PLAN  
 FOX MEADOW ESTATES  
 TOWN OF NEW WINDSOR  
 ORANGE COUNTY, NEW YORK  
 SHEET NO. 1 OF 13  
 DATE: JUNE 19, 2002  
 REVISIONS:  
 AUGUST 14, 2002  
 OCTOBER 18, 2002  
 FEBRUARY 5, 2003  
 JULY 25, 2003  
 OCTOBER 27, 2003  
 DECEMBER 17, 2003  
 MARCH 5, 2004  
 APRIL 23, 2004  
 AUGUST 31, 2004  
 DRAWN BY: DCB  
 CHECKED BY: [Signature]  
 SCALE: 1" = 100'  
 TAX MAP NO.: 52-1-20  
 SHEET NO.: A-03-0080-01



SHEET 3  
SHEET 2

SHEET 2  
SHEET 4

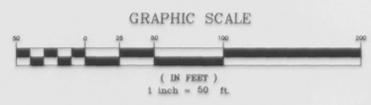
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**LEGEND**

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- BUILDING SETBACK LINE
- 911 ADDRESS
- EXISTING MAJOR TOPOGRAPHIC CONTOUR
- EXISTING MINOR TOPOGRAPHIC CONTOUR
- PROPOSED MAJOR TOPOGRAPHIC CONTOUR
- EXISTING TOPOGRAPHIC SPOT ELEVATION
- EXISTING STONE WALL
- EXISTING TREELINE
- EXISTING VEGETATION
- FEDERAL JURISDICTIONAL WETLANDS
- EXISTING WELL
- PROPOSED WELL
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAINAGE
- PROPOSED DIVERSION SWALE
- PROPOSED CURTAIN DRAIN
- SOIL PERCOLATION TEST
- DEEP SOIL TEST
- PROPOSED FOOTING DRAIN
- PROPOSED ROOF DRAIN



APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
FEB 18 2005

ORANGE COUNTY DEPARTMENT OF HEALTH  
DIVISION OF ENVIRONMENTAL HEALTH  
By direction of the State Commissioner of Health  
these plans are hereby approved pursuant to the  
Public Health Law. See first sheet for date and  
signature.

LANC & TULLY  
ENGINEERING AND SURVEYING, P.C.  
P.O. Box 887, Rt. 207  
Goshen, N.Y. 10924  
(845) 294-3700

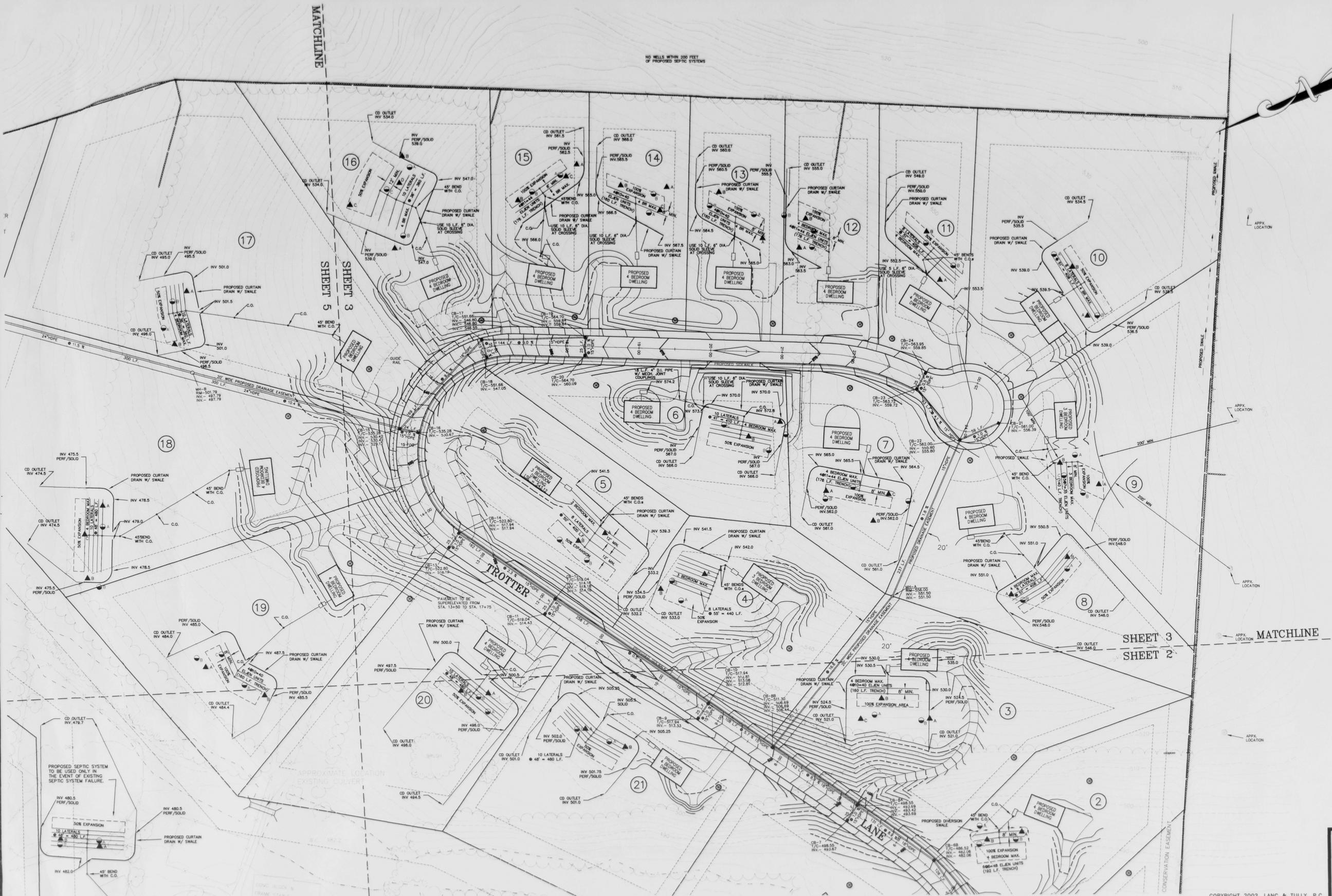
GRADING & UTILITY PLAN

**FOX MEADOW ESTATES**  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK

DATE: JUNE 20, 2002  
REVISIONS:  
AUGUST 14, 2002  
OCTOBER 18, 2002  
FEBRUARY 6, 2003  
JULY 29, 2003  
OCTOBER 27, 2003  
DECEMBER 17, 2003  
MARCH 5, 2004  
APRIL 23, 2004  
AUGUST 31, 2004

CD FILE: OCHD.DWG  
SHEET NO: 2 OF 13  
DRAWING NO: A-03-0080-01

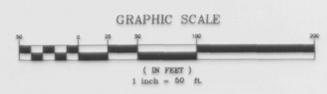
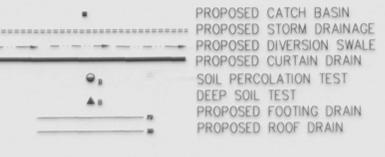
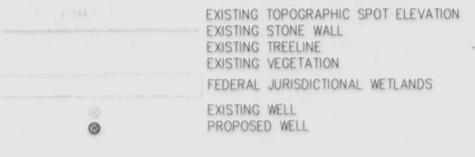
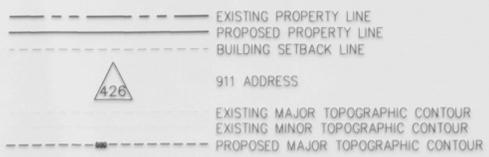
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Checked By:  
Scale: 1" = 50'  
Tax Map No.: 52-1-20



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FEB 18 2005

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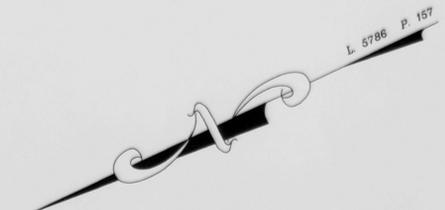
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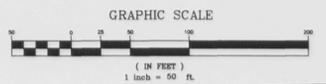
Drawn By: JCHD, DWG  
Sheet No.: 3 OF 13  
Date: JUNE 20, 2002



MATCHLINE

SHEET 5  
SHEET 4

SHEET 2  
SHEET 4  
MATCHLINE



APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
FEB 18 2005  
By: *[Signature]*  
TOWN ENGINEER

ORANGE COUNTY DEPARTMENT OF HEALTH  
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**LEGEND**

- |   |  |  |
|---|--|--|
| <p>--- EXISTING PROPERTY LINE</p> <p>- - - PROPOSED PROPERTY LINE</p> <p>--- BUILDING SETBACK LINE</p> <p>426 911 ADDRESS</p> <p>--- EXISTING MAJOR TOPOGRAPHIC CONTOUR</p> <p>--- EXISTING MINOR TOPOGRAPHIC CONTOUR</p> <p>--- PROPOSED MAJOR TOPOGRAPHIC CONTOUR</p> | <p>• EXISTING TOPOGRAPHIC SPOT ELEVATION</p> <p>--- EXISTING STONE WALL</p> <p>--- EXISTING TREELINE</p> <p>--- EXISTING VEGETATION</p> <p>--- FEDERAL JURISDICTIONAL WETLANDS</p> <p>• EXISTING WELL</p> <p>• PROPOSED WELL</p> | <p>• PROPOSED CATCH BASIN</p> <p>• PROPOSED STORM DRAINAGE</p> <p>• PROPOSED DIVERSION SWALE</p> <p>• PROPOSED CURTAIN DRAIN</p> <p>• SOIL PERCOLATION TEST</p> <p>• DEEP SOIL TEST</p> <p>• PROPOSED FOOTING DRAIN</p> <p>• PROPOSED ROOF DRAIN</p> |
|---|--|--|

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**GRADING & UTILITY PLAN**

**FOX MEADOW ESTATES**  
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ORANGE COUNTY, NEW YORK

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Drawing No: A-03-0080-01



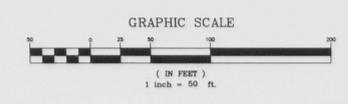
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|--|---|---|
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|--|---|---|



APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
 FEB 18 2005  
 [Signature]

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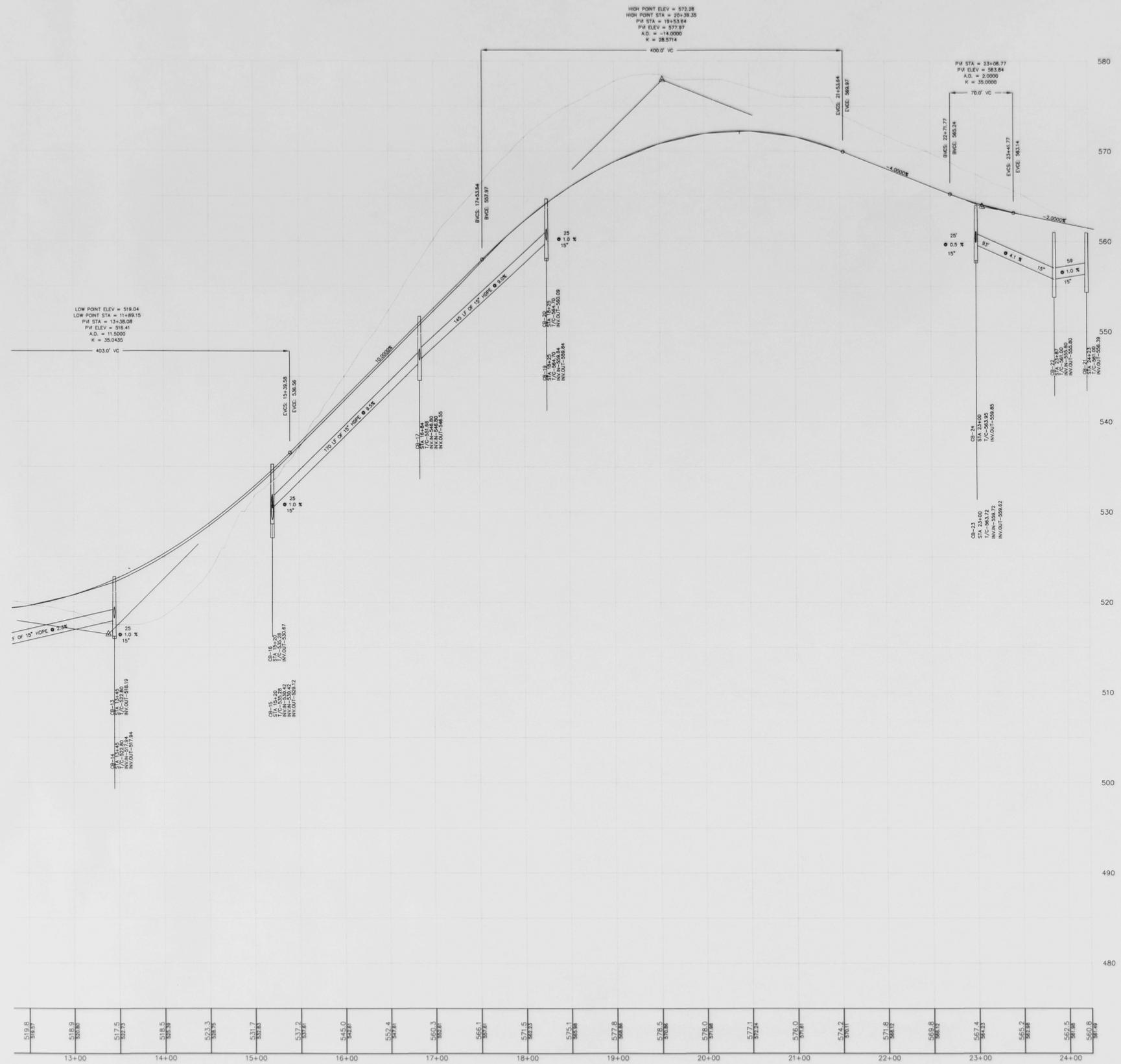
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Scale: 1" = 50'  
 Sheet No.: 5 OF 13  
 Drawing No.: A-03-0080-01





519.8	518.9	517.5	516.5	523.3	531.7	537.2	545.0	552.4	560.3	566.1	571.5	575.1	577.8	578.5	578.0	577.1	576.0	574.2	571.8	569.8	567.4	565.2	562.5	560.8
13+00	13+20	13+40	13+60	13+80	14+00	14+20	14+40	14+60	14+80	15+00	15+20	15+40	15+60	15+80	16+00	16+20	16+40	16+60	16+80	17+00	17+20	17+40	17+60	17+80

PROFILE  
TROTTER LANE  
SCALE: HOR. 1 INCH = 50 FEET  
VER. 1 INCH = 5 FEET

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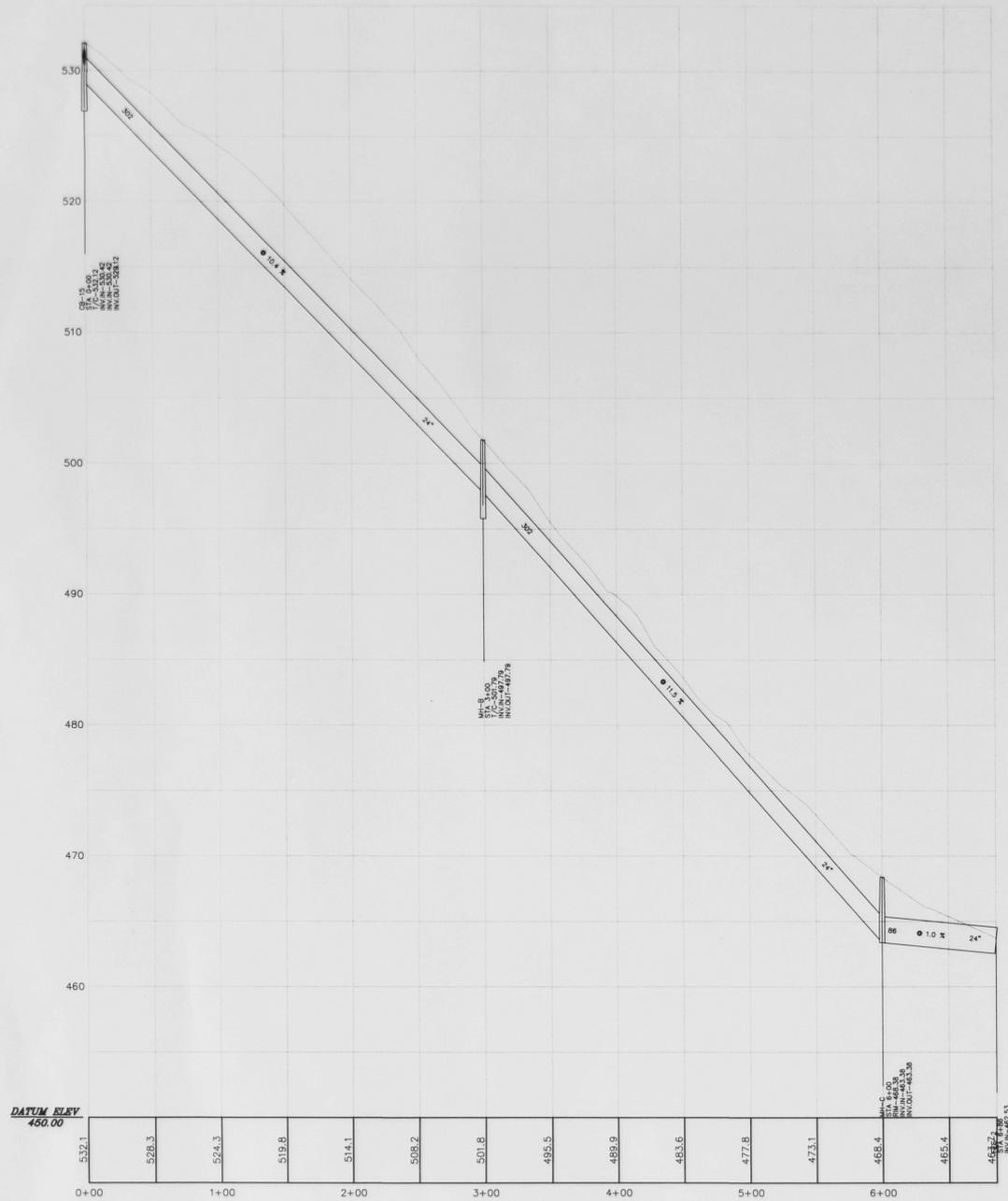
ROAD PROFILE  
STA 12+50 TO 24+25

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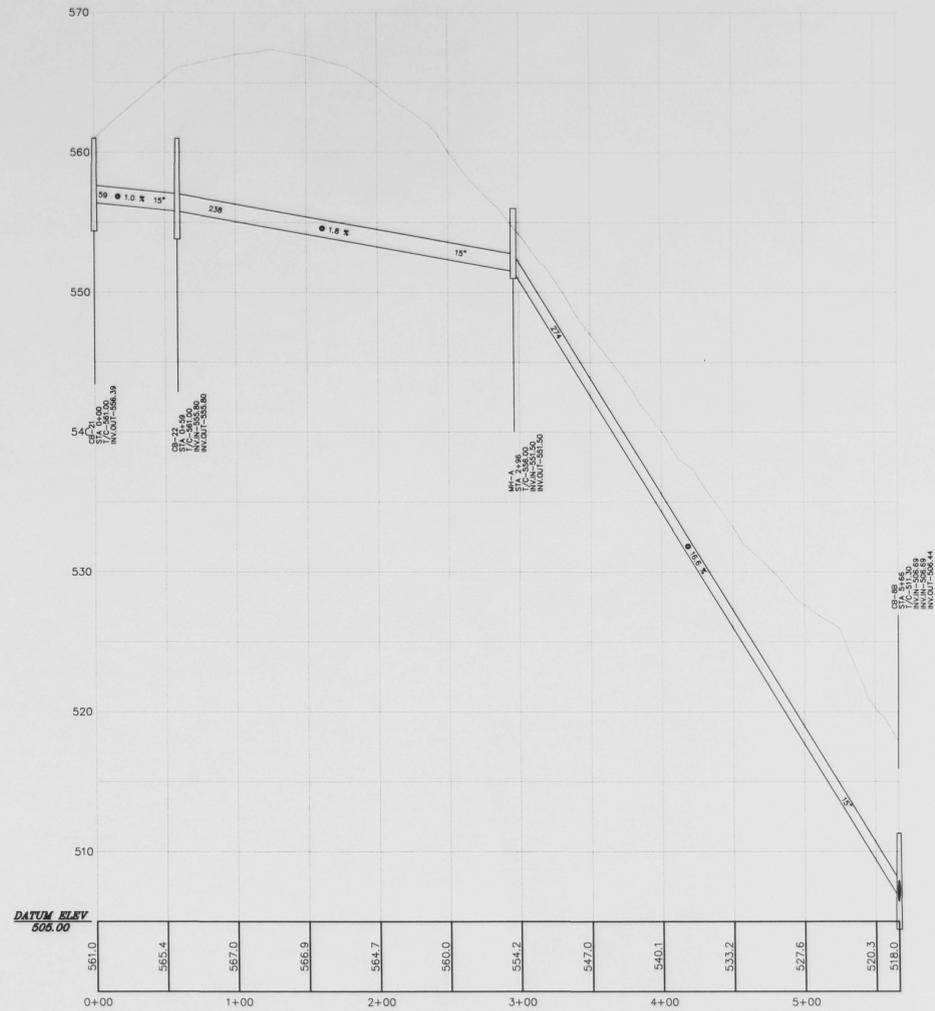
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CAD File: DCHD.DWG  
Sheet No: 7 OF 13  
Drawing No: A-03-0080-01

Drawn By: DEH  
Checked By:  
Scale: AS SHOWN  
Tab Map No.: 52-1-20



PIPE TO BASIN II



PIPE FROM CUL-DE-SAC

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**FOX MEADOW ESTATES**  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK

Scale: 1" = 50'

Sheet No.: 8 OF 13

Drawing No.: A-03-0080-01

**REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS**

SYSTEM COMPONENTS	WELL (f) OR SUCTION LINE	TO STREAM LAKE WATER COURSE(S), OR WELLD	DWELLING	PROPERTY LINE	DRAINAGE DITCH(S)
HOUSE SEWER (WATERTIGHT JOINTS)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	3'	10'	-
SEPTIC TANK	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	35'
ABSORPTION FIELD	100'(a)	100'	20'	10'	35'
SEEPAGE PIT	150'(a)	100'	20'	10'	35'
DRY WELL (ROOF AND FOOTING)	50'	25'	20'	10'	10'
RAISED OR MOUND SYSTEM (c)	100'(a)	100'	20'	10'	35'
INTERMITTENT SAND FILTER (c)	100'(a)	100'	20'	10'	35'
EVAPORATION SYSTEM (c)	100'(a)	50'	20'	10'	35'
COMPOSTER	50'	50'	20'	10'	10'
SANITARY PRIVY PIT	100'	50'	20'	10'	35'
PRIVY, WATERTIGHT VAULT	50'	50'	20'	10'	10'

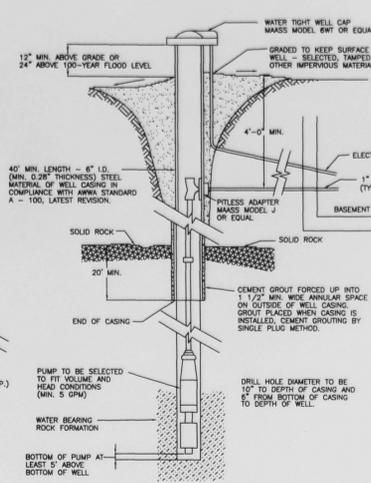
- WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE AND IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200 FEET AWAY FROM THE WELL.
- MEAN HIGH WATER MARK
- FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF SLOPE OF THE FILL.
- ANY WATER SERVICE LINE UNDER PRESSURE (I.E., PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE, WELL TO HOUSEHOLD SERVICE LINE) LOCATED WITHIN TEN FEET OF ANY ABSORPTION FIELD, SEEPAGE PIT OR SANITARY PRIVY SHALL BE INSTALLED INSIDE A LARGER DIAMETER WATER MAIN TO PROTECT THE POTABLE WATER SYSTEM.
- ANY WATER SERVICE LINE UNDER PRESSURE (I.E., PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE, WELL TO HOUSEHOLD SERVICE LINE) CROSSING A SEWER SHALL BE INSTALLED WITH ONE FULL LENGTH OF WATER MAIN CENTERED ABOVE THE SEWER SO BOTH WATER CONNECTING JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. SECTION 8.6 OF THE GLUMBR RECOMMENDED STANDARDS FOR WATER WORKS, SHALL BE FOLLOWED FOR SEPARATION OF THE WATER MAINS, SANITARY SEWERS AND STORM SEWERS.
- THE MINIMUM SEPARATION DISTANCE BETWEEN A SEPTIC TANK AND A COMMUNITY TYPE PUBLIC WATER SUPPLY WELL SHOULD BE 100 FEET. DISTRIBUTION BOXES AND ABSORPTION FACILITIES (E.G., ABSORPTION TRENCHES, SEEPAGE PITS, RAISED SYSTEMS, MOUND SYSTEMS, ETC.) SHOULD BE LOCATED AT LEAST 200 FEET FROM COMMUNITY TYPE PUBLIC WATER SUPPLY WELLS.
- RECOMMENDED SEPARATION DISTANCES.

**ORANGE COUNTY DEPARTMENT OF HEALTH NOTES**

- NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.
- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WELL AND SEPTIC SYSTEM) SHALL NOT BE CHANGED.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 200' OF THIS PROJECT HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
- THERE IS NO REGRADING ALLOWED IN THE AREA OF ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE TILE FIELD EXCEPT FOR THE ACTUAL CONSTRUCTION OF THE FIELD. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT BEFORE, DURING OR AFTER CONSTRUCTION.
- NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES WHICH MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE JACUZZI-TYPE SPA TUBS OVER 100 GALLONS OR WATER CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SEWAGE DISPOSAL SYSTEM IS REDESIGNED TO ACCOMMODATE THEM, AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THE PURCHASER OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT PLAN OF ANY EXISTING SANITARY FACILITIES.
- INDIVIDUAL WELLS AND SEWAGE TREATMENT SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED FOR HOUSEHOLD DOMESTIC PURPOSES WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN ONE YEAR OF ITS AVAILABILITY.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO FIVE YEARS. TIME EXTENSION FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON DEVELOPMENT FACTS AND THE REALTY SUBDIVISION REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST DATE OF FINAL PLAN APPROVAL BY THE TOWN PLANNING BOARD.
- BOULDERS ON SURFACE OF THE GROUND TO BE CLEARED AWAY PRIOR TO CONSTRUCTION OF SEWAGE DISPOSAL SYSTEM.
- ALL TREES SHALL BE REMOVED FROM THE TILE FIELD AREA PRIOR TO CONSTRUCTION.
- NO LATERALS UNDER DRIVEWAY OR PAVED AREA.
- ALL LAUNDRY AND KITCHEN WASTES SHALL BE DISCHARGED INTO SEWAGE DISPOSAL SYSTEM.
- NO CELLAR OR FOOTING DRAINS SHALL BE DISCHARGED INTO SEWAGE DISPOSAL SYSTEM.
- SANITARY FACILITIES (WELLS, ANDY WATER TREATMENT, AND SEWAGE DISPOSAL FACILITIES) SHALL BE INSPECTED AT THE TIME OF CONSTRUCTION BY A N.Y.S. LICENSED PROFESSIONAL ENGINEER WHO SHALL PRIOR TO OCCUPANCY SUPPLY WRITTEN CERTIFICATION TO THE ORANGE COUNTY HEALTH DEPARTMENT AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES ARE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS ARE SEALED AND TESTED FOR WATERTIGHTNESS.
- AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK TO THE HOUSE MUST BE MAINTAINED TO ALLOW VENTING OF SEWER GASES THROUGH THE STACK VENT.
- TOILETS OR SINKS IN THE BASEMENT MAY REQUIRE SPECIAL DESIGN AND APPROVAL.
- ANY CHANGE IN DIRECTION OF THE SOLID TILE SEWAGE PIPE WILL REQUIRE A CLEANOUT.
- THE SEWAGE DISPOSAL SYSTEMS ARE DESIGNED TO ACCOMMODATE THE USE OF A GARBAGE GRINDER.
- DISCHARGE FROM ROOF AND FOOTING DRAINS SHALL BE DIRECTED AWAY FROM THE AREA OF THE ABSORPTION FIELD. ROOF DRAINS AND FOOTING DRAINS ARE NOT TO BE RUN CONCURRENTLY.

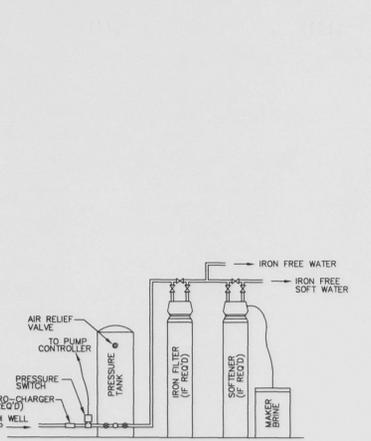
**LOWEST SEWERABLE ELEVATION DETAIL**

NOT TO SCALE



**TYPICAL WELL DETAIL**

NOT TO SCALE  
MINIMUM 5 GPM WELL YIELD



- THE WATER TREATMENT SHALL BE INSTALLED AT THE HOMEOWNER'S OPTION IF THE INDIVIDUAL WATER ANALYSIS INDICATES THAT EXCESSIVE HARDNESS AND/OR IRON IS PRESENT.
- THE IRON REMOVAL FILTER SHALL BE INSTALLED IF IRON PRESENCE IS GREATER THAN 0.3 mg/L.
- THE REMOVAL OF HARDNESS BY MACLEAN MODEL CS D751 WILL INCREASE THE SODIUM CONTENT OF THE WATER APPROXIMATELY 46 mg/L FOR EACH 100 mg/L OF HARDNESS REMOVED.
- THE IRON REMOVAL FILTER, IF REQUIRED, SHALL BE MACLEAN CHEM FREE MODEL MCA01.
- THE TIME OF REGENERATION OF IRON REMOVAL FILTER AND WATER SOFTENER SHALL BE SET IN SUCH A WAY THAT THEY DO NOT REGENERATE ON THE SAME DAY.

**WATER CONDITIONING EQUIPMENT DETAIL**

NOT TO SCALE

**1,500 GAL. CONCRETE SEPTIC TANK**

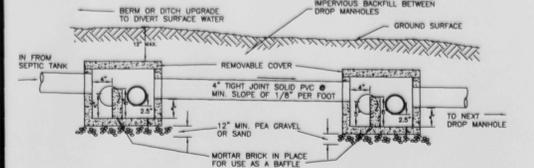
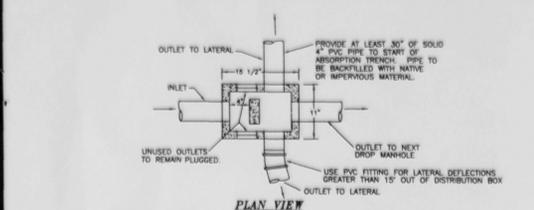
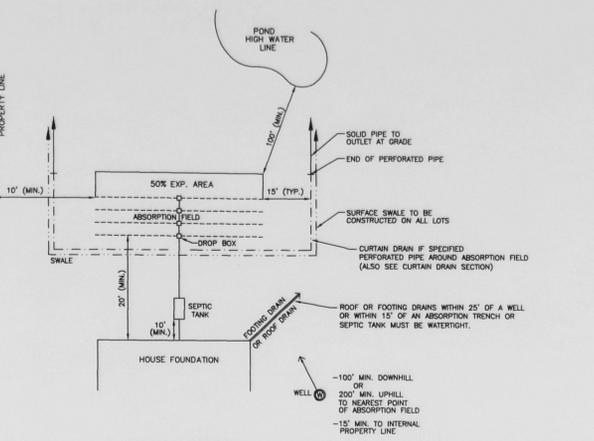
NOT TO SCALE

SPECIFICATIONS	PRECAST SEPTIC TANKS
Concrete Minimum Strength: 4,000 psi at 28 days	Model 97-1000 / 1000 GALLONS
Reinforcement: #4 @ 12" o.c. Min. Max. #3 Rebar	Woodard's Concrete Products, Inc.
Air Entrainment: 5%	900 South Street, Wallingford, CT 06495
Construction Joint: Bully Rubber Sealant	(860) 261-9471 / Fax 860-261-9400
Pipe Connection: Polylok Seal (optional)	Page 4A
Load Rating: 300 psf Weight = 10,600 lbs	

- CONCRETE SEPTIC TANK BY TO BE ST-1000 CONCRETE SEPTIC TANK BY WOODARD'S CONCRETE PRODUCTS, INC., BULLVILLE, N.Y. OR EQUAL.
- AN ASPHALTIC SEAL SHALL BE APPLIED BETWEEN CONTACT SURFACES OF MANHOLE COVERS, INSPECTION COVERS, AND CLEANOUT COVERS.
- CONCRETE MIN. STRENGTH: 4,000 PSI @ 28 DAYS.
- STEEL REINFORCEMENT: #4@12" O.C. STEEL WIRE MESH.
- ALL JOINTS TO BE CALKED.
- TO BE USED FOR THREE AND FOUR BEDROOM DWELLINGS.

**TYPICAL SEPTIC SYSTEM LAYOUT**

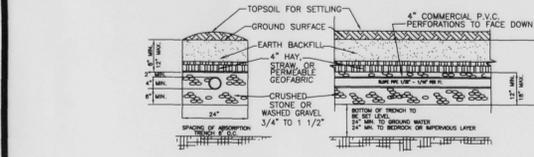
NOT TO SCALE



- MODEL DB-608 BY WOODARD'S CONCRETE PRODUCTS, INC., BULLVILLE, N.Y. OR APPROVED EQUAL.
- ALL PIPE JOINTS ARE TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUAL.
- CONCRETE MINIMUM STRENGTH-4,000 PSI AT 28 DAYS.
- REINFORCEMENT: FIBER.
- SPEED LEVELERS SHALL BE USED ON ALL OUTLETS TO ENSURE EQUAL DISTRIBUTION.

**DROP MANHOLE DETAIL**

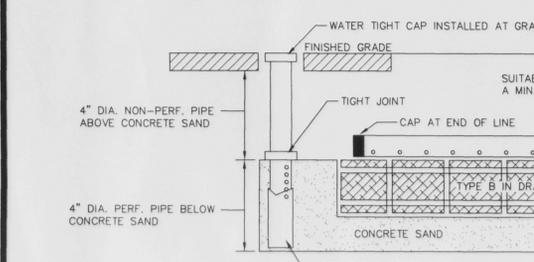
NOT TO SCALE



- DO NOT INSTALL TRENCHES IN WET SOIL.
- RAISE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING GRAVEL.
- END OF ALL DISTRIBUTION PIPES MUST BE PLUGGED.
- SPACING OF ABSORPTION TRENCH 6' O.C. WITH 4' MIN. UNDISTURBED SOILS BETWEEN TRENCHES.
- ALL LATERALS ARE TO BE THE SAME LENGTH (60' MAX) IN EXCESS OF 20%.
- NO SYSTEM IS TO BE CONSTRUCTED ON GROUND WITH A SLOPE IN EXCESS OF 20%.

**ABSORPTION TRENCH DETAIL**

NOT TO SCALE



**ELJEN OBSERVATION PORT**

NOT TO SCALE

- FOR USE ON LOTS 2,3,7,9,12,13,14,15, AND 19.
- PIPE HOLES TO BE SET AT THE 5 AND 7 O'CLOCK POSITIONS.
- ELJEN TRENCH SYSTEMS NOT TO BE USED ON SLOPES EXCEEDING 15%.
- DO NOT INSTALL TRENCHES IN WET SOIL.
- RAISE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING CONCRETE SAND.
- END OF ALL DISTRIBUTION PIPES MUST BE PLUGGED.
- TRENCHES TO BE INSTALLED PARALLEL WITH EXISTING CONTOURS WITH SPACING OF ABSORPTION TRENCHES TO BE A MINIMUM OF 8 FEET ON CENTER WITH A MINIMUM OF 4 FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.
- ALL TRENCHES ARE TO HAVE IDENTICAL NUMBER OF ELJEN UNITS.
- THE TRENCH BOTTOM SHALL BE FLAT, PERFORATED PIPE SLOPE SHALL BE 0.5%.

**ELJEN TRENCH DETAIL**

NOT TO SCALE

NEW YORK STATE D.O.T. CONCRETE SAND SPEC. 703-07

SIEVE SIZE	MINIMUM	MAXIMUM
3/8 INCH	100	-
NO. 4	90	100
NO. 8	75	100
NO. 16	50	85
NO. 30	25	60
NO. 50	10	30
NO. 100	1	10
NO. 200 (WET)	0	3

**CROSS SECTION VIEW**

- FOR USE ON LOTS 2,3,7,9,12,13,14,15, AND 19.
- PIPE HOLES TO BE SET AT THE 5 AND 7 O'CLOCK POSITIONS.
- ELJEN TRENCH SYSTEMS NOT TO BE USED ON SLOPES EXCEEDING 15%.
- DO NOT INSTALL TRENCHES IN WET SOIL.
- RAISE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING CONCRETE SAND.
- END OF ALL DISTRIBUTION PIPES MUST BE PLUGGED.
- TRENCHES TO BE INSTALLED PARALLEL WITH EXISTING CONTOURS WITH SPACING OF ABSORPTION TRENCHES TO BE A MINIMUM OF 8 FEET ON CENTER WITH A MINIMUM OF 4 FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.
- ALL TRENCHES ARE TO HAVE IDENTICAL NUMBER OF ELJEN UNITS.
- THE TRENCH BOTTOM SHALL BE FLAT, PERFORATED PIPE SLOPE SHALL BE 0.5%.

**ELJEN TRENCH DETAIL**

NOT TO SCALE

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**THIS DRAWING SET CONTAINS THIRTEEN (13) SHEETS. THIS SHEET SHOULD BE CONSIDERED INCOMPLETE AND INVALID UNLESS ACCOMPANIED BY EACH OF THE REMAINING SHEETS.**

LANC & TULLY ENGINEERING AND SURVEYING, P.C. P.O. Box 687, Rt. 207 Wallingford, N.Y. 19242 (845) 284-5700

SEWAGE DISPOSAL SYSTEM DESIGN DETAILS

FOX MEADOW ESTATES TOWN OF NEW WINDSOR ORANGE COUNTY, NEW YORK

DATE: JUNE 20, 2002  
 REVISION: AUGUST 14, 2002  
 OCTOBER 18, 2002  
 FEBRUARY 5, 2003  
 JULY 25, 2003  
 OCTOBER 27, 2003  
 DECEMBER 17, 2003  
 MARCH 5, 2004  
 APRIL 23, 2004  
 AUGUST 31, 2004

Drawn By: DEH  
 Checked By: NOT TO SCALE  
 Date: 5-2-02  
 Scale: 5/8" = 1'-0"

**PERCOLATION TEST RESULTS :**

1 TESTS COMPLETED IN JUNE 2001  
 2 TESTS COMPLETED IN AUGUST 2001  
 3 TESTS COMPLETED IN SEPTEMBER 2001  
 4 TESTS COMPLETED IN JULY 2003 & WITNESSED BY THE O.C. HEALTH DEPT.  
 5 TESTS COMPLETED IN AUGUST 2003  
 (ALL PERCOLATION TESTS COMPLETED AT 24" DEPTH)

LOT NO.	PERC. TEST RATE (IN MIN.)				DESIGN RATE	LENGTH OF TILE FIELD (FEET)** IF IRON REMOVAL AND/OR WATER SORPTION IS REQUIRED (FOR DESIGN FLOWRATES > 50 GPD FOR REGENERATION)				LENGTH OF TILE FIELD (FEET)** IF IRON REMOVAL AND/OR WATER SORPTION IS NOT REQUIRED			
	A	B	C	D		3 BEDROOM		4 BEDROOM		3 BEDROOM		4 BEDROOM	
						REQUIRED	DESIGN	REQUIRED	DESIGN	REQUIRED	DESIGN	REQUIRED	DESIGN
1	40'	22'			31-45	440	8 @ 55 = 440	N/A		390	8 @ 55 = 440	N/A	
2	28'	48'	11'		46-60	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
3	22'	14'			21-30	105	112	136	160	93	112	124	160
4	34'	21'	2'		31-45	440	8 @ 55 = 440	N/A		390	8 @ 55 = 440	N/A	
5	26'	19'			21-30	367	8 @ 50 = 400	N/A		325	8 @ 50 = 400	N/A	
6	20'	14'	5'		16-20	315	10 @ 35 = 350	408	10 @ 41 = 410	279	10 @ 35 = 350	372	10 @ 41 = 410
7	34'	37'	4'		31-45	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
8	8'	20'			16-20	315	8 @ 41 = 328	408	8 @ 51 = 408	279	8 @ 41 = 328	372	8 @ 51 = 408
9	29'	54'	12'		46-60	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
10	17'	4'			16-20	315	8 @ 41 = 328	408	8 @ 51 = 408	279	8 @ 41 = 328	372	8 @ 51 = 408
11	18'	13'			16-20	315	8 @ 41 = 328	408	8 @ 51 = 408	279	8 @ 41 = 328	372	8 @ 51 = 408
12	13'	33'	6'		31-45	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
13	22'	29'			21-30	105	112	136	160	93	112	124	160
14	28'	22'			21-30	105	112	136	160	93	112	124	160
15	13'	35'			31-45	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
16	5'	14'	13'		11-15	275	10 @ 30 = 300	357	10 @ 36 = 360	244	10 @ 30 = 300	325	10 @ 36 = 360
17	8'	12'			11-15	275	10 @ 30 = 300	357	10 @ 36 = 360	244	10 @ 30 = 300	325	10 @ 36 = 360
18	24'	28'			21-30	367	10 @ 38 = 380	475	10 @ 48 = 480	325	10 @ 38 = 380	434	10 @ 48 = 480
19	27'	6'	22'		21-30	SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL		SEE ELJEN IN-DRAIN TRENCH DETAIL	
20	5'	21'			21-30	367	10 @ 38 = 380	475	10 @ 48 = 480	325	10 @ 38 = 380	434	10 @ 48 = 480
21	23'	11'			21-30	367	10 @ 38 = 380	475	10 @ 48 = 480	325	10 @ 38 = 380	434	10 @ 48 = 480
22	21'	13'	2'		21-30	367	8 @ 50 = 400	475	8 @ 60 = 480	325	8 @ 50 = 400	434	8 @ 60 = 480
23	10'	12'	14'		11-15	275	8 @ 50 = 400	357	8 @ 40 = 320	244	8 @ 50 = 400	325	8 @ 40 = 320
24	8'	27'			21-30	367	10 @ 38 = 380	475	10 @ 48 = 480	325	10 @ 38 = 380	434	10 @ 48 = 480

\* DESIGN FLOW RATES: THREE BEDROOM 390 GALLONS PER DAY  
 FOUR BEDROOM 520 GALLONS PER DAY

\*\* AN INDIVIDUAL LOT'S LEACH FIELD CAN BE INSTALLED WITHOUT PROVIDING THE ADDITIONAL LENGTH OF TILE TO ACCOMMODATE REGENERATION ONLY IF THE WELL ON THE INDIVIDUAL LOT WAS DRILLED AND THE WATER QUALITY TEST RESULTS FOR THE WELL SHOW AN IRON LEVEL LESS THAN THE ALLOWABLE 0.30 MG/L, TOTAL HARDNESS OF LESS THAN 150 MG/L AND/OR AN ODOR LEVEL BELOW 3.

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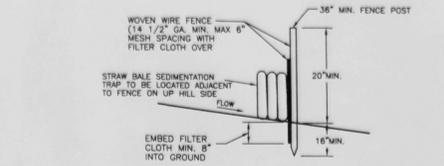
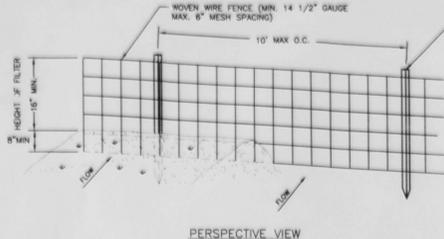
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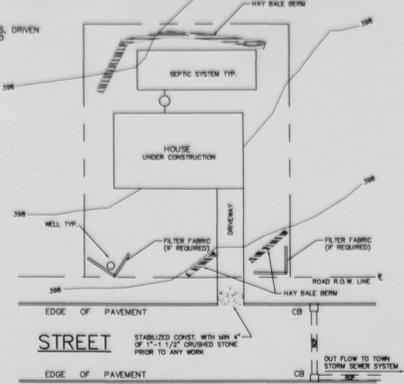
**DEEP TEST RESULTS:**

1 TESTS COMPLETED ON OCTOBER 23, 2001  
 2 TESTS COMPLETED ON OCTOBER 24, 2001  
 3 TESTS COMPLETED ON JULY 10, 2003 & WITNESSED BY THE O.C. HEALTH DEPT.  
 4 TESTS COMPLETED ON SEPTEMBER 11, 2003

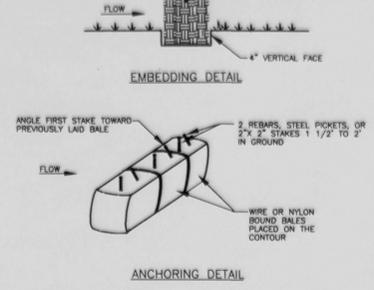
LOT	TEST	RANGE	DESCRIPTION	LOT	TEST	RANGE	DESCRIPTION	LOT	TEST	RANGE	DESCRIPTION
1	A	0-10'	NO CK NO BR MOTTLED @ 30"	6	A	0-10'	NO CK NO BR MOTTLED @ 30"	16	C	0-10'	NO CK NO BR MOTTLED @ 30"
1	A	10-20'	NO CK NO BR MOTTLED @ 30"	6	A	10-20'	NO CK NO BR MOTTLED @ 30"	16	C	10-20'	NO CK NO BR MOTTLED @ 30"
1	A	20-30'	NO CK NO BR MOTTLED @ 30"	6	A	20-30'	NO CK NO BR MOTTLED @ 30"	16	C	20-30'	NO CK NO BR MOTTLED @ 30"
1	A	30-40'	NO CK NO BR MOTTLED @ 30"	6	A	30-40'	NO CK NO BR MOTTLED @ 30"	16	C	30-40'	NO CK NO BR MOTTLED @ 30"
1	A	40-50'	NO CK NO BR MOTTLED @ 30"	6	A	40-50'	NO CK NO BR MOTTLED @ 30"	16	C	40-50'	NO CK NO BR MOTTLED @ 30"
1	A	50-60'	NO CK NO BR MOTTLED @ 30"	6	A	50-60'	NO CK NO BR MOTTLED @ 30"	16	C	50-60'	NO CK NO BR MOTTLED @ 30"
1	A	60-70'	NO CK NO BR MOTTLED @ 30"	6	A	60-70'	NO CK NO BR MOTTLED @ 30"	16	C	60-70'	NO CK NO BR MOTTLED @ 30"
1	A	70-80'	NO CK NO BR MOTTLED @ 30"	6	A	70-80'	NO CK NO BR MOTTLED @ 30"	16	C	70-80'	NO CK NO BR MOTTLED @ 30"
1	A	80-90'	NO CK NO BR MOTTLED @ 30"	6	A	80-90'	NO CK NO BR MOTTLED @ 30"	16	C	80-90'	NO CK NO BR MOTTLED @ 30"
1	A	90-100'	NO CK NO BR MOTTLED @ 30"	6	A	90-100'	NO CK NO BR MOTTLED @ 30"	16	C	90-100'	NO CK NO BR MOTTLED @ 30"
1	A	100-110'	NO CK NO BR MOTTLED @ 30"	6	A	100-110'	NO CK NO BR MOTTLED @ 30"	16	C	100-110'	NO CK NO BR MOTTLED @ 30"
1	A	110-120'	NO CK NO BR MOTTLED @ 30"	6	A	110-120'	NO CK NO BR MOTTLED @ 30"	16	C	110-120'	NO CK NO BR MOTTLED @ 30"
1	A	120-130'	NO CK NO BR MOTTLED @ 30"	6	A	120-130'	NO CK NO BR MOTTLED @ 30"	16	C	120-130'	NO CK NO BR MOTTLED @ 30"
1	A	130-140'	NO CK NO BR MOTTLED @ 30"	6	A	130-140'	NO CK NO BR MOTTLED @ 30"	16	C	130-140'	NO CK NO BR MOTTLED @ 30"
1	A	140-150'	NO CK NO BR MOTTLED @ 30"	6	A	140-150'	NO CK NO BR MOTTLED @ 30"	16	C	140-150'	NO CK NO BR MOTTLED @ 30"
1	A	150-160'	NO CK NO BR MOTTLED @ 30"	6	A	150-160'	NO CK NO BR MOTTLED @ 30"	16	C	150-160'	NO CK NO BR MOTTLED @ 30"
1	A	160-170'	NO CK NO BR MOTTLED @ 30"	6	A	160-170'	NO CK NO BR MOTTLED @ 30"	16	C	160-170'	NO CK NO BR MOTTLED @ 30"
1	A	170-180'	NO CK NO BR MOTTLED @ 30"	6	A	170-180'	NO CK NO BR MOTTLED @ 30"	16	C	170-180'	NO CK NO BR MOTTLED @ 30"
1	A	180-190'	NO CK NO BR MOTTLED @ 30"	6	A	180-190'	NO CK NO BR MOTTLED @ 30"	16	C	180-190'	NO CK NO BR MOTTLED @ 30"
1	A	190-200'	NO CK NO BR MOTTLED @ 30"	6	A	190-200'	NO CK NO BR MOTTLED @ 30"	16	C	190-200'	NO CK NO BR MOTTLED @ 30"
1	A	200-210'	NO CK NO BR MOTTLED @ 30"	6	A	200-210'	NO CK NO BR MOTTLED @ 30"	16	C	200-210'	NO CK NO BR MOTTLED @ 30"
1	A	210-220'	NO CK NO BR MOTTLED @ 30"	6	A	210-220'	NO CK NO BR MOTTLED @ 30"	16	C	210-220'	NO CK NO BR MOTTLED @ 30"
1	A	220-230'	NO CK NO BR MOTTLED @ 30"	6	A	220-230'	NO CK NO BR MOTTLED @ 30"	16	C	220-230'	NO CK NO BR MOTTLED @ 30"
1	A	230-240'	NO CK NO BR MOTTLED @ 30"	6	A	230-240'	NO CK NO BR MOTTLED @ 30"	16	C	230-240'	NO CK NO BR MOTTLED @ 30"
1	A	240-250'	NO CK NO BR MOTTLED @ 30"	6	A	240-250'	NO CK NO BR MOTTLED @ 30"	16	C	240-250'	NO CK NO BR MOTTLED @ 30"
1	A	250-260'	NO CK NO BR MOTTLED @ 30"	6	A	250-260'	NO CK NO BR MOTTLED @ 30"	16	C	250-260'	NO CK NO BR MOTTLED @ 30"
1	A	260-270'	NO CK NO BR MOTTLED @ 30"	6	A	260-270'	NO CK NO BR MOTTLED @ 30"	16	C	260-270'	NO CK NO BR MOTTLED @ 30"
1	A	270-280'	NO CK NO BR MOTTLED @ 30"	6	A	270-280'	NO CK NO BR MOTTLED @ 30"	16	C	270-280'	NO CK NO BR MOTTLED @ 30"
1	A	280-290'	NO CK NO BR MOTTLED @ 30"	6	A	280-290'	NO CK NO BR MOTTLED @ 30"	16	C	280-290'	NO CK NO BR MOTTLED @ 30"
1	A	290-300'	NO CK NO BR MOTTLED @ 30"	6	A	290-300'	NO CK NO BR MOTTLED @ 30"	16	C	290-300'	NO CK NO BR MOTTLED @ 30"
1	A	300-310'	NO CK NO BR MOTTLED @ 30"	6	A	300-310'	NO CK NO BR MOTTLED @ 30"	16	C	300-310'	NO CK NO BR MOTTLED @ 30"
1	A	310-320'	NO CK NO BR MOTTLED @ 30"	6	A	310-320'	NO CK NO BR MOTTLED @ 30"	16	C	310-320'	NO CK NO BR MOTTLED @ 30"
1	A	320-330'	NO CK NO BR MOTTLED @ 30"	6	A	320-330'	NO CK NO BR MOTTLED @ 30"	16	C	320-330'	NO CK NO BR MOTTLED @ 30"
1	A	330-340'	NO CK NO BR MOTTLED @ 30"	6	A	330-340'	NO CK NO BR MOTTLED @ 30"	16	C	330-340'	NO CK NO BR MOTTLED @ 30"
1	A	340-350'	NO CK NO BR MOTTLED @ 30"	6	A	340-350'	NO CK NO BR MOTTLED @ 30"	16	C	340-350'	NO CK NO BR MOTTLED @ 30"
1	A	350-360'	NO CK NO BR MOTTLED @ 30"	6	A	350-360'	NO CK NO BR MOTTLED @ 30"	16	C	350-360'	NO CK NO BR MOTTLED @ 30"
1	A	360-370'	NO CK NO BR MOTTLED @ 30"	6	A	360-370'	NO CK NO BR MOTTLED @ 30"	16	C	360-370'	NO CK NO BR MOTTLED @ 30"
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1	A	400-410'	NO CK NO BR MOTTLED @ 30"	6	A	400-410'	NO CK NO BR MOTTLED @ 30"	16	C	400-410'	NO CK NO BR MOTTLED @ 30"
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1	A	420-430'	NO CK NO BR MOTTLED @ 30"	6	A	420-430'	NO CK NO BR MOTTLED @ 30"	16	C	420-430'	NO CK NO BR MOTTLED @ 30"
1	A	430-440'	NO CK NO BR MOTTLED @ 30"	6	A	430-440'	NO CK NO BR MOTTLED @ 30"	16	C	430-440'	NO CK NO BR MOTTLED @ 30"
1	A	440-450'	NO CK NO BR MOTTLED @ 30"	6	A	440-450'	NO CK NO BR MOTTLED @ 30"	16	C	440-450'	NO CK NO BR MOTTLED @ 30"
1	A	450-460'	NO CK NO BR MOTTLED @ 30"	6	A	450-460'	NO CK NO BR MOTTLED @ 30"	16	C	450-460'	NO CK NO BR MOTTLED @ 30"
1	A	460-470'	NO CK NO BR MOTTLED @ 30"	6	A	460-470'	NO CK NO BR MOTTLED @ 30"	16	C	460-470'	NO CK NO BR MOTTLED @ 30"
1	A	470-480'	NO CK NO BR MOTTLED @ 30"	6	A	470-480'	NO CK NO BR MOTTLED @ 30"	16	C	470-480'	NO CK NO BR MOTTLED @ 30"
1	A	480-490'	NO CK NO BR MOTTLED @ 30"	6	A	480-490'	NO CK NO BR MOTTLED @ 30"	16	C	480-490'	NO CK NO BR MOTTLED @ 30"
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1	A	540-550'	NO CK NO BR MOTTLED @ 30"	6	A	540-550'	NO CK NO BR MOTTLED @ 30"	16	C	540-550'	NO CK NO BR MOTTLED @ 30"
1	A	550-560'	NO CK NO BR MOTTLED @ 30"	6	A	550-560'	NO CK NO BR MOTTLED @ 30"	16	C	550-560'	NO CK NO BR MOTTLED @ 30"
1	A	560-570'	NO CK NO BR MOTT								



**NOT FOR REVIEW OR APPROVAL BY THE  
ORANGE COUNTY DEPARTMENT OF HEALTH**



**NOT FOR REVIEW OR APPROVAL BY THE  
ORANGE COUNTY DEPARTMENT OF HEALTH**

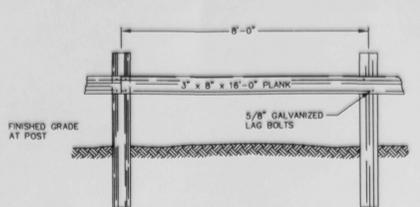


**CONSTRUCTION SPECIFICATIONS**

- NOTES:
- BALES SHALL BE PLACED IN ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
  - EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4"
  - BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
  - INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
  - BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

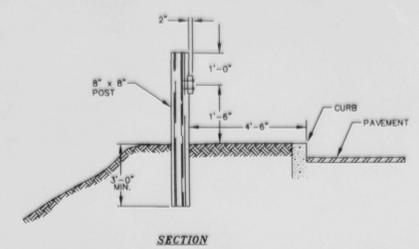
**STRAW BALE SEDIMENT BARRIER**  
NOT TO SCALE

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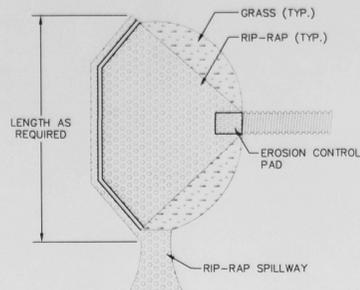
**WOOD GUIDE RAIL**  
NOT TO SCALE

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ORANGE COUNTY DEPARTMENT OF HEALTH**



**SEDIMENT AND EROSION CONTROL NOTES  
AND CONSTRUCTION SEQUENCING**

- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES WHERE SHOWN ON THE PLAN.
- INSTALL SEDIMENT BARRIERS/SWALES/DITCHES/DIKES AT DOWN SLOPE AREAS FROM ALL PROPOSED GRADING OPERATIONS, AND INSTALL OTHER SEDIMENTATION AND EROSION CONTROL STRUCTURES OR MEASURES AS SHOWN ON THE DRAWINGS.
- LAND DISTURBANCE SHALL BE LIMITED TO ONLY THAT AREA NECESSARY FOR DEVELOPMENT. NO MORE THAN FIVE (5) ACRES OF UNPROTECTED SOIL SHALL BE DISTURBED AT ONE TIME. PREVIOUS EARTHWORK SHALL BE STABILIZED AS SPECIFIED BEFORE ADDITIONAL AREA IS EXPOSED.
- CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED. THEN STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED. SEED STOCKPILED TOPSOIL WITH TEMPORARY RYEGRASS COVER AS SPECIFIED BELOW (SEE NOTE 8), AND ERECT A SILT FENCE AROUND THE STOCKPILE.
- PROTECT ALL TREES WHICH ARE TO REMAIN AND WHICH ARE IN OR NEAR CONSTRUCTION AREAS AS DESCRIBED IN THESE SPECIFICATIONS. PLACE SNOW FENCING AT THE TREE TRUNK. PLACE SNOW FENCING AT THE DRIP LINE SURROUNDING TREES, IF POSSIBLE, OR TO MAINTAIN A MINIMUM DIAMETER OF 10 FEET AROUND TREES. SNOW FENCING MUST BE PLACED CLOSER THAN THE DRIP LINE. PLACE 4 INCHES OF WOOD CHIPS OVER ROOT ZONE TO EXTEND TO THE DRIP LINE. MAINTAIN THIS WOOD CHIP PROTECTION FOR THE DURATION OF CONSTRUCTION.
- PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE. INSTALL STORM DRAINAGE SYSTEM.
- INSTALL SEDIMENT BARRIERS AROUND ALL STORM DRAIN INLETS, OR MODIFY SEDIMENT CONTROL MEASURES INSTALLED IN #2 ABOVE AND MAINTAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION AND ALL PAVEMENTS ARE PAVED WITH A BASE COURSE.
- SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 15 DAYS OR MORE AND WHICH WILL NOT BE UNDER CONSTRUCTION WITHIN 30 DAYS WITH TEMPORARY RYEGRASS COVER, AS FOLLOWS (METHOD OF SEEDING IS OPTIONAL):
  - LOOSEN SEEDBED BY DISCING TO A 4" DEPTH.
  - SEED WITH 6 LBS PER ACRE PERENNIAL OR ANNUAL RYEGRASS.
  - MULCH WITH 100-200 BALES PER ACRE OF BLOWN AND CHOPPED HAY SOUND IN PLACE WITH 2000 LBS PER ACRE CELLULOSE FIBER MULCH, AND WITH AN APPROVED TACKIFIER BINDER.
- IF CONSTRUCTION IS SUSPENDED OR COMPLETED, ALL DISTURBED AREAS SHALL BE SEED AND MULCHED IMMEDIATELY. ALL SLOPES STEEPER THAN ONE ON THREE (1/3) AND PERIMETER TRENCHES AND TRAP EMBANKMENTS SHALL, ON COMPLETION, BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING.
- AFTER COMPLETION OF SITE CONSTRUCTION, FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED WITH PERENNIAL LAWN MIX AS FOLLOWS (SEE LANDSCAPE PLAN FOR OTHER PLANTING INFORMATION):
  - LIME TOPSOIL TO pH 6.0.
  - FERTILIZE WITH 20 LBS PER SQ. FT. OF 5-10-10, 50% WATER SOLUBLE NITROGEN FERTILIZER.
  - SEED WITH 5 LBS PER 1000 SQ. FT. OF THE FOLLOWING MIXTURE, OR OTHER MIXTURE APPROVED BY THE LANDSCAPE ARCHITECT: 40% JAMESTOWN CHEWINGS FESCUE, 40% BARON KENTUCKY BLUEGRASS AND 20% YORKTOWN PERENNIAL RYEGRASS.
  - MULCH AS DESCRIBED FOR TEMPORARY SEEDING (NOTE 8 ABOVE).
  - FERTILIZE 4 WEEKS AFTER GERMINATION WITH 10 LBS 20-10-10 FERTILIZER PER 1000 SQ. FT.
- DURING THE PROGRESS OF CONSTRUCTION, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED UP WITH SEDIMENT.
- AFTER PAVEMENTS ARE INSTALLED AND PERMANENT VEGETATIVE COVER AND PLANTINGS ARE ESTABLISHED, REMOVE SEDIMENT BARRIERS AND SEED THOSE DISTURBED AREAS.
- MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A VISIBLE STABILIZED VEGETATIVE COVER.
- STRUCTURAL MEASURES MUST BE MAINTAINED TO BE EFFECTIVE. IN GENERAL, THESE MEASURES MUST BE PERIODICALLY INSPECTED TO INSURE STRUCTURAL INTEGRITY, TO DETECT VANDALISM DAMAGE, AND FOR CLEANING AND REPAIR WHENEVER NECESSARY.
- DURING CONSTRUCTION, ALL STRUCTURES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAIN. REMOVE ACCUMULATED SEDIMENT AND STOCKPILE AND STABILIZE IN AN AREA NOT SUBJECT TO FURTHER EROSION.
- AFTER CONSTRUCTION IS COMPLETED, PERMANENT SEDIMENT OR EROSION CONTROL STRUCTURES SHOULD BE INSPECTED AT LEAST SEMI-ANNUALLY AND AFTER EVERY RAIN.



**CONSTRUCTION SPECIFICATIONS**

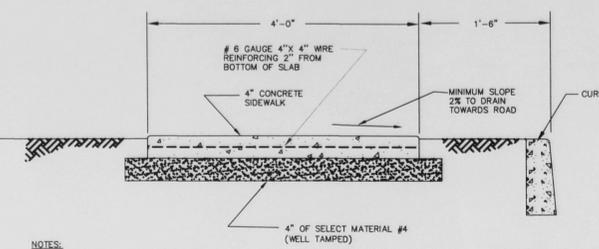
- ENSURE THAT THE LIP IS LEVEL TO UNIFORMLY SPREAD DISCHARGE.
- A 20 FOOT TRANSITION SECTION WILL BE CONSTRUCTED FROM THE DIVERSION CHANNEL TO THE SPREADER TO SMOOTHLY BLEND THE DIFFERENT DIMENSION AND GRADES.
- SEED AND MULCH THE DISTURBED AREA IMMEDIATELY AFTER CONSTRUCTION.

**LEVEL SPREADER DETAIL**  
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**FLARED CULVERT END SECTION**  
NOT TO SCALE

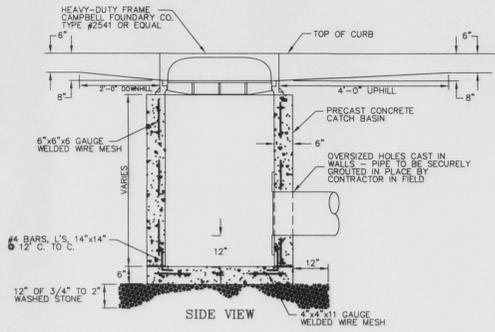
**NOT FOR REVIEW OR APPROVAL BY THE  
ORANGE COUNTY DEPARTMENT OF HEALTH**



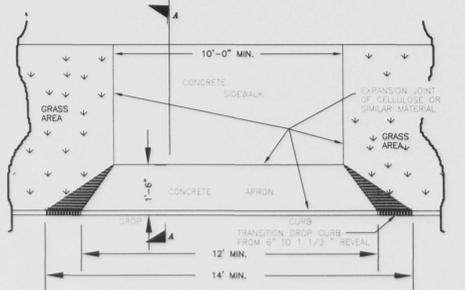
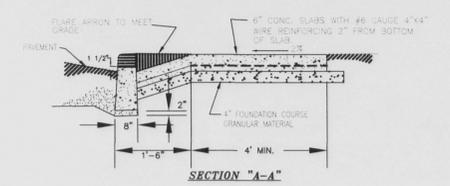
- NOTES:
- EXPANSION JOINTS OF 3/16" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
  - CONTRACTION JOINTS 1" DEEP HAVING 1/4" RADIUS EDGES SHALL BE PLACED AT 5'-0" INTERVALS IN SIDEWALK.
  - EDGES SHALL HAVE 1/2" RADIUS.
  - USE 4000 PSI CONCRETE.
  - BROOM FINISH TOP SURFACE.

**STANDARD SIDEWALK DETAIL**  
NOT TO SCALE

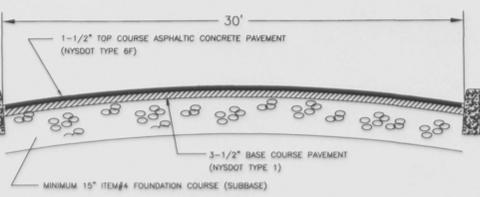
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**PLAN OF SIDEWALK ENTRANCE**  
NOT TO SCALE



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ORANGE COUNTY DEPARTMENT OF HEALTH**

**CONCRETE CURB**  
NOT TO SCALE

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CONSTRUCTION DETAILS			
DATE	JUNE 20, 2002	DATE	AUGUST 14, 2002
DATE	OCTOBER 18, 2002	DATE	FEBRUARY 5, 2003
DATE	OCTOBER 27, 2003	DATE	DECEMBER 17, 2003
DATE	MARCH 5, 2004	DATE	APRIL 7, 2004
DATE	AUGUST 31, 2004	DATE	
CAD FILE	DCHD.DWG	SHEET NO.	11 OF 13
SCALE	NOT TO SCALE	FIG. MAP NO.	52-1-20
DRAWING NO.	A-03-0080-01		

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