

14050034

File No. FP-2-2014
Date Received: 5-21-14
Scheduled Public Hearing Date: 6-25-14

Fee: 250.00
Initials: CAS
Check or Receipt No. 4595

APPLICATION FOR FINAL PLAT
CITY OF GAHANNA PLANNING COMMISSION

***Required Information**

*Name of Final Plat: Oak Grove of Gahanna

*Property Location 4185 Stygler Road, Gahanna, Ohio

*Total Acreage: 4.585 *Proposed Number of Lots: 13 + 1 *Current Zoning: SF3

*Applicant Name: Ed Minhinnick *Email edkemi44@gmail.com

*Status: Land Owner Option Holder Cont. Purchaser Agent

*Business Owner Same * Phone: 614-474-0361 614-864-4600

*Business Address 4579 Poth Road *Fax:

*Business City/State/Zip Whitehall, Ohio 43213

*Developer same *Contact

*Address *Phone

*City/State/Zip

*Landowner: Bustereve LLC (Ed Minhinnick, President) Phone 614-474-0361 614-864-4600

*Address: 4579 Poth Road, Whitehall, Ohio 43213

Ed Minhinnick President 5-21-14
*Applicant's Signature Date

Submission Requirements

1. A plat that complies with the list of Final Plat requirements stated in Section 1105.04.
2. Eleven (11) copies of plat: Two 24 x 36 size **folded** (not rolled) to 8 1/2 X 11 inch size prior to submission, nine (9) 11x17 size.
3. Application Fee \$250.
4. A Street Tree Plan in accordance with Section 913.10 for Landscape Board Approval.
5. Reduced drawing to an 8/12 x 11 inch size.

In accordance with Section 1105 of the Codified Ordinances of Gahanna, Ohio, I hereby certify that this project, as stated above, has been recommended for approval by the City of Gahanna Planning Commission on . A copy of the minutes is hereby attached. This application can now be forwarded to City Council for Final Approval. Any Final Plat approved by Council shall be filed and recorded with the County Recorder within six (6) months of the date of approval.

Planning & Zoning Administrator Date

Note: All correspondence will be to applicant above unless otherwise stated.

PLAT RECEIVED
MAY 21 2014 **MAY 21 2014**

Revised April 2012

BY: CAS CHK#
4595

BY: CAS

FINAL PLAT CHECKLIST

CITY OF GAHANNA PLANNING COMMISSION

Developer/Applicant: Ed Minhinnick
 Address: 4579 Poth Road, Whitehall, OH 43213
 Plat Address: 4185 Stygler Road, Gahanna, Ohio

The final drawing shall contain and clearly show the following:

ITEM	DEVELOPER	PLANNING & ZONING ADMINISTRATOR	CITY ENGINEER
A. Identification			
1. Name of proposed subdivision	1. <u>X</u>	<u>✓</u>	<u>✓</u>
2. Key map location of proposed subdivision within the City.	2. <u>X</u>	<u>✓</u>	<u>✓</u>
3. Names and addresses of the landowners, developers and design professionals involved with the proposed subdivision. If the landowner and/or developer is a corporation or partnership, the names and addresses of the principal corporate officers and/or partners must also appear on the final plat drawing.	3. <u>X</u>	<u>✓</u>	<u>✓</u>
4. Date	4. <u>X</u>	<u>✓</u>	<u>✓</u>
5. North arrow	5. <u>X</u>	<u>✓</u>	<u>✓</u>
B. Survey and Engineering Data:			
1. Boundary of plat based on an accurate traverse with angular and lineal dimensions.	1. <u>X</u>	<u>✓</u>	<u>✓</u>
2. True angle and distance to the nearest street intersection, accurately described on the plat.	2. <u>X</u>	<u>✓</u>	<u>✓</u>
3. Radii, internal angles, points of curvature tangent bearings, and lengths of all short dimensions.	3. <u>X</u>	<u>✓</u>	<u>✓</u>
4. All lot numbers and lines with accurate dimensions, in feet and hundredths and bearings in degrees and minutes.	4. <u>X</u>	<u>✓</u>	<u>✓</u>
5. Accurate location of permanent monuments marking each boundary corner of the subdivision.	5. <u>X</u>	<u>✓</u>	<u>✓</u>
6. Accurate location, width, and name of all streets and other public ways.	6. <u>X</u>	<u>✓</u>	<u>✓</u>
7. Minimum building setback lines along all streets and other public ways.	7. <u>X</u>	<u>✓</u>	<u>✓</u>

ITEM	DEVELOPER	PLANNING & ZONING ADMINISTRATOR	CITY ENGINEER
8. Accurate outlines and delineation of all drainage easements, floodway routing, flood hazard areas and other water courses contained within or contiguous to plat boundaries.	8. <u>X</u>	<u>✓</u>	<u>✓</u> (na) (reserve A?)
9. Accurate outlines and delineation of any areas to be dedicated or reserved for public use, with purposes indicated thereon, and of any area to be reserved by deed covenant for the common use of all property owners.	9. <u>X</u>	<u>✓</u>	<u>-</u>
10. Any restriction and covenants which are to be included as part of the deed to any lot within the subdivision plat or planned development.	10. <u>X</u>	<u>✓</u>	<u>✓</u>
11. Other information deemed necessary by the City Engineer or Planning Commission in order to fully describe any special conditions or circumstances affecting the proposed plat.	11. _____	_____	<u>Na</u>
C.) <u>Certification and Approval Provisions:</u>			
1. Certification by an Ohio registered surveyor that the plat represents a survey made by him/her or under his/her direction and that the monuments shown exist as designated or will be set following construction and that all dimensional and geodetic details are correct.	1. <u>X</u>	<u>✓</u>	<u>✓</u>
2. Notarized certification by the landowner as to adoption of the plat and the dedication to public use of the streets and other public ways shown on the plat. No private property shall extend into the dedicated right of way for any street or public way.	2. _____	_____	<u>✓</u>
3. Space for approval by signature of the City Engineer.	3. <u>X</u>	<u>✓</u>	<u>✓</u>
4. Proper form for the approval of Planning Commission with space for the signature of the Chairman.	4. <u>X</u>	<u>✓</u>	<u>✓</u>
5. Space for approval by signature of the Mayor.	5. <u>X</u>	<u>✓</u>	<u>✓</u>
6. Proper form for approval of the Final Plat by Council showing ordinance number and provision for signature by the Clerk of Council.	6. <u>X</u>	<u>✓</u>	<u>✓</u>

ITEM	DEVELOPER	PLANNING & ZONING ADMINISTRATOR	CITY ENGINEER
7. Proper form for acceptance by Council of the dedication to public use of the streets and other ways and provisions for signature by the Clerk of Council.	7. <u> X </u>	<u> ✓ </u>	<u> ✓ </u>
8. Space for transfer by the County Auditor and recording by the County Recorder with a statement indicating the expiration date of any or all approvals granted by the City related to the Final Plat.	8. <u> X </u>	<u> ✓ </u>	<u> ✓ </u>



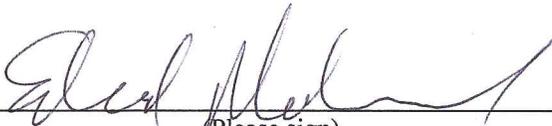
CITY OF GAHANNA

Agreement to Construct as Approved

Your signature below affirms that, as the contractor/applicant Busterwe LLC
(Please print Contractor/Applicant Name)

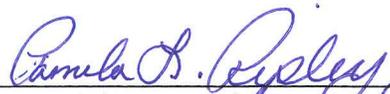
Edward Minihnick for Oak Grove / 4185 N. Stuyler Rd. Gahanna 43230
(Business/Project Name and Address)

the above named project will be built as approved and specified by the City of Gahanna Planning Commission. As the contractor or applicant, you also agree that any proposed change to the approved plans must be reported to the Planning and Zoning Administrator. Significant changes to the project, as determined by the Planning and Zoning Administrator, must be approved by the Planning Commission.

Contractor/Applicant Signature 
(Please sign)

6-6-14
(Date)

PAID
JUN 06 2014
BY: CS


(Signature of Notary) Pamela L. Ripley

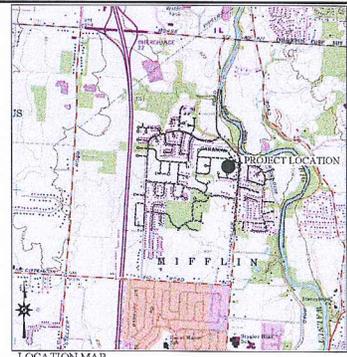
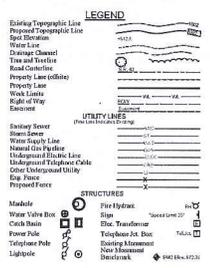
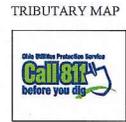
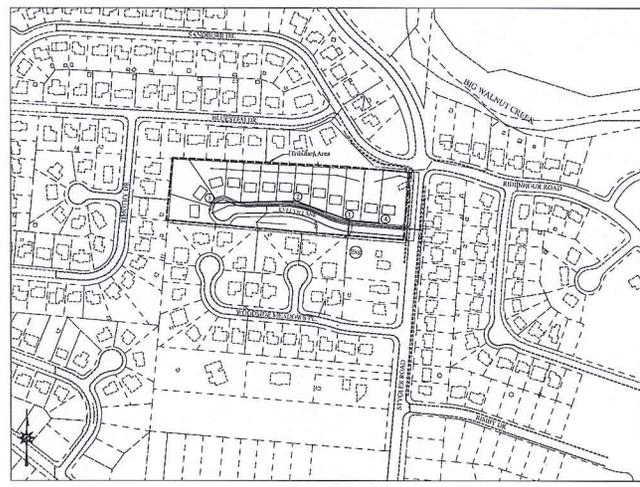
6-6-14 Commission expires: 6-30-16
(Date)

Planning Commission Information for All Applicants

- 1. All required information must be submitted with the application. Wednesday, 12 noon is the deadline for acceptance of all applications (type of application determines weeks of advertisement). No application will be forwarded to Planning Commission until all information is received in the Planning & Zoning Office.**
- 2. It is the responsibility of the applicant to have a court reporter present, at the applicant's expense, if they wish to have a verbatim transcript of the meeting. Council office must be advised in advance if a court reporter is going to be present.**
- 3. Reduced drawings suitable to an 8 ½ x 11 inch size must be submitted. If an application is amended at any time during the process, a new reduced drawing must be submitted as well as any full size drawings requested.**
- 4. Agendas will be mailed to the applicant on the Friday prior to the Planning Commission meeting. If the agenda is to go to someone other than the applicant, it needs to be noted on the application.**
- 5. If a list of Contiguous Property owners needs to be submitted with an application, it must be compiled in a list on a separate sheet of paper. This must include name and address of property owner. Showing them only on one of the plan sheets is not acceptable.**
- 6. For Design Review applications, a materials list must be submitted with the application. If materials are changed during the process, then a new materials list must be submitted.**
- 7. For Multi-tenant ground sign & Master Sign Plan applications, location must be noted: on site plan for a freestanding sign or on building elevation, if a wall sign. Color renderings must be submitted.**
- 8. Please review "Submission Requirements" on any application before submitting to the Planning & Zoning Division.**
- 9. Copies of specific sections of the zoning code are available in the Zoning Office at no charge. The entire zoning code with a map is available in the Council Office at a cost of \$25.00. Zoning Code is available on line and can be found @ www.gahanna.gov/departments/development/planning.asp under Code Ordinances.**
- 10. Planning Commission members may visit the property prior to the hearing to review the application.**

ESTIMATED QUANTITIES FOR OAK GROVE OF GAHANNA			
ITEM	DESCRIPTION	AMOUNT	UNIT
Excavation and Fill			
201	Clearing and Grubbing	1	LS
203	Excavation	1,865	CY
	Including Topsoil Excavation	660	CY
203	Embankment Placement (Evelyn Lane)	116	CY
203	Embankment at CB04	30	CY
	Spot Placement and grading (includes waste from pipe trenches)	3,333	CY
Evelyn Lane			
204	Subgrade Compaction and Test Rolling	2,177	SY
305	Concrete Base (7" Depth)(Roller Compacted Concrete)	403	CY
401	Asphalt Base Course (1.5" Course)	101	CY
404	Asphalt Finish Course (1.25" Course)	72	CY
606	Curb Ramps	2	EA
609	Curbs Standard, Reverse and Flat	1,497	LF
	Concrete	143	CY
	Aggregate	139	CY
	4" Undersize	1,497	LF
511	Shoulders - concrete (Confined only - not on lids)	2.6	CY
630	Signage (Traffic control and entrance signs)	4	EA
642	Traffic Paint	1	LS
614	Construction Traffic Control	1	LS
630	Entrance Sign Assembly	1	EA
1000	Street Lighting Materials and Installation (City of Gahanna Standard Drawings and specifications)	6	EA
Stormwater Pipe			
901	14" dia. COC 720 12 Compugated Plastic Pipe w/ smooth interior	266	LF
901	9" dia. COC 720 12 Compugated Plastic Pipe w/ smooth interior	210	LF
901	10" dia. COC 720 12 Compugated Plastic Pipe w/ smooth interior	355	LF
901	12" dia. COC 720 12 Compugated Plastic Pipe w/ smooth interior	85	LF
604	COC Type AA S-1324 Catch Basins	3	EA
604	COC Type AA S-133A Catch Basins w/ Special Side Inlet	1	EA
604	COC Type S AA-133B Catch Basins w/ Special Side Inlet	1	EA
604	COC AA S-135A Curb Inlet	2	EA
604	Adjust Grade of Catch Basin CB1	1	EA
Boreation Area at CB01			
	Planting Layer (Sand, soil and mulch)	109	CY
	Filter Sand (ASTM C33) as specified	14	CY
	Filter Aggregate (COC 703 No.5)	14	CY
	Gravel Layer (COC 703 No.57)	55	CY
207	Filter Fabric silt fence	210	LF
Boreation Area at CB04			
	Planting Layer (Sand, Soil and mulch)	82	CY
	Filter Sand (ASTM C33) as specified	10	CY
	Filter Aggregate (COC 703 No.5)	10	CY
	Gravel Layer (COC 703 No.57)	41	CY
207	Filter Fabric silt fence	228	LF
Seeding, Mulching and Erosion Control			
207	Temporary Seeding and Mulching	2.40	AG
207	Filter Fabric Silt Fence or Sediment	850	LF
207	Erosion Control and Street Clearing	1	LS
207	Construction Entrance	1	EA
207	Concrete Cleanout	1	EA
207	Oil Change Pail	1	EA
207	Sediment Trap Assembly CB01	1	EA
207	Sediment Trap Assembly CB04	1	EA
207	Wet Protection	9	EA
616	Dust Control	1	LS
659	Seeding and Mulching	2.40	AG
659	Commercial Fertilizer (10-10-10)	2,685	LBS
Sanitary Sewer			
901	8" Sewer Pipe	661	LF
604	Manholes AA S-120	4	EA
616	House Connections (to Easement limits) AA-S160	13	EA
Water Service Lines			
601	8" Water Main	763	LF
632	8" Gate Valve	1	EA
602	45 deg. Elbows	2	EA
633	8"x12" Teeing Silem	1	EA
605	Water Service Taps (up to Curb Stops)	13	EA
606	18" Casting Pipe	54	LF
606	Iron Pipecast (City of Gahanna)	3	EA

A BUSTEREVE LLC DEVELOPMENT OAK GROVE SUBDIVISION CONSTRUCTION PLANS CITY OF GAHANNA, OHIO



LOCATION MAP
URCS 7.2' Quad Northeast Columbus, Ohio (Maptech, Inc.)
1"=200'

BENCHMARKS
Vertical Datum is NAVD83
TBM01 = 839.54 Top of west bell of the top flange of a Fire Hydrant located at station 105+90.20 feet right of Styler Road, collation to front of 660 Styler Road. Fire Hydrant is tagged with an aluminum marker 1581. Bells is 2.0 feet above grade.
Franklin County Bench Mark A 26 - 855.31 Top of Brass Plug on top of the southwest abutment of the bridge at the north entrance to the drive to Shagbark United Methodist Church on Cherry Bottom Road, 0.62 miles north of U.S. 62, 46.3 feet west of the entrance of Cherry Bottom Road, 18.5 feet south of the centerline of the entrance drive.
Bench of Horizontal CPK data collected using the M.C.A. A. National Geodetic Service, National Spatial Reference System translated to State Plane Coordinates 34C2 SOUTH OHIO (NAD83).

INDEX OF DRAWINGS	
TITLE	SHEET
COVER SHEET	81
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GRADING PLAN	84
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STREET PLAN/PROFILES	86
WATER AND SEWER PLANS	87

STANDARD DETAILS USED IN THESE DRAWINGS			
INDEX	DESCRIPTION	INDEX	DESCRIPTION
G-25	TYPICAL HYDRANT DETAILS - HYDRANT TYPE "B"	L-6086	TYPICAL TRENCH FOR WATER MAIN OUTSIDE OF PAVEMENT
SFD-4 TD-1	STREET LIGHTING - FENESTRAL LIGHTING	L-6096	DETAILS OF PAVED DRIVE/DRIVEWAY/DRIVEWAY FOR AT-VEHICLE
AA-4102	TYPICAL MANHOLE CURB INLET	L-6410	BACKING FOR VERTICAL MANHOLE
AA-4125A	STANDARD CURB INLET (SMALL FITS)	L-6411	BACKING FOR HORIZONTAL
AA-5149	TYPICAL BIDDING FOR FLORE/LEADER PIPE	L-6412	BACKING FOR TRENCH
AA-5166	TYPICAL SANITARY HOUSE CONNECTION	L-6416	COLUMBIUS STANDED HEAVY DUTY VALVE BOX
AA-6169	PRECAST PIPE HEADWALL	L-6234	CANON PIPE SPACERS AND END HEADS
144	PAVEMENT AND UTILITY CUT REPAIR STANDARDS	L-6600	ALUMINUM HOOKS/STAKE
L-1063	POLE/UTILITY ENCASUREMENT FOR D.I.	L-3062	TRENCH BLOCK DETAIL END OF PIPE
L-1064	POLE/UTILITY ENCASUREMENT FOR SERVICE TAPS ETC.	L-9904	CURB BOX INSTALLATION
L-6086	CONCRETE VALVE SUPPORTS	2185	STREET COLUMBIUS LID/LOT FOR GAHANNA STANDARDS
L-6094	TYPICAL TRENCH FOR WATER MAIN UNDER PAVEMENT	2319	CURB RAMP TYPE "A"

CITY OF GAHANNA APPROVAL
The signatures below signify only concurrence with the purpose and general location of the project. All technical details remain the responsibility of the Engineer preparing the plans.

City Engineer, City of Gahanna _____ Date _____

Water Resource Engineer, City of Gahanna _____ Date _____

Superintendent, Division of Streets, City of Gahanna _____ Date _____

Director of Public Service, City of Gahanna _____ Date _____

Director of Finance, City of Gahanna _____ Date _____

Mayor, City of Gahanna _____ Date _____

CITY OF COLUMBUS APPROVAL
Approval on the part of the City of Columbus is given pursuant to the provisions of the Sewer Service Agreement, dated September 27, 1967, with the City of Gahanna and all subsequent amendments thereof. The sanitary sewer plans include or exceed the City of Columbus Design Standards (including per capita flow, Peak Factor and 1d allowance) and Material Specifications.

Administrator, Division of Sewerage and Drainage, City of Columbus _____ Date _____

Director, Department of Public Utilities, City of Columbus _____ Date _____

BUSTEREVE LLC DEVELOPMENT
COVER SHEET
OAK GROVE OF GAHANNA
4185 STYGLER ROAD

APPROVED: *Casey C. Cline*
DATE: 03/27/2014
CASEY C. CLINE
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: 03/31/2018
10000 STATE ROUTE 173, COLUMBUS, OHIO 43240

CITY OF OHIO
REGISTERED PROFESSIONAL ENGINEER

CONTRACT: 13107

S1

The City of Gahanna requirements and standards and the City of Columbus Construction and Material Specifications (CMS), 2012 edition, including all supplements thereto, shall govern the construction items in this project unless otherwise noted.

OWNERSHIP OF PLANS: The site plans and design information for this project are the property of the Engineer. Any change in the sealed plans without the approval of the Engineer will remove all liability for execution of this project from the Engineer. If the plans or the design are altered without the approval of the Engineer, no part of the plans will be considered sealed or approved by the Engineer.

These plans and construction details are copyrighted by the Engineer and may not be used for any other Project at this site or any other site without the written consent of the Engineer.

The Engineer will incur no liability for these plans until the plans have been reviewed and approved by the reviewing agencies.

PRE-CONSTRUCTION CONFERENCE: The Contractor shall schedule a pre-construction conference with the City of Gahanna a minimum of five business days prior to any construction activities including clearing, delivery of equipment or material or construction office. Attendees shall include the Contractor, Developer, Tasting Agency, City Engineer and Design Engineer.

The Contractor shall notify the City of Gahanna at least three business days prior to commencing work.

STANDARD DRAWINGS: These plans are not complete without a set of the specified Standard Drawings by the City of Gahanna and the City of Columbus. Copies are available at the Office of the City Engineer.

PERMITS: The Contractor shall obtain all necessary permits.

EXISTING UTILITIES: The information shown concerning existing utilities is not represented, warranted or guaranteed to be complete or accurate. It is the Contractor's responsibility to physically locate and verify, in the field, all utility locations and elevations, whether shown on this plan or not prior to the beginning of his construction operations. The Contractor shall support, protect, and restore all existing utilities and their associated items. The cost of this work shall be included in the price bid for the various items.

The Contractor shall notify all utility owners, in accordance with Section 153.64, Ohio Revised Code, at least forty-eight (48) hours prior to the beginning of any work, coordinate his work with them, and keep the utility owners apprised of his schedule and requirements until all work is completed. The Contractor shall provide the Engineer with evidence of having notified the utilities and providing them with his work schedule prior to beginning any work.

Notice shall be given to the Ohio Utilities Protection Service (telephone 800-362-2764), for the member utilities at least 48 hours prior to performing any construction activities.

Member Utilities in the area include:

Water, Sanitary Sewer and Storm Sewer Facilities:	
City of Gahanna	614-532-4050
City of Columbus	614-465-8156
Electric Power:	AEP
Telephone:	AT&T
Cable:	Time Warner Cable
WOW Cable	
Natural Gas	Columbia Gas

SAFETY OF CONSTRUCTION: The Contractor and Sub-Contractor shall be solely responsible for all OSHA, federal, state, and local safety requirements, together with existing precautions at all times for the protection of persons (including employees) and property. It is also the sole responsibility of the Contractor and Sub-Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work.

MISCELLANEOUS WORK: No extra compensation shall be paid to the Contractor for compliance with any of the requirements indicated on the plans. All payments shall be deemed to be included in the various items, as bid upon, unless otherwise specifically provided.

SURPLUS EXCAVATION: The Contractor shall dispose of all excess excavation offsite. Topsoil may be stockpiled and reused in areas to be graded at a depth of at least 4" free of debris and rocks larger than 2".

This site is designed to be balanced in terms of earth excavation and fill. Spoil from Evelyn Drive, the stormwater detention basins and the public utilities is to be placed as shown on the plans, with at least 4" of topsoil dressed on top. This will leave sufficient room for basement excavation on each lot.

The cost of spoil placement and grading is to be included under excavation and fill.

CLEARING AND GRUBBING

DEBRIS: All debris material shall be disposed of in a manner suitable to the Inspectors. On site burial will be confined to an area designated by the Owner. The preferred disposal method is removal from the site to an approved disposal facility.

Clearing and Grubbing includes the removal of those large trees marked on Lots 1 and 2 and the removal of selected dead and fallen trees at the west end of the project. No grubbing shall be performed in the wooded area on the west and north sides of the site. Stumps shall remain in these areas.

Existing trees are to be preserved and protected. No construction traffic is permitted within the drip edge of existing trees except where indicated on the plans.

GENERAL NOTES

PROOF ROLLING: Proof rolling shall be performed on all points in the subgrade of Evelyn Lane by COC 204.

CURBS: In the curbs in this project are typical. The west part of Evelyn Lane drains to the south into the detention basin at Catch Basin 04. This requires the north curb to be a reverse curb and the south curb to a straight curb. The curb in the cut-to-see transitions from a reverse curb to a conventional curb that ends in a straight curb to release the gutter flow into a grass swale that drains into the detention basin.

Curbs will be marked at the time of construction with a formed "W", "S" or "V" where a water service, sanitary sewer service or gas service crosses the curb.

SIDEWALKS: Sidewalks are shown along the north side of Evelyn Drive. The only section of sidewalk in this project is the replacement of sidewalks and curb ramps at the intersection of Evelyn Drive and Stygler Road. The remaining sidewalk will be installed by the house contractors.

STREET LIGHTING: Electrical installation, material and equipment is to meet the current NEC for exterior installations. Standard electrical specifications and standard construction drawings for street lighting for the City of Gahanna shall apply. The street light pole base shall meet the SLDs-bolt pattern by standard/pedestal manufacturer. Cable in duct shall be 1" Cablecon or Schedule 40 approved equivalent. Location of the lighting control site is to be coordinated with AEP.

STORM SEWERS: Reinforced concrete pipe (COC 706.02) may be substituted under proposed pavement. Flexible pipe shall be tested per COC 901.21 at the Contractor's expense under Item 901.

The Riprap used in the Sediment Traps may be recycled as required for the Headwall HW06 and as protection around the detention basin outlets.

No. 57 aggregate that is not contaminated with sediment may be recycled as the base layer in the Bioretention Cells.

FIELD TILE AND SUBSURFACE DRAINS: Where field tile and subsurface drains are detected during construction, the existing subsurface drains shall be repaired if damaged and connected to the storm sewer system at catch basins or detention basin structures.

BIORETENTION CELLS: Bioretention cells permit runoff water to seep into the surface of the cell, percolate through a filter media, a layer of sand, a layer of "pea gravel" into a layer of aggregate where the water either infiltrates into the soil or flow through a subsurface collector drain and outlet into a catch basin.

The Bioretention Cells are located near the outlet structures to the detention basins for the project. The detention basins will retain the Water Quality Volume (WQV) below the first stage outlet windows in the control structures. The WQV percolates into the Bioretention Cell and drains the basin in 12 to 48 hours.

It is critical to protect the Bioretention Cells from sediment during construction and site stabilization. The Bioretention Cells are the last items installed prior to seeding and mulching and shall be protected from sediment laden runoff water.

Bioretention Cells that are clogged with sediment prior to acceptance of the project by the City shall be repaired by the Contractor. Repair shall consist of removing and replacing clogged filter media, sand, and gravel.

It is likely that only a few inches of the filter media will need to be replaced but the seeding and mulching will need to be repaired and clogged media removed from the detention basin.

STORMWATER CONNECTIONS: Floor drains, roof drains, foundation drains, downspout drains, storm sewers, ground water drains and all other clean water connections to the sanitary sewer are prohibited.

SANITARY SEWERS: The Contractor shall excavate and expose the existing 48" of the 8" sanitary sewer at Station 0+53 and verify the pipe slope from the downstream manhole to the existing end of pipe. If the pipe slope is different from that shown on the plans, the Engineer shall develop shop drawings adjusting the elevation of Manhole 4 and the pipe slopes from MHI to MHI and from MHI to MHI. If the pipe slope does not meet minimum grade requirements (0.40% for 8" diameter pipe) then the Engineer and City Engineer will determine if a change order is needed to (1) correct the grade of the existing pipe or (2) add a manhole at the end of the existing pipe.

Any other unforeseen impacts to traffic shall be immediately reported as they occur.

The plans provide for horizontal boring or jacking of a casing pipe across Stygler Road in lieu of open excavation. If open excavation is chosen, the Traffic Maintenance Plan will need to be revised.

Fire Hydrants shall meet the City of Gahanna specifications and Standard Drawing G-25 and City of Columbus Item 809 and

Standard Drawing L-6409. Fire Hydrants shall be provided with a Storm Fitting.

Curb Boxes shall be located 0.5 feet from the property line unless otherwise directed by the City Engineer. The installation details shall otherwise meet City of Columbus L-9901.

WATER MAIN TESTING: The Contractor shall pressure test all water mains per COC 801.12 and submit results to the City of Gahanna. Pressure testing and chlorination shall meet AWWA C600 and AWWA C651 (See COC 801.12). The Contractor shall submit two copies of the pressure test results and a letter requesting disinfection to the City of Columbus. The cost of testing and disinfection is considered part of Item 801.

Separation of water mains and sanitary or storm sewers shall conform to the Ten States Standards (18" vertical separation and 10 feet horizontal separation).

DUST CONTROL: The contractor shall furnish and apply water and calcium chloride for dust control as directed by the engineer. The following quantitative quantities have been included for dust control purposes:

MAINTENANCE OF TRAFFIC

TEMPORARY TRAFFIC CONTROL ITEMS

All temporary traffic control (TTC) devices shall be furnished, erected, maintained and removed by the Contractor in accordance with the Ohio Manual Of Uniform Traffic Control Devices For Construction And Maintenance Operations (Current Edition).

Construction operations shall NOT begin until all traffic control is in place and approved by the City of Gahanna.

The contractor shall give advance notification (written and verbally) to City of Gahanna, informing them of all upcoming traffic pattern changes.

TYPE OF CHANGE-ADVANCE NOTIFICATION NEEDED

Lane closures lasting 2 weeks or more 2 week notice

Lane closures of less than 2 weeks 3 day notice

This project will require a lane closure for less than 2 weeks.

The excavation of Evelyn Lane near Stygler Road shall be filled to pavement level with aggregate for a distance of 5 feet from the edge of pavement between the lot it is excavated to the time it is paved.

A TTC Plan (TTC) including pedestrian control shall be submitted at the pre-construction meeting or a minimum of ten (10) working days prior to beginning work. Copies of the approved TTC shall be given to the Contractor and kept on site along with the Street Closure/Occupancy Permit.

Pedestrians shall be excluded from the construction area.

Steady-burning Type C lights shall be required on all barricades, drums, and similar traffic control devices in use at night. Only 42" reflectorized channelizing devices (cones) shall be permitted for nighttime work with the approval of the City of Gahanna per O.D.O.T. standards.

A flashing arrow panel (48" X 96" Type C) shall be used in lane closures as per the Ohio Manual.

All trenches within the road right-of-way shall be backfilled or securely plated per City of Gahanna requirements during non-working hours. (Use City of Columbus General Policy on Steel Plate Usage dated 11/15/2006 and 2007 STD. DWG. 1441)

Access for pedestrian and vehicular traffic to all adjoining properties shall be maintained at all times. All traffic lanes shall be fully open to traffic from 6:00 to 9:00 A.M. and 4:00 to 6:00 P.M. One lane may be closed to traffic during working hours. Two-way traffic shall be maintained at all times.

Law Enforcement Officer(s) (LEO) are not needed unless a hazard develops. If a hazard develops, an LEO shall be assigned by the City of Gahanna Safety Director or Service Director at the Contractor's expense.

LEO is needed for interim traffic control if construction equipment must encroach on the open lanes at any time. The Contractor is not permitted to supply non LEO traffic control.

EXISTING PERMANENT TRAFFIC CONTROL ITEMS

Vehicular, pedestrian, and U.S. Mail service access to all adjoining properties shall be maintained at all times. When a parcel is served by only one driveway, the affected driveway must be constructed in stages and/or supplemented with Item 410 so that access is not disrupted. Short term closure of driveways will be permitted in accordance with the specification requirements for the protection of completed asphalt courses. It shall be the responsibility of the Contractor to coordinate construction activities with the City Engineer and with the owners of adjoining properties in advance of any operations which affect access. Notification shall be given to adjoining property owners a minimum of forty-eight (48) hours in advance of any operations affecting access.

Any other unforeseen impacts to traffic shall be immediately reported as they occur.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

OWNER: Buserstev LLC
Michael J. Anthony, agent
383 N. Front St., LL
Columbus, OH 43215

CONTRACTOR:

ENGINEER: Casey Elliott, PE
212 West High Street
London, Ohio 43140
PHONE: (740)852-1300
FAX: (740)852-2212

ON SITE CONTACT: Ed J. Mihimick
4579 Park Road
Whitehall, Ohio 43213
(614)332-4182

The conditions of the NPDES Construction Storm Water General Permit OTC000004 shall be met during all stages of construction. The location and timing of all erosion and sediment control items shall be field adjusted to prevent significant impacts on receiving waters. Implementation of this storm water pollution prevention plan shall continue throughout the duration of the project or until such time that the uplope disturbed areas are stabilized.

Installation of sediment basins/dams, perimeter filter fabric fence, and ditch checks shall be concurrent with clearing and grubbing and/or grading operations.

All reasonable attempts should be made to minimize the total area of disturbed land.

This Erosion Control Plan has been prepared in compliance with provisions of the Federal Water Pollution Control Act (33 USC 1251 et. Seq.) and the Ohio Water Pollution Control Act (ORC 6111). This plan is covered by NPDES Permit OHC000004. The Developer shall file a Notice of Intent at least 21 days prior to commencing catch-moving activities.

DEVELOPMENT: 4.58 acres (area of the property) with 3.89 acres disturbed. The project consists of a 13 lot subdivision with a 700 foot long euidence.

SITE INFORMATION: AREA: 4.6 acres SLOPE: 0 to 4 percent

STORMWATER MANAGEMENT: City of Gahanna Regulations

IMPERVIOUS AREA CREATED: 1.1 acres of street, sidewalk, driveways and house roofs with a Curve Number of 98. This is 23% of the entire disturbed area.

EXG. COVER: Follow - Brush, trees and grass PROPOSED COVER: subdriveway

Preconstruction CN = 79.

Post construction CN = 83

SOILS: Bob Bennington silt loam, 2-6% slopes

RECEIVING STREAM: The property drains to the southwest corner of Stygler Road and Sandbar Drive. There, it enters an existing 27" storm sewer that drains into Stygler Road to an outlet north of Rindour Road into Big Walnut Creek. Big Walnut Run is part of the Upper Scioto Watershed (Hydrologic Unit 05606001).

The CONTRACTOR is required to maintain a copy of the NPDES

CONSTRUCTION SEQUENCE

- (1) Notify the Erosion Control Inspector that construction is about to start. Install silt fence as needed before each step of construction. Maintain as needed.
- (2) Install silt fence. This is intended to protect Stygler Road on the east and the private property to the south. The remaining property lines drain into the site. If runoff is observed leaving the site, install additional silt fence as directed by the erosion control inspector, the Engineer or the City.
- (3) Install Dandy Bags™ on existing catch basins as shown.
- (4) Install a construction entrance off of the existing driveway. Be prepared to clean the pavement daily.
- (5) Install the outlet pipes and Hitcatchbottom perforated risers. There are no office plots for these structures. Excavate the sediment traps as shown. Install the Sediment Trap Outlet Structures and silt fence practices. The sediment traps serve as the main sediment control barrier during construction of the project.
- (6) Construct the final grade of the detention basins outside of the sediment traps. Raise CB1 (existing) to the planned grade. Place excavated spoil along the north side of Evelyn Lane. If the excavation involves subsoil, over-excavate subsoil by a minimum of 4 inches (0.3 feet) and fill with topsoil to grade.
- (7) Install the headwall, storm sewer and catch basins [6], [7], [8], and [9]. This will control the surface water and drainage from the northeast corner of the site.
- (8) Install Dandy Bags™ and Dandy Sacks™ on proposed catch basins as they are installed.
- (9) Install the pipe and curb Inlet CB02. Install Dandy Curb™ on curb inlets as they are installed. Install silt fence over the opening for the inlet pipe and place No. 57 aggregate to cover the silt fence and the opening.
- (10) Install the sanitary sewer lines, services and manholes.
- (11) Install the 8" water main and services.
- (12) Excavate, fill and grade Evelyn Lane.
- (13) Install the street lighting and private utilities.
- (14) Install the Curb Inlet CB03 and remove the aggregate from CB02.

Permit, specification packet, plans, and the hydraulic and hydrologic design packet at the construction site.

INSTREAM ACTIVITIES: None.

CONSTRUCTION DATES: Beginning of construction - June 2014. End Construction - October 2014

SWPPP Log - An Excel spreadsheet is supplied with these plans for use during construction.

SPECIFICATIONS: Installation and materials shall be defined by:

1. City of Columbus Material and Construction Specifications (2012).
2. Rainwater and Land Development, 2nd Edition, (ODNR, 12/2006)
3. Construction Documents

NOTE: Where specifications conflict, the erosion control inspector or the Engineer shall determine which specification to use. The construction documents were prepared using COC Specifications.

PRACTICES (from Rainwater and Land Development):

Silt Fence Sediment Trap Construction Entrance Mulching Permannent Seeding Temporary Seeding Detention Basin Bioretention Cell

Temporary Seeding Mixes shall be selected from Table 7.8.1 of the Rainwater and Land Development Manual (ODNR, 2007) for the appropriate dates.

The preferred seeding mix is Perennial Ryegrass (40 lb/ acre of pale blue seeds), Turf Type Tall Fescue (40 lb/acre PLS) and Annual Ryegrass (40 lb/acre PLS) until August 15th, then Perennial Rye (40 lb/acre PLS), Turf Type Tall Fescue (40 lb/acre PLS) and Annual Ryegrass (40 lb/acre PLS).

Permannent Seeding Mixes shall be selected from Table 7.10.2 of the Rainwater and Land Development Manual (ODNR, 2007) for the appropriate dates.

The preferred seeding mix is Turf Type Tall Fescue (90 lb/acre PLS)

Mulching shall conform to Mulching, Rainwater and Land Development Manual (ODNR, 2007) page 39.

Alternative seeding mixes and mulching are available in the City of Columbus Material and Construction Specifications (2012), the Ohio D.O.T. Material and Construction Specifications (2012) and the NRCS Technical Guide Reference File. Additional guidance will be supplied on request.

The times when seeding and mulching are required are listed in OCEPA General Permit OHC000004 under Part II.B Table 1 and Table 2.

MAINTENANCE: All Erosion Control Practices shall be inspected once per week and immediately after any rainfall/runoff event. Repairs shall be made within three working days and maintenance problems that are considered critical to the Engineer, Erosion Control Inspector (by request) or the OCEPA shall be repaired within 24 hours.

The Contractor shall provide for cleaning Stygler Road at the end of each construction day. Gahanna or the erosion inspector may require the Contractor to clean the street for more frequent intervals as necessary to protect infrastructure and the safety of the public.

The Contractor shall provide for cleaning Stygler Road at the end of each construction day. Gahanna or the erosion inspector may require the Contractor to clean the street for more frequent intervals as necessary to protect infrastructure and the safety of the public.

(15) Proof roll, correct the subgrade, install concrete curbs and concrete base course. Install the intermediate course of asphalt.

(16) Final grade the lots, drainage channels, seed and mulch the disturbed areas.

(17) Remove the Sediment Trap at CB04 and install the outlet structure and Bioretention Cell. Sediment and excavated material can be spread on the north side of the graded fill on lots 7 through 10. Do not drive in the channel between lots 8 and 9.

A dewatering coral or dewatering sock can be set on the back side of Lot 7. This will drain into CB08 and bypass the site. Lot 7 should be undisturbed grass as little or no fill is to be placed there.

The riprap can be re-used around the outlet structure or removed from the site.

The No. 57 aggregate, if cleaned of silt, can be reused in the bottom layer of the Bioretention Cell.

Install silt fence around the Bioretention Cell to limit the amount of sediment that enters the cell.

(18) Repeat the process for the Sediment Trap at CB01. Spread sediment and excavated material on Lots 3 through 6. Do not drive in the channel between Lots 2 and 3.

A dewatering sock can be set up on the back of lots 5 through 7. This will drain back into the detention basin but this area should be relatively undisturbed grass.

Riprap and No 57 aggregate from the Sediment Trap can be reused at Headwall HW06.

(19) Install Permanent Seeding and Mulch all disturbed areas.

(20) Remove the silt fence when the area is stabilized.

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION BY THE ENGINEER, THE INSPECTOR AND THE OHIO EPA.

REVISIONS:

DATE

BY

REVISIONS:

DATE

BY

REVISIONS:

DATE

BY

BUSTERVE LLC DEVELOPMENT
NOTES and SWPPP
OAK GROVE OF GAHANNA
4185 STYGLER ROAD

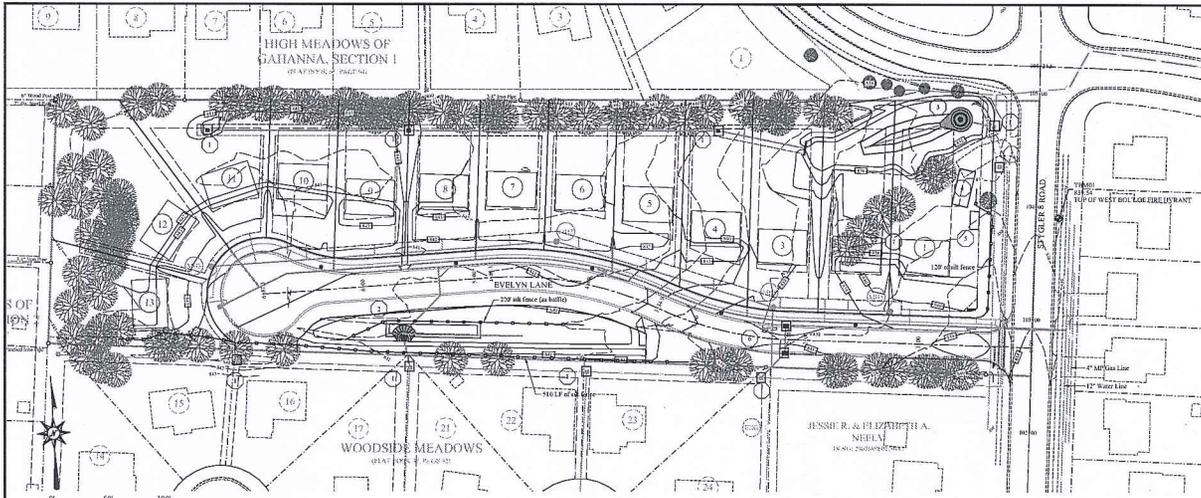


Approved: Casey Elliott, PE
Date: 05/27/2014
Professional Engineer License No. 127739
State of Ohio
Professional Engineer License No. 127739
State of Ohio

CONTRACT: 13107

S2

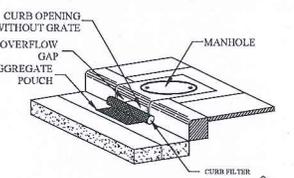
DATE



- 1 MARK 1 - Protect existing and installed catch basin inlets with DANDY BAGS (see Detail 8) and install catch basins with DANDY SOCKS (see Detail 6). The Dandy Socks are a permanent installation.
- 2 MARK 2 - Sediment Trap at Catch Basin 04. See design information at right and Detail 1.
- 3 MARK 3 - Sediment Trap at Catch Basin 01. See design information at right and Detail 2.
- 4 MARK 4 - Construction Entrance. See Detail.
- 5 MARK 5 - Concrete Cleanout. See Detail.
- 6 MARK 6 - Curb Inlet Protection. Protect Curb Inlets with Dandy Curb assemblies.
- 7 MARK 7 - Remove Red Maple Trees as marked.

DANDY CURB™
NOTE: THE DANDY CURB™ WILL BE MANUFACTURED IN THE U.S.A. PER A WHOLESALE PLANT FABRICATOR THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

Material Properties	Test Method	Units	MINIMUM
Concrete Strength	ASTM C 39	psi	4000
Concrete Density	ASTM C 138	pcf	145
Concrete Air Content	ASTM C 231	%	5.0
Concrete Modulus of Elasticity	ASTM C 469	ksi	3,600,000
Concrete Compressive Strength	ASTM C 39	psi	4000
Concrete Tensile Strength	ASTM C 496	psi	400
Concrete Flexural Strength	ASTM C 660	psi	400
Concrete Slump	ASTM C 143	in.	4.0
Concrete Setting Time	ASTM C 413	min.	30
Concrete Temperature	ASTM C 1064	°F	50
Concrete Moisture	ASTM C 188	%	5.0
Concrete Free Water	ASTM C 188	%	5.0
Concrete Chloride Ion Content	ASTM C 1218	%	0.10
Concrete Sulfate Content	ASTM C 1218	%	0.10
Concrete Alkali Content	ASTM C 1218	%	0.10
Concrete pH	ASTM C 1218		12.5
Concrete Compressive Strength	ASTM C 39	psi	4000
Concrete Tensile Strength	ASTM C 496	psi	400
Concrete Flexural Strength	ASTM C 660	psi	400
Concrete Slump	ASTM C 143	in.	4.0
Concrete Setting Time	ASTM C 413	min.	30
Concrete Temperature	ASTM C 1064	°F	50
Concrete Moisture	ASTM C 188	%	5.0
Concrete Free Water	ASTM C 188	%	5.0
Concrete Chloride Ion Content	ASTM C 1218	%	0.10
Concrete Sulfate Content	ASTM C 1218	%	0.10
Concrete Alkali Content	ASTM C 1218	%	0.10
Concrete pH	ASTM C 1218		12.5



5 DETAIL - DANDY CURB (TM)
 1/8" = 1'

DANDY SOCK™
NOTE: THE DANDY SOCK™ WILL BE MANUFACTURED IN THE U.S.A. PER A WHOLESALE PLANT FABRICATOR THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REINFORCED FLOW DANDY SOCK™ (READY)

Material Properties	Test Method	Units	MINIMUM
Concrete Strength	ASTM C 39	psi	4000
Concrete Density	ASTM C 138	pcf	145
Concrete Air Content	ASTM C 231	%	5.0
Concrete Modulus of Elasticity	ASTM C 469	ksi	3,600,000
Concrete Compressive Strength	ASTM C 39	psi	4000
Concrete Tensile Strength	ASTM C 496	psi	400
Concrete Flexural Strength	ASTM C 660	psi	400
Concrete Slump	ASTM C 143	in.	4.0
Concrete Setting Time	ASTM C 413	min.	30
Concrete Temperature	ASTM C 1064	°F	50
Concrete Moisture	ASTM C 188	%	5.0
Concrete Free Water	ASTM C 188	%	5.0
Concrete Chloride Ion Content	ASTM C 1218	%	0.10
Concrete Sulfate Content	ASTM C 1218	%	0.10
Concrete Alkali Content	ASTM C 1218	%	0.10
Concrete pH	ASTM C 1218		12.5

REINFORCED DANDY SOCK™ (SAFETY DESIGN)

Material Properties	Test Method	Units	MINIMUM
Concrete Strength	ASTM C 39	psi	4000
Concrete Density	ASTM C 138	pcf	145
Concrete Air Content	ASTM C 231	%	5.0
Concrete Modulus of Elasticity	ASTM C 469	ksi	3,600,000
Concrete Compressive Strength	ASTM C 39	psi	4000
Concrete Tensile Strength	ASTM C 496	psi	400
Concrete Flexural Strength	ASTM C 660	psi	400
Concrete Slump	ASTM C 143	in.	4.0
Concrete Setting Time	ASTM C 413	min.	30
Concrete Temperature	ASTM C 1064	°F	50
Concrete Moisture	ASTM C 188	%	5.0
Concrete Free Water	ASTM C 188	%	5.0
Concrete Chloride Ion Content	ASTM C 1218	%	0.10
Concrete Sulfate Content	ASTM C 1218	%	0.10
Concrete Alkali Content	ASTM C 1218	%	0.10
Concrete pH	ASTM C 1218		12.5

*Note: All Dandy Socks™ can be ordered with our optional absorbent filter.



6 DETAIL - DANDY BAG (TM)
 NTS



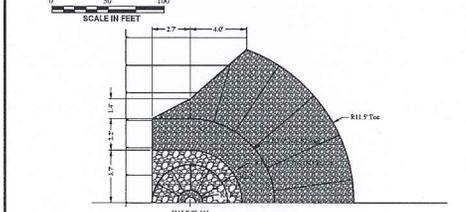
7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"

DANDY BAG™
NOTE: THE DANDY BAG™ WILL BE MANUFACTURED IN THE U.S.A. PER A WHOLESALE PLANT FABRICATOR THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

Material Properties	Test Method	Units	MINIMUM
Concrete Strength	ASTM C 39	psi	4000
Concrete Density	ASTM C 138	pcf	145
Concrete Air Content	ASTM C 231	%	5.0
Concrete Modulus of Elasticity	ASTM C 469	ksi	3,600,000
Concrete Compressive Strength	ASTM C 39	psi	4000
Concrete Tensile Strength	ASTM C 496	psi	400
Concrete Flexural Strength	ASTM C 660	psi	400
Concrete Slump	ASTM C 143	in.	4.0
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Concrete Moisture	ASTM C 188	%	5.0
Concrete Free Water	ASTM C 188	%	5.0
Concrete Chloride Ion Content	ASTM C 1218	%	0.10
Concrete Sulfate Content	ASTM C 1218	%	0.10
Concrete Alkali Content	ASTM C 1218	%	0.10
Concrete pH	ASTM C 1218		12.5

*Note: All Dandy Bags™ can be ordered with our optional absorbent filter.

8 DETAIL - DANDY BAG (TM)
 NTS

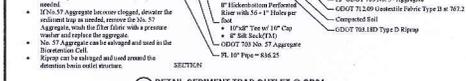


3 DETAIL - CONCRETE WASH OUT SUMP
 1/8" = 1'

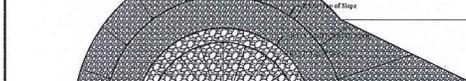
CONDITIONS: Concrete aggregate may use the concrete wash out to clean their trucks and other vehicles from the surface of concrete. Concrete will be removed from the sump and will be a minimum 100 feet from the curb. The sump may optionally use the concrete as a base if approved by the engineer or approved by the contractor. The material may be tested as per the engineer's direction.

NOTE: Locate the Sump in an area that includes all traffic water. Surface water can be directed away from the sump using surface drainage. Excess water must be removed from the construction site and disposed of at a construction waste disposal facility.

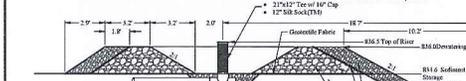
ALTERNATIVE: Alternative methods of using concrete make a potential space reserved for the Inspector and the Engineer.



1 DETAIL - SEDIMENT TRAP OUTLET @ CB04
 NTS



2 DETAIL - SEDIMENT TRAP OUTLET @ CB01
 NTS



4 DETAIL - SILT FENCE INSTALLATION
 3/8" = 1'



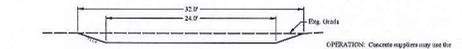
7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"



6 DETAIL - DANDY BAG (TM)
 NTS



7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"



3 DETAIL - CONCRETE WASH OUT SUMP
 1/8" = 1'

SILT FENCE INSTRUCTIONS
INSTALLATION - Silt fence shall be constructed according to the construction sequence or before any earth-ditching activity.

Silt fence shall be installed according to the plan. If site conditions do not match the plan, the Engineer to correct the design. Silt fence should be installed on the contour to spread the effort over the length of the fence. The ends of the fence should be higher than the top of the silt fence along the length of the fence to prevent water from passing around the end of the fence.

Preserve at least 5 feet of vegetation uphill of the silt fence. If this is not possible, seed the disturbed area immediately.

The silt fence shall be a min. 16" tall and have 8" of fabric buried in a 6" deep trench. Lay the excess material in the bottom of the trench and compact soil over the silt fence.

The stakes shall be located on the downhill side of the silt fence.

Roll the stakes from adjacent sections of silt fence together and drive them together.

MAINTENANCE - Inspect the silt fence weekly and each storm event. Report any problems and repairs IN WRITING to the erosion control inspector.

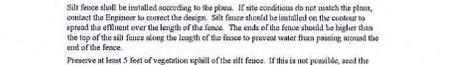
Promptly repair blowouts, torn fabric and tension. If the silt fence is topped or side-bled water bypasses the silt fence, consult with the Engineer and erosion control inspector to correct the installation.

NOTE: Silt fence fabric is meant to filter silt. Suspended clay in water can still pass through silt fence fabric. Do not expect effluent to be clear water.

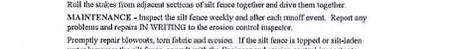
MATERIALS - Hubs shall be 2"x2"x36" hubs made of hardwood or Douglas fir.

Silt Fence shall meet the following:

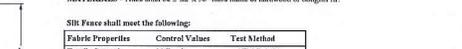
Fabric Properties	Control Values	Test Method
Tensile Strength	90 lb. min.	ASTM D 1582
Shear Strength	100 psi min.	ASTM D 3786
Shrinkage Rate	0.5 gpm/ft max.	
Eye Opening Size	No. 40-80	US Sieve CW-42215
Ultraviolet Resistance	90% min.	ASTM D 25



4 DETAIL - SILT FENCE INSTALLATION
 3/8" = 1'



7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"



6 DETAIL - DANDY BAG (TM)
 NTS



7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"



8 DETAIL - DANDY BAG (TM)
 NTS



7 DETAIL - CONSTRUCTION ENTRANCE
 1" = 10"



6 DETAIL - DANDY BAG (TM)
 NTS

SEDIMENT TRAP DESIGN @ CB01 (MARK 3)

Drainage Area	Design Volume	1,800 CF/AC
Dewatering Storage	Required Volume	6,010 CF/AC
Sediment Storage	Design Volume	1,000 CF/AC
	Required Volume	3,672 CF/AC
Top of Dam	Freeboard	856.50 FT
	Freeboard	0.5
Dewatering Pool	Surface Area	856.00 FT ²
	Depth	7.50 FT
	Volume	1.0 FT
	Sideslope	3:0
	Volume	6,644 CF/AC
Sediment	Surface Area	855.00 FT ²
	Volume	5,782 SF
Sediment Pool	Surface Area	834.6
	Volume	1,719.0 FT ³
	Depth	3.5 FT
	Sideslope	2:0
Bottom	Volume	3,833 CF/AC
	Surface Area	831.10 FT ²
	Depth	471 SF

SEDIMENT TRAP DESIGN @ CB04 (MARK 2)

Drainage Area	Design Volume	1,727 AC
Dewatering Storage	Required Volume	1,800 CF/AC
Sediment Storage	Design Volume	2,386 CF/AC
	Required Volume	1,000 CF/AC
Top of Dam	Freeboard	841.00 FT
	Freeboard	1.0
Dewatering Pool	Surface Area	840.00 FT ²
	Depth	7.334 USF
	Volume	0.0 FT
	Volume	3,879 CF/AC
Sediment Pool	Surface Area	839.1 FT ²
	Average Width	14.0 FT
	Average Length	84.0 FT
	Surface Area	1,176.0 SF
	Depth	1.4 FT
	Sideslope	2:0
Bottom	Volume	1,284 CF/AC
	Average Width	8.4 FT
	Average Length	78.4 FT
	Surface Area	658.54 SF

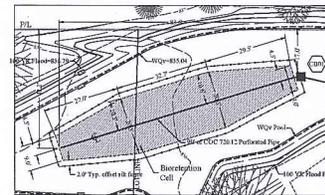
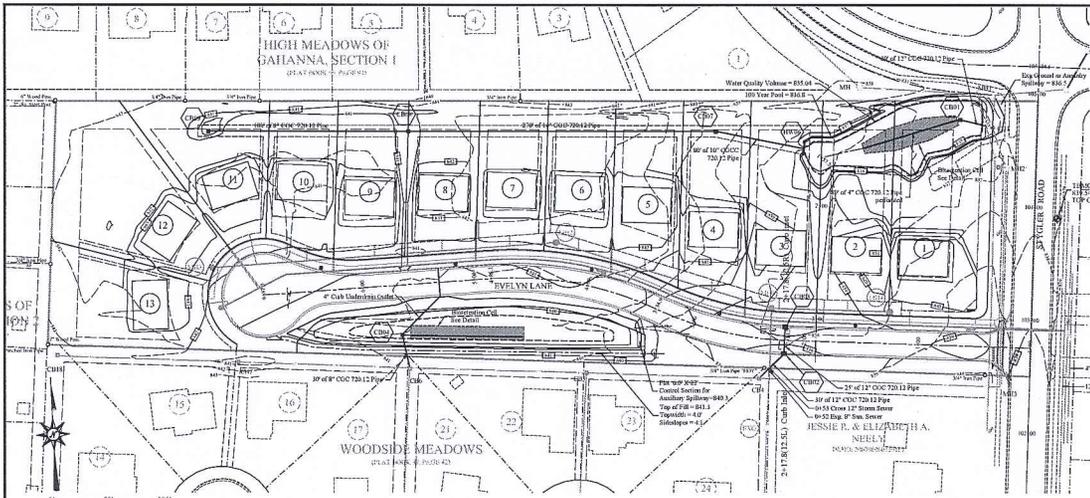
REVISIONS:
 BUSTERVE LLC DEVELOPMENT
 EROSION CONTROL PLAN
 OAK GROVE OF GAHANNA
 4185 STYGLER ROAD
 GANNAH



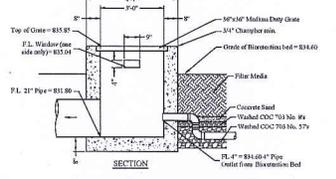
Approved: **Cary C. Elliott**
 PE 0012878
 Date: 03/10/14
 Project: OAK GROVE OF GAHANNA
 Location: OAK GROVE RD
 Drawing No: 13107

Contract: 13107

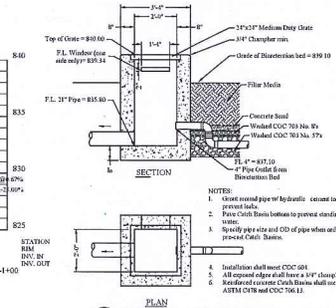




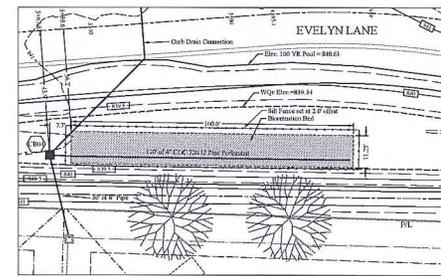
1 BIORETENTION CELL AT CB01



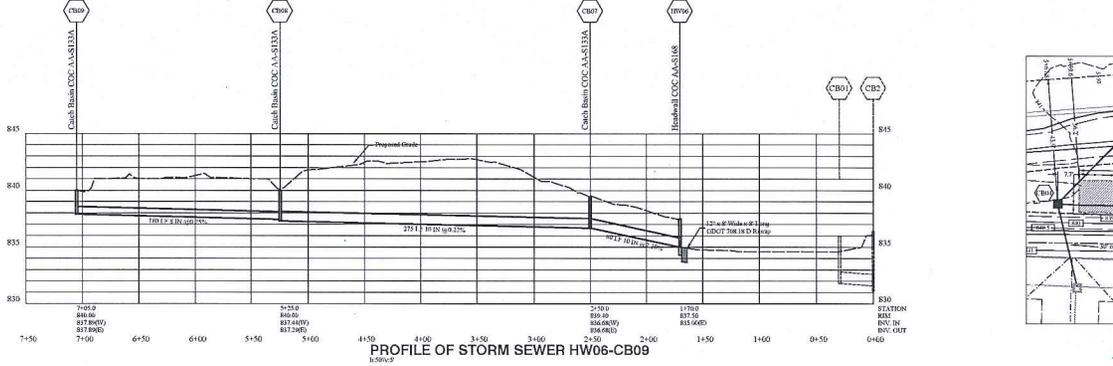
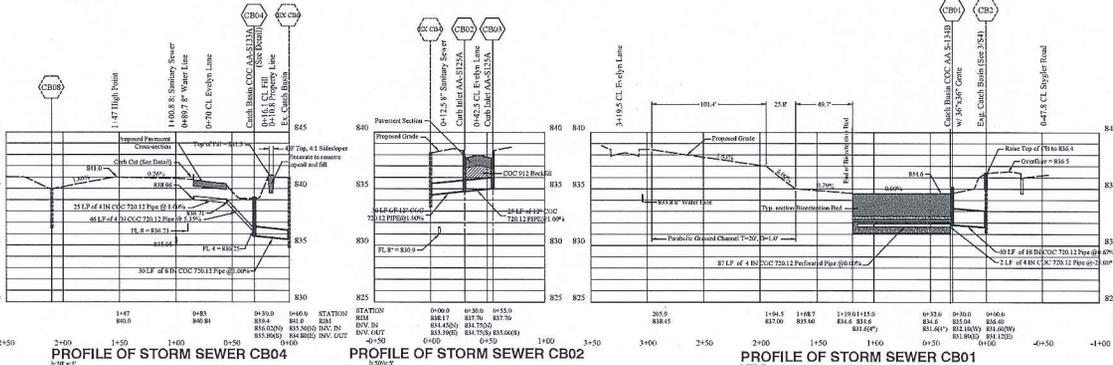
2 DETAIL-Pond Outlet Structure CB01



3 DETAIL-Pond Outlet Structure CB04



4 BIORETENTION CELL AT CB04



DETENTION BASIN AT CB01			
Total Area	A	3.67	Ac
Impervious Area	I	0.58	Ac
Ratio	I=I/A	0.16	
WQ ₁₀ =	C x P x (A/I) ^{1/2}		
C =		0.15	
P =		0.75	ft
A =		3.67	Ac
WQ ₁₀ =		1.461	ft

BIORETENTION BASIN DESIGN			
Surface Area	1,461	SF	ODNR
Average Width	16.8	FT	
Length	87	FT	
Coefficient of Transmissibility	K	0.50	FT/DAY
Outflow	0.0085	CFS	Media Controls

STORAGE SUMMARY			
Description	Elevation (ft)	Storage (CF)	Peak Outflow (CFS)
Bioretention Cell	834.60	-	-
WQ ₁₀	833.04	1,499	0.099
Q-5 YR	836.75	6,618	1.9
Q-10 YR	836.79	14,426	24.8

DETENTION BASIN AT CB04			
Total Area	A	1.27	Ac
Impervious Area	I	0.51	Ac
Ratio	I=I/A	0.40	
WQ ₁₀ =	C x P x (A/I) ^{1/2}		
C =		0.28	
P =		0.75	ft
A =		1.27	Ac
WQ ₁₀ =		0.62	Ac-ft
		970	cf

BIORETENTION BASIN DESIGN			
Surface Area	1,111	sf	ODNR
Average Width	11.25	FT	
Length	98.7	FT	
Coefficient of Transmissibility	K	0.50	FT/DAY
Outflow	0.0094	CFS	Media Controls

STORAGE SUMMARY			
Description	Elevation (ft)	Storage (CF)	Peak Outflow (CFS)
Bioretention Cell	839.10	970	0.006
WQ ₁₀	839.93	4,362	0.7
Q-5 YR	840.48	9,931	2.7
Q-10 YR	840.63	11,098	3.0

COMPOSITE WATERSHED DATA (On Site)			
Total Area	A	4.92	Ac
Impervious Area	I	1.09	Ac
Ratio	I=I/A	0.22	
WQ ₁₀ =	C x P x (A/I) ^{1/2}		
C =		0.18	
P =		0.75	ft
A =		4.92	Ac
WQ ₁₀ =		0.96	Ac-ft
		2,445	cf

CRITICAL STORM			
Basin	Existing Property	Proposed	
1 Year Rainfall	2.17	3.17	in
Ave. CN	80.6	83.0	
Volume Runoff	0.70	0.84	in - NRCS CN Method
Change in Runoff Volume		21%	
Design Storm	1-year	5-Year	Between 20-50% Increase

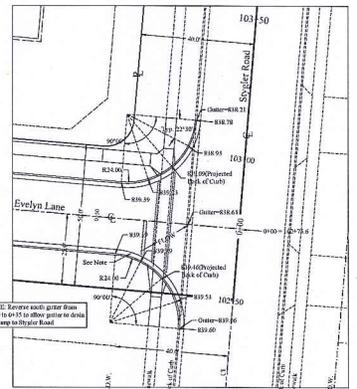
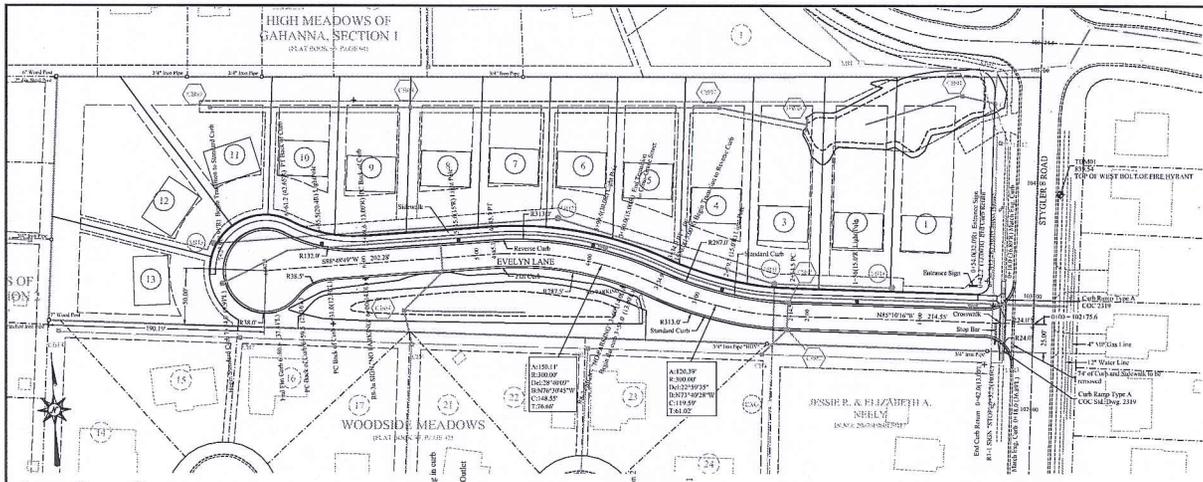
CRITICAL STORM RELEASE SUMMARY				
Storm Return Period	Flow from Existing Property (cfs)	Permitted Release (cfs)	Flow from Project (cfs)	Comment
1	2.89	2.89	0.74	
2	4.94	2.89	1.41	
5	7.89	2.89	2.13	Critical Storm
10	10.37	10.37	3.52	
25	19.70	19.70	4.99	
50	25.62	25.62	11.77	
100	31.72	31.72	25.51	

*Flow from Project includes the contained flows from CB01, CB02 and CB04. The peak flow shown is the largest combined flow at a given time during the event.

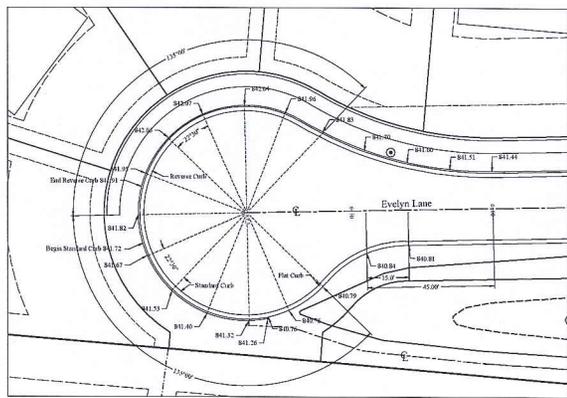
BUSTERVE LLC DEVELOPMENT
STORMWATER PLAN
 OAK GROVE OF GAHANNA
 4185 STYGLER ROAD
 GANNAH, VA 22420

APPROVED: *[Signature]* P.E. 009278 FS 7750
 DATE: 03/20/2014
 CHECKED: *[Signature]* P.E. 009278 FS 7750
 DATE: 03/20/2014
 DESIGNED: *[Signature]* P.E. 009278 FS 7750
 DATE: 03/20/2014

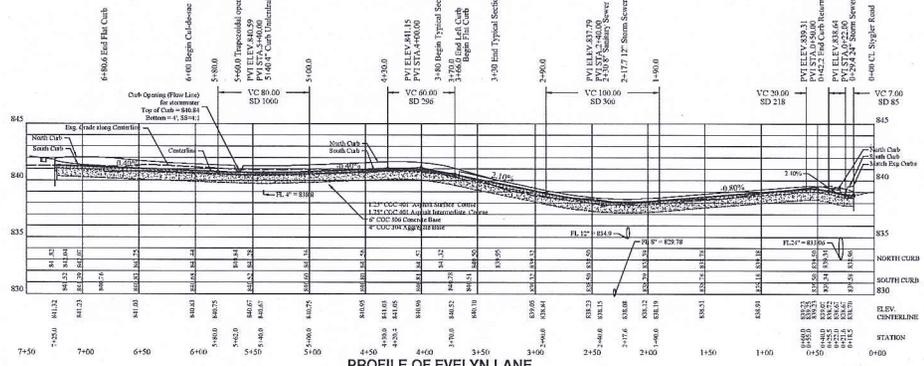
CONTRACT: 13107
S5



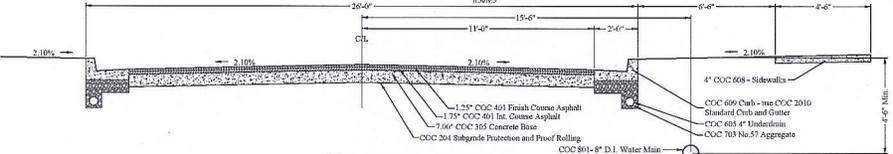
4 DETAIL-INTERSECTION
1"=20'



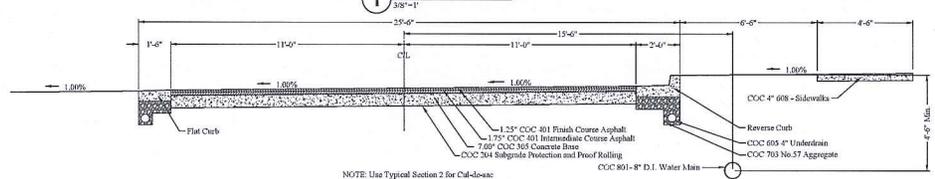
5 DETAIL-CUL-DE-SAC
1"=20'



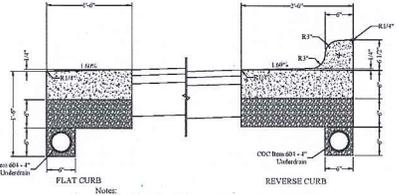
PROFILE OF EVELYN LANE



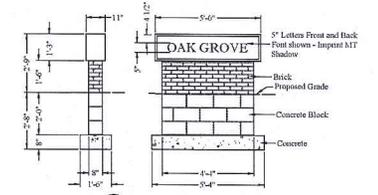
1 TYP. SECTION 26' STREET
3/8"=1'



2 TYP. SECTION 26' CROSS GRADE STREET
3/8"=1'



3 CURB DETAILS FOR CROSS GRADE STREET
1/2"=1'



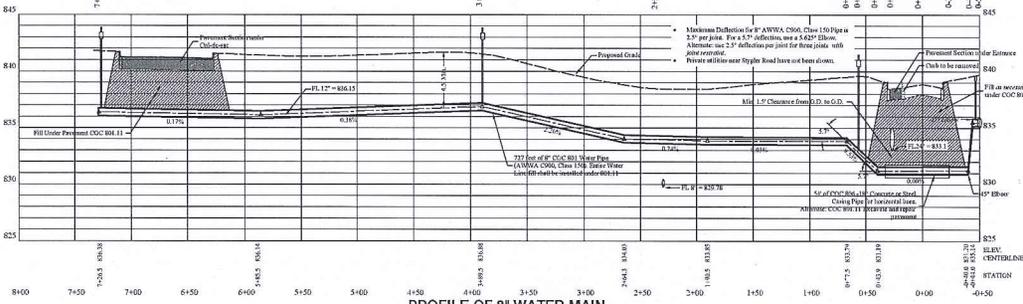
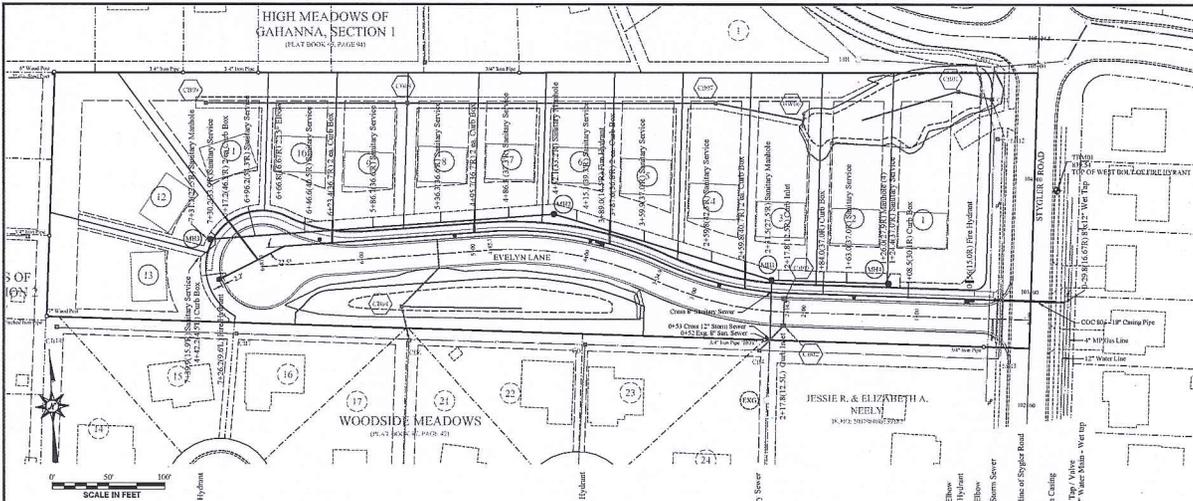
6 DETAIL-ENTRANCE SIGN
3/8"=1'

REVISIONS:

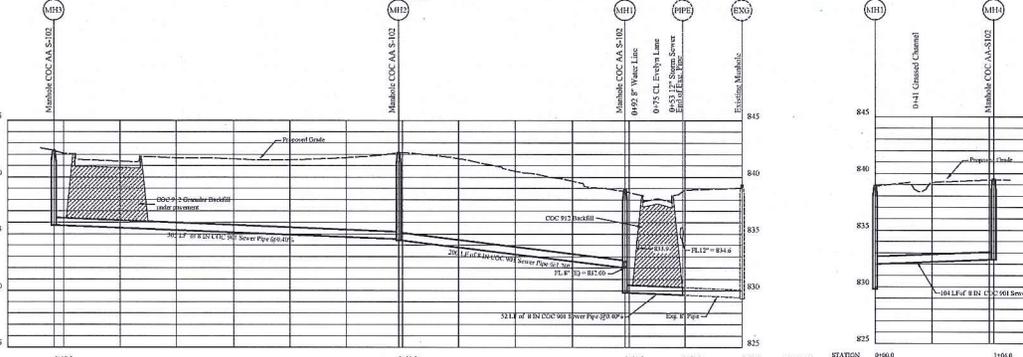
 BUSTERVE LLC DEVELOPMENT
EVELYN LANE PLAN/PROFILE for
OAK GROVE OF GAHANNA
 4185 STYLER ROAD
 GANNA, OHIO

Approved: *Chad E. Hester* PE 039721 PS 7789
 DATE: 05/07/2014
 PROJECT: EVELYN LANE DEVELOPMENT
 LOCATION: OHIO 43101
 CONTRACT NO.: 13107

S6



PROFILE OF 8" WATER MAIN



PROFILE OF 8" SANITARY SEWER

PROFILE OF 8" SANITARY SEWER

REVISIONS:

BUSTERVE LLC DEVELOPMENT
WATER and SEWER PLANS
 OAK GROVE GAHANNA
 4185 STYGLER ROAD
 PAMUNKEY COUNTY, VA

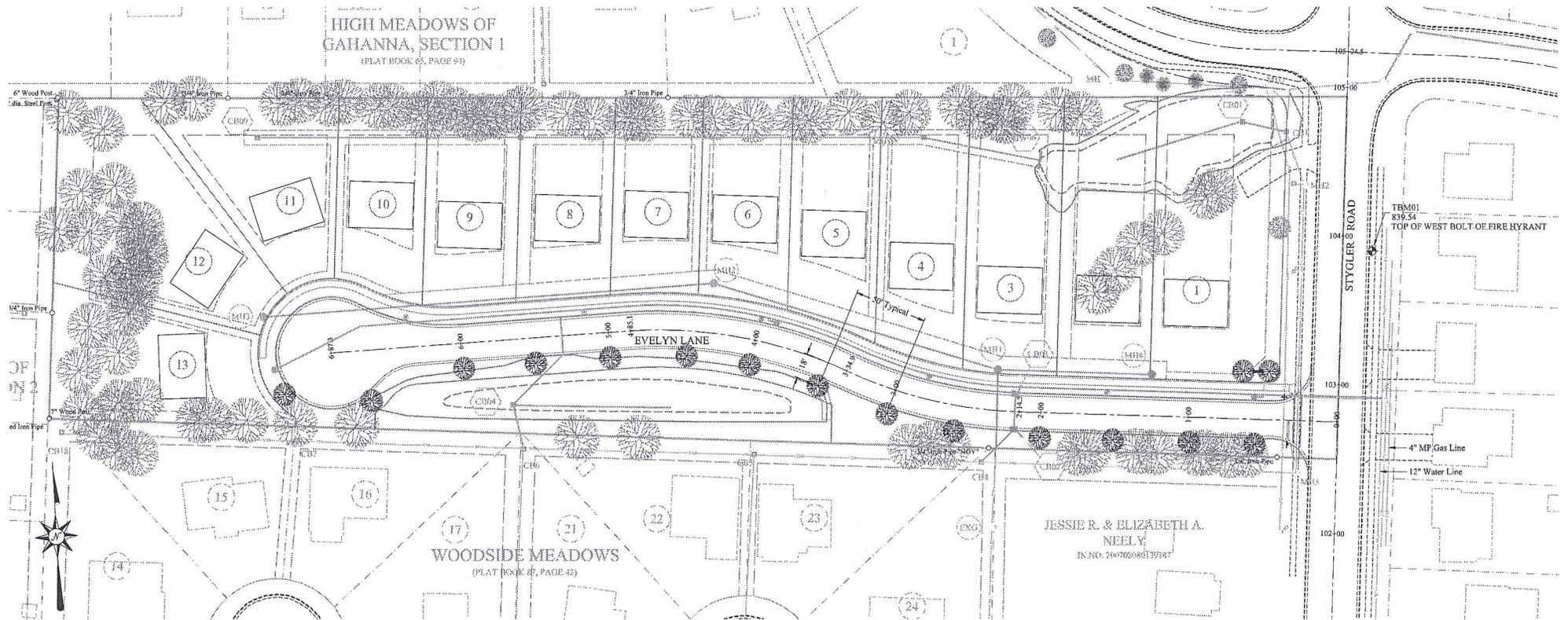
APPROVED: [Signature] P.E. 049272 RS 7759
 DATE: 03/26/2014

SAFETY CONSULTANT/ENGINEER
 LICENSE NO. 1000111001
 PAMUNKEY COUNTY, VA

Contract: 18107

S7

HIGH MEADOWS OF
GAHANNA, SECTION I
(PLAT BOOK 63, PAGE 93)



TREE PLANTING PLAN

- 14 trees to be planted at 50' spacing on south side of Evelyn Drive plus 2 trees planted at entrance sign.
- Trees shall be Deciduous, 1-1/2" caliper at 12" above the planting line, balled and burlap. Species shall be preferred Red Oak, Black Oak or similar but shall meet the Gahanna Tree Commission specifications for "Large Trees" from the permitted list.
- Additional trees to be planted by builders on lots - number and species to be determined.
- Existing trees shall be protected during construction except as noted on the Construction Drawings.
- No trees are to be planted in the north tree lawn of Evelyn Lane due to interference with proposed utilities. Trees planting is to be encouraged north of the sanitary sewer easement.

OAK GROVE OF GAHANNA
PROPOSED TREE PLAN



CITY OF GAHANNA

DEPARTMENT OF PARKS & RECREATION

TO: PLANNING COMMISSION, BONNIE GARD
FROM: TROY EUTON, DIRECTOR OF PARKS AND RECREATION
SUBJECT: OAK GROVE LANDSCAPE PLAN
DATE: JUNE 5, 2014

RECOMMENDATION

REGULAR MEETING OF LANDSCAPE BOARD HELD: JUNE 5, 2014

DiGiando made a **MOTION** to recommend the landscape plan for the Oak Grove development with the recommendation from the City Arborist and with the suggestion of using White, Red and a burr oak variety of trees; seconded by Allinder. **On roll call vote:** Shepherd, yes, Allinder, yes, DiGiando, yes, and Hyde, yes. **Motion carried 4-0.**

Chair requested that Deputy Director forward this recommendation to Planning Commission

Memorandum

To: Gahanna City Council

From: Bonnie Gard, Planning and Zoning Administrator

Date: 4/3/14

Re: FP-2- 2014 Oakgrove Subdivision 4185 N. Stygler Road

In accordance with Chapter 1109.08 of the codified Ordinances of Gahanna, the following is the breakdown of the fees-in-lieu of land dedication for Oakgrove Subdivision.

1. Required dedication for 4.581 acres of development:
2. (Number of lots) x (2.99 individuals/lot) x (.025 acres/individual) =
dedicated acres
3. **13 x 2.99 x .025 = .97 acre**
4. Appraised value of total acreage: \$210,000
5. Appraised value per acre: \$210,000 ÷ 4.581 ac = \$45,842/acre
6. Fees required: \$45,842 x .97 ac. = \$44,466.27

STORMWATER COMPLIANCE CERTIFICATE

I hereby certify that **OAK GROVE** shall be in full compliance with the design requirements of Gahanna Codified Ordinances Section 1193.



Karl C. Wetherholt, PE
City Engineer

May 15, 2014
Date

:jaw

cc: Clerk & Members of Planning Commission
Zoning Administrator
Project File

Stormcom.doc