

# CITY OF GROVE CITY, OHIO STREET, STORM SEWER AND WATER IMPROVEMENT FOR HOOVER PARK SECTION 8 2004

## SHEET INDEX

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## STANDARD CONSTRUCTION DRAWINGS

CITY OF GROVE CITY	CITY OF COLUMBUS	ODOT
C-GC-1 29 49	L-6306	CB-2-2B
9 31 51	L-6309	CB-2-3
11 32 52	L-6310	
12 35 53	L-6311	
13 36 54	L-6312	
20 40 57A	L-6409	
21 41 59	L-6473	
23 43A 60	L-6637	
24 43DW 61	L-7001	
26 46 79	AA-S145	
80		

## BENCH MARKS (1929 Datum)

Franklin County B.M. L-24 - BP in CM at B.&O. R.R. Crossing on Rensch Road,  
0.12 mile W. of S.R. 62, 27.8' E. of R.R. tracks,  
15.35' S. of C/L Rensch Road, 5.8' W. of utility  
pole and 2' N. of W. post.

Elev.=869.238

B.M.#2 - Spike S. Side of Triple 18" Tree in N. P/L 300± Ft.  
W. of Haley Way.

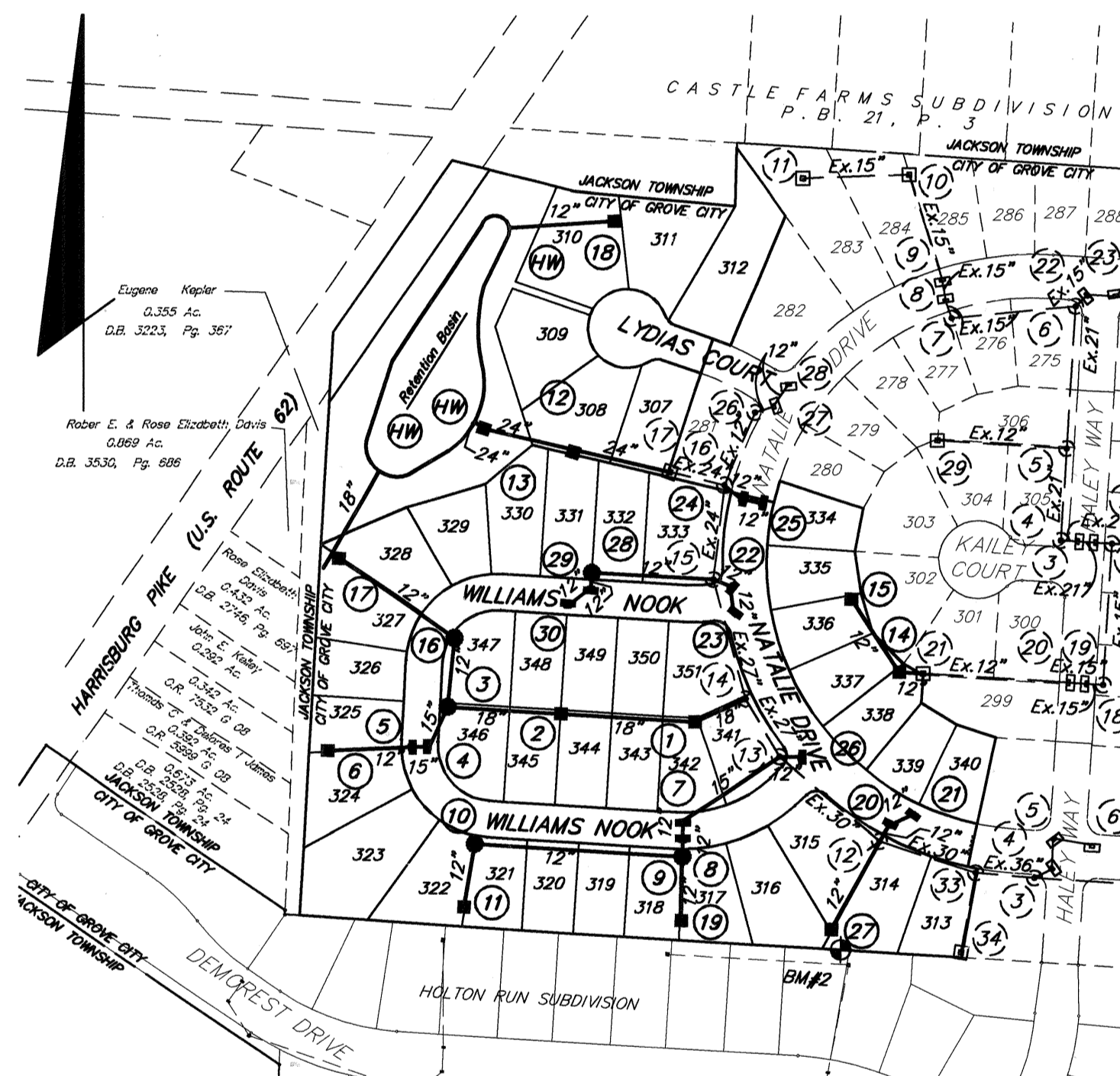
Elev.=861.63

B.M.#3 - Spike S. Side of 48" Tree in N. P/L 500± Ft.  
E. of Haley Way.

Elev.=855.40

Source  
B.M. - Brass Plate in Concrete Monument, at Intersection of  
Orders Rd. and Southern Grove Dr., 26.2 Ft. N. of  
C/L of Orders Rd., 24.3 Ft. W. of C/L of Southern  
Grove Drive, 4.2 Ft. S.E. of Center of Utility Pole No.  
195A228, 2.75 Ft. S.E. of A WP.

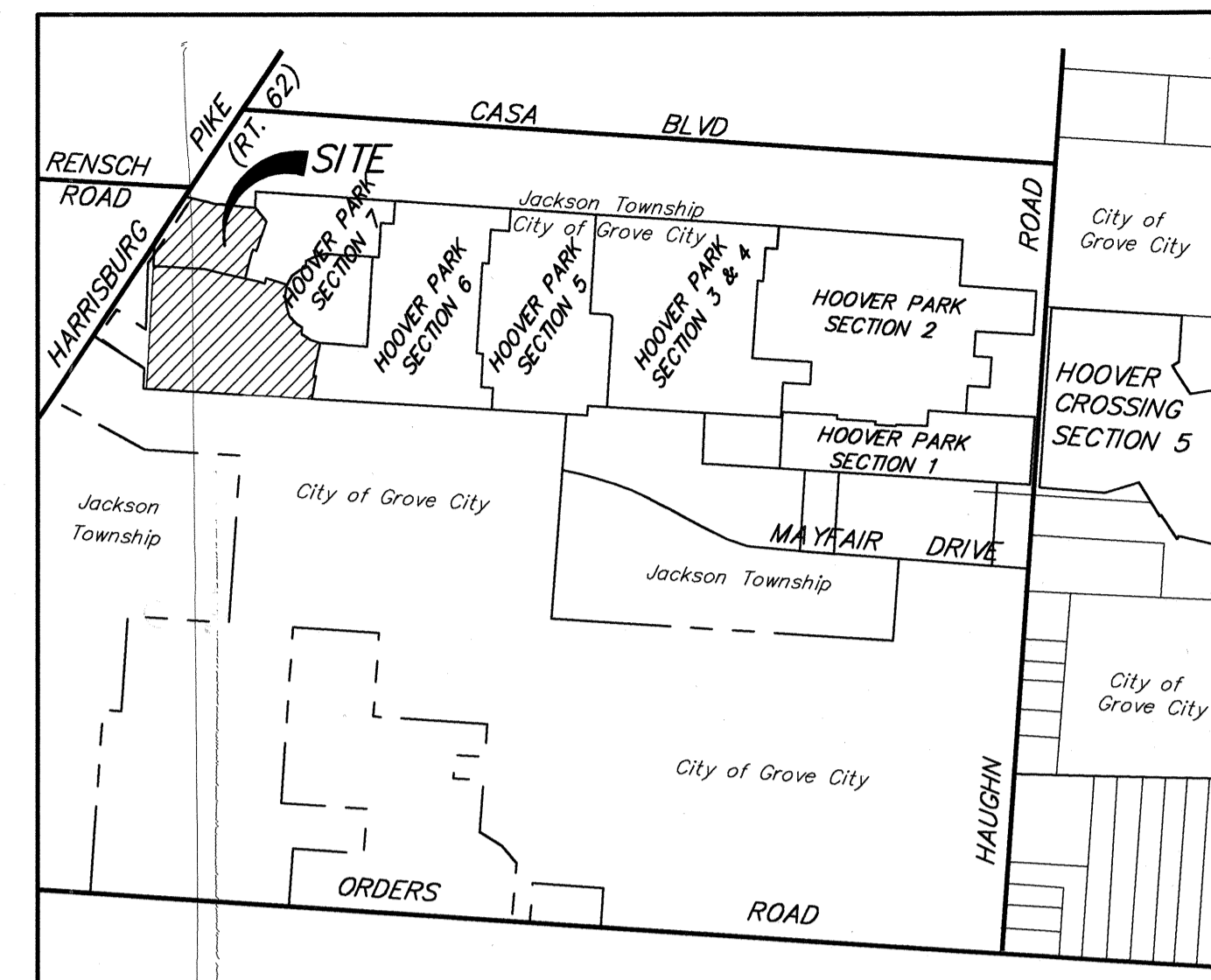
Elev.=853.38



## INDEX MAP

SCALE: 1" = 200'

2 WORKING DAYS  
BEFORE YOU DIG  
CALL TOLL FREE 800-362-2764  
OHIO UTILITIES PROTECTION SERVICE



## LOCATION MAP

SCALE: N.T.S.

Approval: Signatures below signify only concurrence with the general purpose  
and general location of the project. All technical details remain the responsibility  
of the Engineer preparing the plans.

APPROVED:

*Cheryl R. Schumacher*  
Mayor, City of Grove City, Ohio

8-11-04  
Date

*[Signature]*  
City Administrator, City of Grove City, Ohio

8-11-04  
Date

*[Signature]*  
Service Director, City of Grove City, Ohio

8-11-04  
Date

*[Signature]*  
Safety Director, City of Grove City, Ohio

8-11-04  
Date

*[Signature]*  
Fire Chief, Jackson Township

8-12-04  
Date

*Mark R. Schumacher #61341*  
Reviewed By Engineer for City of Grove City, Ohio  
By Hockaden and Associates, Inc.

8-4-04  
Date

Approval on the part of the City of Columbus is given pursuant to the provisions of the  
Water Service Agreement between the City of Grove City and the City of Columbus, Ohio  
on December 01, 2000, and all subsequent amendments thereof.

*RC Winkler*  
Administrator Division of Water  
City of Columbus, Ohio

8-25-04  
Date

*Cheryl Roberts, by N.R. [Signature]*  
Director of Public Utilities  
City of Columbus, Ohio

8/25/04  
Date

PREPARED BY:

**EMHT**  
INC.  
ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
EVANS, MECHWART, HAMBLETON & TILTON, INC.  
170 MILL STREET  
GAHANNA, OHIO 43230  
TELEPHONE (614) 471-5150  
FACSIMILE (614) 471-9286

*[Signature]*  
Registered Engineer No. 51300

July 8 2004  
Date

AS BUILT INFORMATION FURNISHED BY  
HOCKADEN & ASSOCIATES

AS BUILT 4/26/06

GC4356

CITY OF GROVE CITY, FRANKLIN COUNTY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT  
FOR  
HOOVER PARK  
SECTION 8

**EMHT**  
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ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
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GAHANNA, OHIO 43230  
TELEPHONE (614) 471-5150  
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REVISIONS

MARK DATE DESCRIPTION

Job No.

Date

Scale

Sheet

2001-1353

July, 2004

1" = 200'

1 of 9

GENERAL NOTES

GENERAL: The current City of Grove City, Ohio requirements together with the City of Columbus "Construction and Material Specifications" and the State of Ohio "Construction and Material Specifications", including all supplements thereto, in force on the date of contract, shall govern all materials and workmanship involved in the improvements shown on these plans, except as such specifications are modified by the following specifications or by the construction details set forth herein.

TRENCHES: All trenches under existing or proposed paved areas and drives shall be backfill with Compacted Granular Backfill, Item 912, from the top of the bedding material to the pavement subgrade or to a plane six (6) inches below the top of the ground, between the limits of five (5) feet beyond the edge of pavement, paved shoulder or the back of curb. Unless otherwise shown, trenches not under existing or proposed paved areas but within existing or proposed right-of-way or lawn areas shall be backfill with Compacted Backfill, Item 911. Trench backfill in all other areas shall be Type C Backfill. Any settlement which occurs during the guarantee period shall be repaired at no cost to the Owner. All storm sewer bedding shall be Class B as per O.D.O.T. Item 603.04.

EXISTING UTILITIES: The identity and location of the existing underground utility facilities known to be located in the construction area have been shown on the plans as accurately as provided by the Owner of the underground utility. The City of Grove City and/or the Engineer assume no responsibility as to the accuracy or the depths of the underground facilities whether or not shown on the plans. Support, protection and restoration of all existing utilities and appurtenance shall be the responsibility of the Contractor. The cost of this work shall be included in the price bid for the various items. The Contractor shall cause notice to be given to the Ohio Utilities Protection Service (telephone 800-362-2764, toll free) and to the Owners of the underground utilities who are not members of a registered underground protection service in accordance with Section 153.64 of the Revised Code.

The above-mentioned notice shall be given at least 2 working days prior to start of construction.

The following utilities and Grove City do not subscribe to a registered underground utility service:

UTILITY	OWNER	TELEPHONE NO.
Sanitary Sewer, Storm Sewer & Water Facilities	City of Grove City 4035 Broadway Grove City, Ohio 43123	875-6368

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

WORK LIMITS: The Contractor shall confine his activities to the Project Site under development or the existing right-of-ways, construction and permanent easements shall not trespass upon others' private property without the written consent of the owner.

PERMITS: The Contractor shall obtain all necessary permits. No service connection permits shall be issued or connections made to any service taps until water lines have been disinfected by the City of Columbus, Division of Water.

WATER MAINS: All water pipe and fittings, and methods of workmanship and construction for water mains and appurtenances shown, on these plans shall conform to the "Construction and Material Specifications, City of Columbus", current on the date of contract, unless the requirements of such specifications are upgraded by the following specifications or by the construction details set forth herein. On dead end lines in cul-de-sacs, two (2) 3/4" taps shall be installed within two (2) feet of the end of main.

CONFLICTS: In all conflicts between water mains and gravity sewers, the water mains shall be lowered during construction.

OPERATION OF EXISTING VALVES: Existing valves on "in-service" water mains shall be operated by authorized personnel of the City of Columbus and/or City of Grove City Water Department as applicable.

DISINFECTION: All water mains shall be disinfected by the City of Columbus in accordance with Item 801.13 of the City of Columbus Construction and Material Specifications. Special attention is directed to applicable sections of A.W.W.A. C-651, particularly for flushing (Section 5) and for chlorinating valves and for fire hydrants (Section 7). When the water lines are ready for disinfection, the City of Grove City shall submit two (2) sets of "as built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of Columbus, Division of Water. The Contractor shall be responsible for all costs associated with the disinfection of all water lines constructed under this plan.

All water line materials and installations shall be in accordance with the current rules and regulations of the City of Columbus, Division of Water.

All water meters associated with this project shall be installed inside of the proposed structure, not in a meter pit, unless said meter pit installation is approved by the Administrator, Division of Water, and if a meter pit is approved it shall conform to Standard Drawing No. L-6317, A and B. All meter pits must be approved prior to the issuing of any service permits.

All water lines shall be pressure tested in accordance with Section 801.12 of the City of Columbus Construction and Material Specifications. Cost shall be included in the price bid for the various Water Main Items.

All taps made in 2" P.V.C. pipe are to be made with Ford Service Saddles, Model S70-203, or approved equal.

CURB BOXES: Curb boxes shall be located twelve (12) inches from the edge of proposed sidewalks between the sidewalk and the curb unless otherwise shown on the plans or ordered by the Engineer. Install valve & curb box markers: Use 4' long fence post (farm type) painted blue.

The proposed water line shall be located a minimum distance of twenty (20) feet away from any structure, overhang, or footer.

All valve boxes, service boxes, and fire hydrants shall be located within the easement area.

MINIMUM DEPTH: Water lines shall be laid with a minimum of four feet (4) from finished grade (curb) to top of water line.

The City of Columbus, Division of Water will be responsible for the repair and maintenance of the water line within the easement area. Backfilling of any excavation caused by the maintenance, repair or replacement of said water line shall be such that the surface is restored to its former elevation as near as is reasonably possible.

LINE CROSSING: At all points of crossing of water mains and sewers, the backfill shall be granular material between the deeper and shallower pipe as directed by the Engineer.

VALVE EXTENSIONS: If the top of the operating nut is more than 36" below finish grade, an extension stem shall be furnished to bring the top of the operating nut to within 24" of finished grade elevation.

UNDERCUTTING: In the event excavation for the street is from 0" to 6" below that called for on the plans, the Contractor will be required to replace this excess excavated material with compacted granular material, Item 304 or 310 as directed and at no extra cost to the Owner.

MISCELLANEOUS WORK: All items of work called for on the plans for which no specific method of payment is provided shall be performed by the Contractor and the cost of same shall be included in the price bid for the various related items.

FIELD TILE: All field tile broken during excavation shall be replaced to original condition. The Contractor shall connect all field tile encountered in the area to the proposed storm system. The cost is to be included in the price bid for the various sewer items.

SPECIAL NOTES:

Approval of these plans is contingent upon City of Grove City securing an easement that will hold the City of Columbus harmless for damages resulting from maintenance work and/or water damages that could be associated with this water line.

GAS: Ferguson Enterprises will provide all necessary sleeves and deliver these to the job site. The Contractor should contact Pat Shau with Ferguson Enterprises at (614) 876-8555 at least seven (7) days prior to when the sleeves are needed.

EROSION CONTROL: Erosion Control items shall be installed prior to the start of any construction activity.

The Contractor is to notify the City Engineer 72 hours prior to commencement of work.

The Developer shall schedule a preconstruction meeting including the Developer, Contractor, City Engineer, Design Engineer and Testing Agency.

TRAFFIC CONTROL: Access to all adjoining properties shall be maintained at all times.

All temporary traffic control devices shall be furnished, erected, maintained and removed by the Contractor in accordance with the "Ohio Manual of Traffic Control Devices For Construction And Maintenance Operations" (Current edition), copies of which are available from the Ohio Department of Transportation, Bureau of Traffic, 1980 West Broad Street, Columbus, Ohio 43223.

Steady-Burning, Type "C" lights shall be required on all barricades, drums and similar traffic control devices in use at night. Cones are NOT approved for use at night.

FIRE HYDRANTS: The developer shall be required to provide the City with the minimum of one (1) extra fire hydrant for every twelve (12) fire hydrants installed.

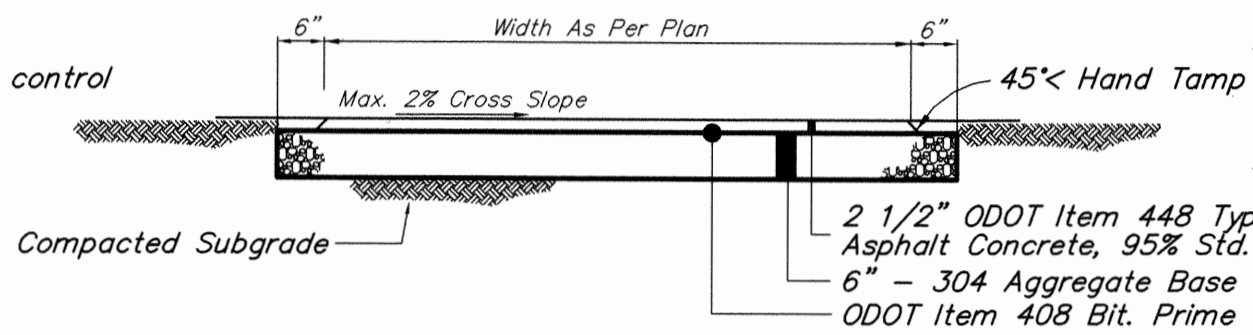
STREET LIGHTS: For every twelve (12) street lighting units installed, the developer shall be required to provide the City with a minimum of one (1) extra street lighting unit.

STREET LIGHTING NOTES

Contractor to Contact City Engineer or Service Director to Obtain Most Recent Grove City Street Light Specifications. Shop Drawings for all Components of the Street Light System Must be Submitted to the Grove City Engineer and Approved Before Street Light Installation Can Start.

STREET LIGHTING LEGEND

- Street Lights (HADCO Series 15: VS 100 Watt, Finish-A, Panels-B, Photo Control-Y, Voltage HPF-E.
- POSTS: P-1740, Material-Tapered Aluminum, Finish-Black.
- Street Light Cable - 1" P.V.C. Pipe
- Enclosed Waterproof Circuit Breaker with Accessories.
- Fused Pedestal or Fused Transformer Power Supply
- Source by Power Company Location Only Approximate, Contractor to Coordinate With Power Company.
- Medium Pull Box
- 3" Rigid Conduit Under Pavement
- Control Site

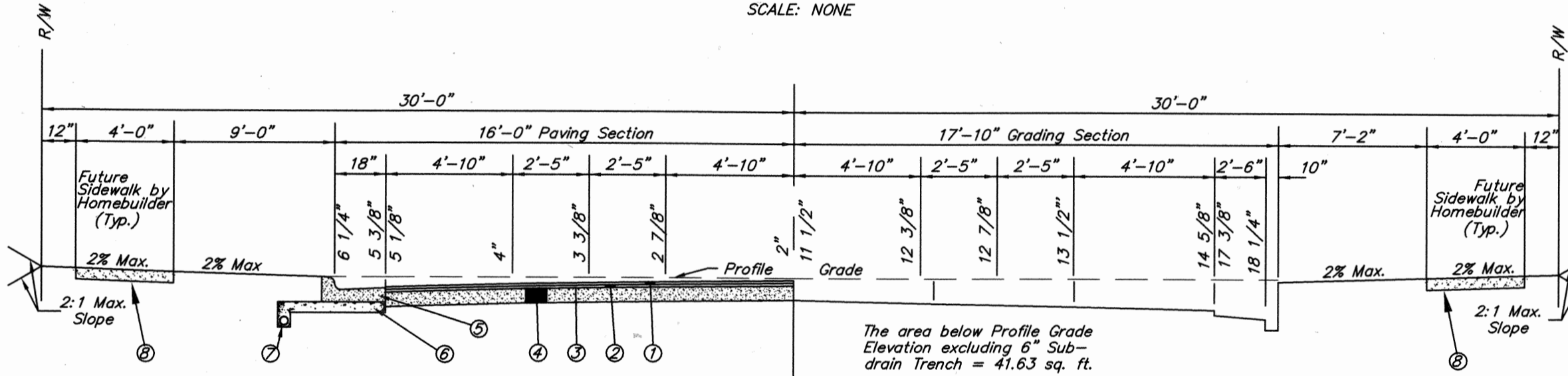


BIKE PATH DETAIL

Scale: NONE

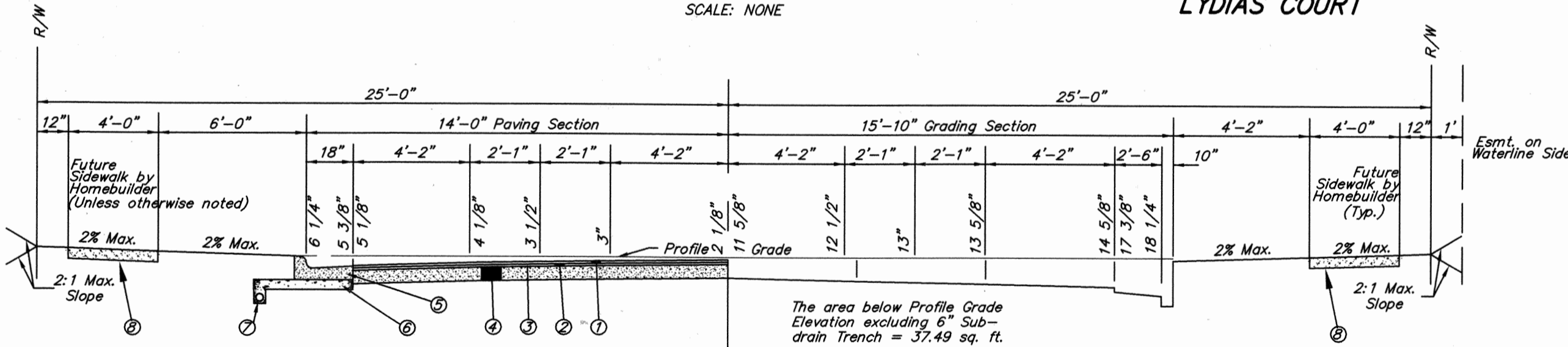
TYPICAL 32' SECTION (60' R.O.W.)

SCALE: NONE



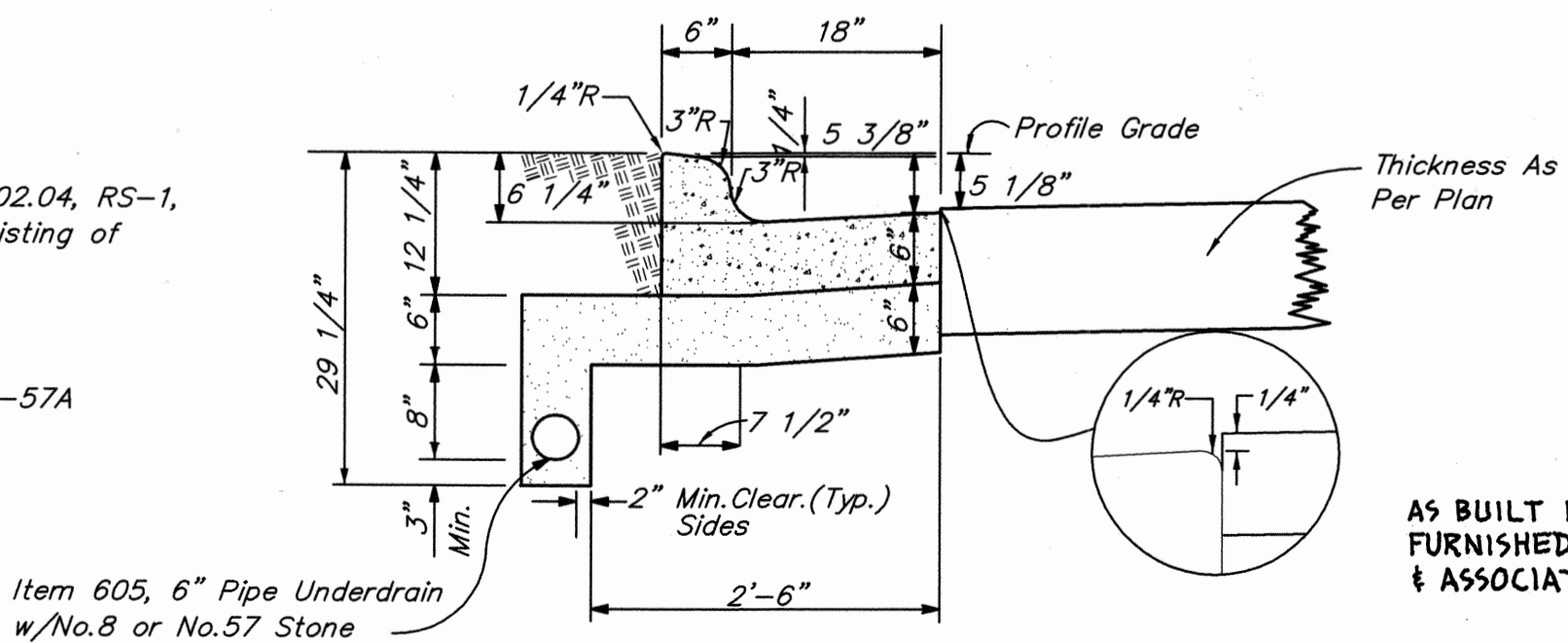
TYPICAL 28' SECTION (50' R.O.W.)

SCALE: NONE



ITEM NUMBERS SHOWN REFER TO THE CURRENT CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS".

- 1 1/4" Hot-mixed, Hot-laid Asphalt Concrete, Item 404
- 1 1/4" Hot-mixed, Hot-laid Asphalt Concrete, Item 402
- Tack Coat, Item 407. Bituminous Material 702.02, RC-70 or RC-250 or 702.04, RS-1, RS-2, or MS-2, applied at a rate of 0.1 gal. per sq. yd. and cover consisting of crushed gravel or limestone size No. 9.
- 7" Portland Cement Concrete Base - Residential, Item 306.
- City of Grove City Standard Combined Curb & Gutter, See Std. Dwg. C-GC-57A
- No. 8 or No. 57 Aggregate.
- 6" Pipe Underdrain, Item 605.
- Concrete Sidewalk



DETAIL OF COMBINED CONCRETE CURB & GUTTER

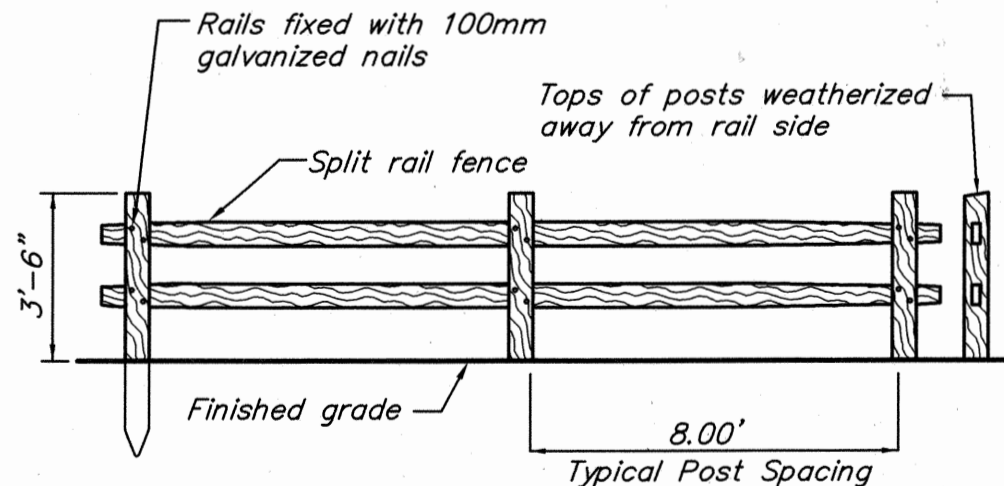
NOTE: Class "C" Concrete  
6 1/2 Bag Mix

ESTIMATE OF QUANTITIES				
ITEM	QUAN.	UNIT	DESCRIPTION	
			STREET	
201	4070	C.Y.	Excavation, Including Embankment Construction	
306	6161	S.Y.	7" P.C. Concrete Base (Residential)	
402	435	Ton	1 1/4" Asphalt Concrete	
404	435	Ton	1 1/4" Asphalt Concrete	
407	626	Gal.	Tack Coat	
454	212	L.F.	Pavement Relief Joint	
605	3982	L.F.	6" Underdrain	
609	3982	L.F.	Standard Combined Curb & Gutter	
608	8	Each	Curb Ramps (Wheel Chair Ramps)	
608	474	S.F.	4' Concrete Walk	
Spec.	10	Each	Street Lights (Complete)	
Spec.	216	L.F.	2 Rail Fence	
			BIKEPATH	
304	237	Ton	6" Aggregate Base	
408	93	Gal	Prime Coat	
448	99	Ton	2 1/2" Asphalt Concrete	
			STORM	
601	9	C.Y.	Rock Channel Protection, Type B	
901	316	L.F.	12"Concrete Pipe, 706.02, Type B, Class IV w/Type I Bedding	
901	1469	L.F.	12"Concrete Pipe, 706.02, Type C, Class IV w/Type I Bedding	
901	27	L.F.	15"Concrete Pipe, 706.02, Type B, Class IV w/Type I Bedding	
901	219	L.F.	15"Concrete Pipe, 706.02, Type C, Class IV w/Type I Bedding	
901	415	L.F.	18"Concrete Pipe, 706.02, Type C, Class III w/Type I Bedding	
901	154	L.F.	18"Concrete Pipe, 706.02, Type C, Class III w/Type I Bedding	
901	279	L.F.	24"Concrete Pipe, 706.02, Type C, Class III w/Type I Bedding	
604	1	Each	Manhole, Type "A", Class "B"	
604	4	Each	Manhole, Type "A", Class "C"	
604	2	Each	Manhole, Type "A", Class "C" w/ Neenah R-3246-F Casting	
604	6	Each	Catch Basin 2-2B	
604	4	Each	Catch Basin 2-3	
604	11	Each	Curb & Gutter Inlet (Standard)	
604	2	Each	Endwall C-G-23 (1-12" Pipe & 1-15" Pipe)	
604	1	Each	Headwall C-G-24 (1-24" Pipe)	
604	4	Each	Ex. Manhole, Rebuilt to Grade	
			WATER	
801	1977	L.F.	8" Ductile Iron Water Pipe, Class 53	
801	90	L.F.	6" Ductile Iron Water Pipe, Class 53	
802	2	Each	8" Valve w/Box	
802	5	Each	6" Valve w/Box (Includes Hydrant Valves)	
805	25	Each	3/4" Water Service (Short)	
805	20	Each	3/4" Water Service (Long)	
809	3	Each	Hydrant, Type "A"	
809	3	Each	Hydrant, Type "B"	
			For Erosion & Sed. Control Quantities See Sheet 8	
Calculated By:		JCB	Date: 10/08/03	Checked By:                      Date:

Note: The contractor, in making his bid, should make his own determination of the earthwork quantities and discuss any differences with the engineer prior to bidding.

\*Note: 707.16 or approved equivalent, polyethylene storm sewer pipe may be substituted for concrete pipe.

The quantities shown on this plan are the Engineers best determination of the work to be performed. The Contractor, in making his bid, should make his own determination of the quantities and discuss any differences with the Engineer prior to bidding.



2 RAIL FENCE DETAIL

Scale: NONE

AS BUILT INFORMATION  
FURNISHED BY HOCKADEN  
& ASSOCIATES

AS BUILT 4/26/06

CITY OF GROVE CITY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT  
FOR  
**HOOVER PARK**  
SECTION 8  
GENERAL NOTES, DETAILS AND QUANTITIES

**EMHT**  
INC.  
ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
EVANS, MECHWART, HAMBLETON & TILTON, INC.  
170 MILL STREET  
GAHANNA, OHIO 43230  
TELEPHONE (614) 471-5150  
FACSIMILE (614) 471-5098

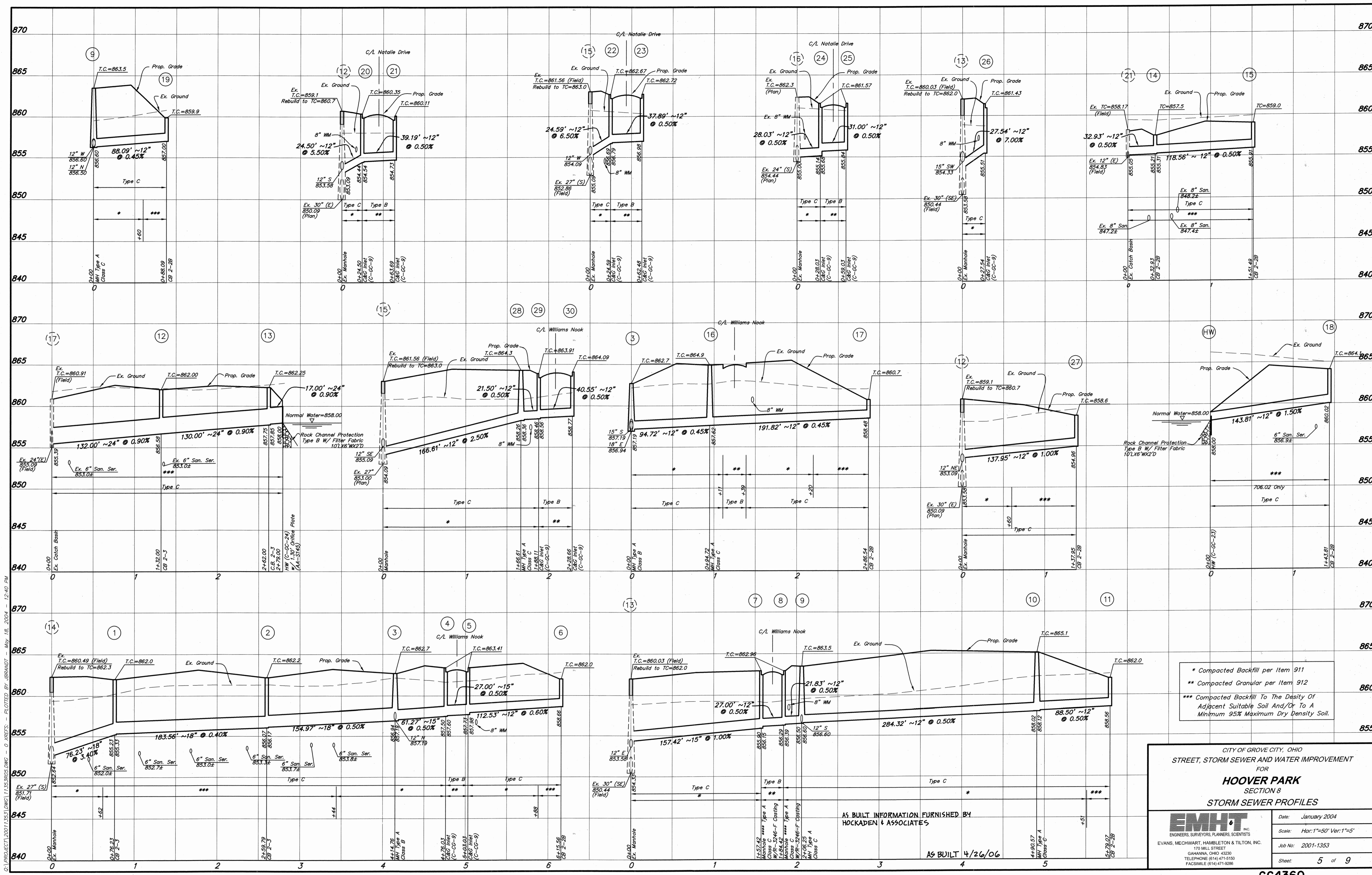
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Job No: 2001-1353  
Sheet: 2 of 9

GC4357





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\* Compacted Backfill per Item 911  
\*\* Compacted Granular per Item 912  
\*\*\* Compacted Backfill To The Density Of  
Adjacent Suitable Soil And/Or To A  
Minimum 95% Maximum Dry Density Soil.

CITY OF GROVE CITY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT  
FOR  
**HOOVER PARK**  
SECTION 8  
STORM SEWER PROFILES

**EMHT**  
INC.  
ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
EVANS, MECHWART, HAMBLETON & TILTON, INC.  
170 MILL STREET  
GAHANNA, OHIO 43030  
TELEPHONE (614) 471-5150  
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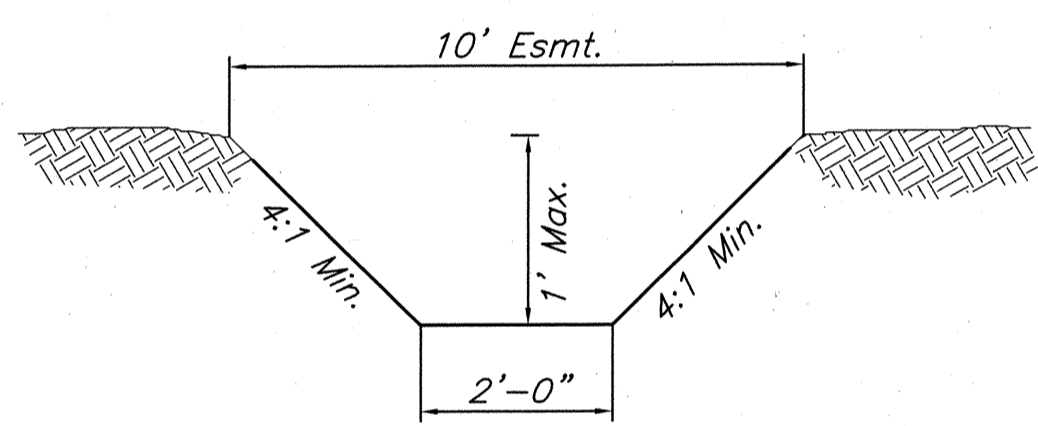
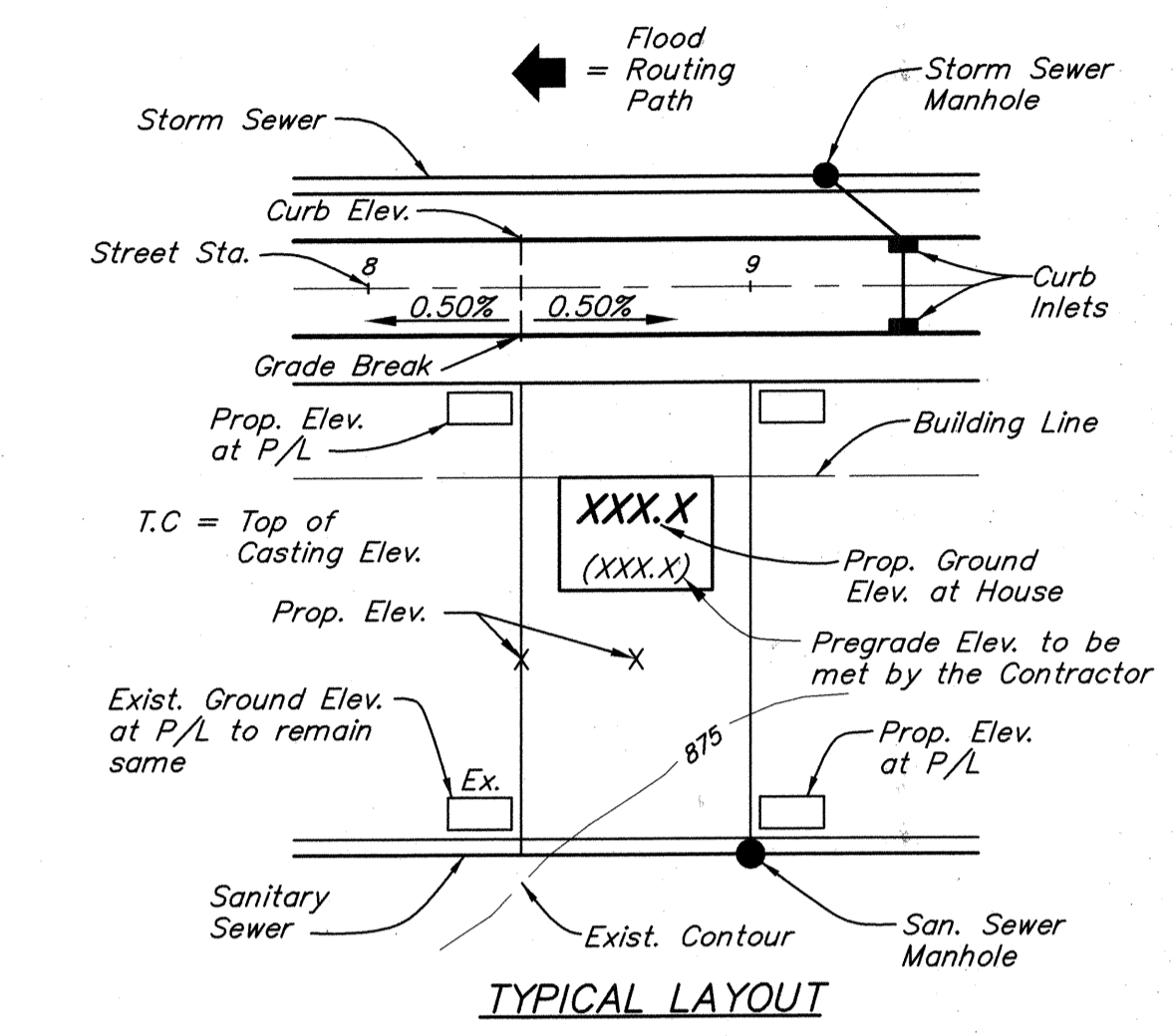
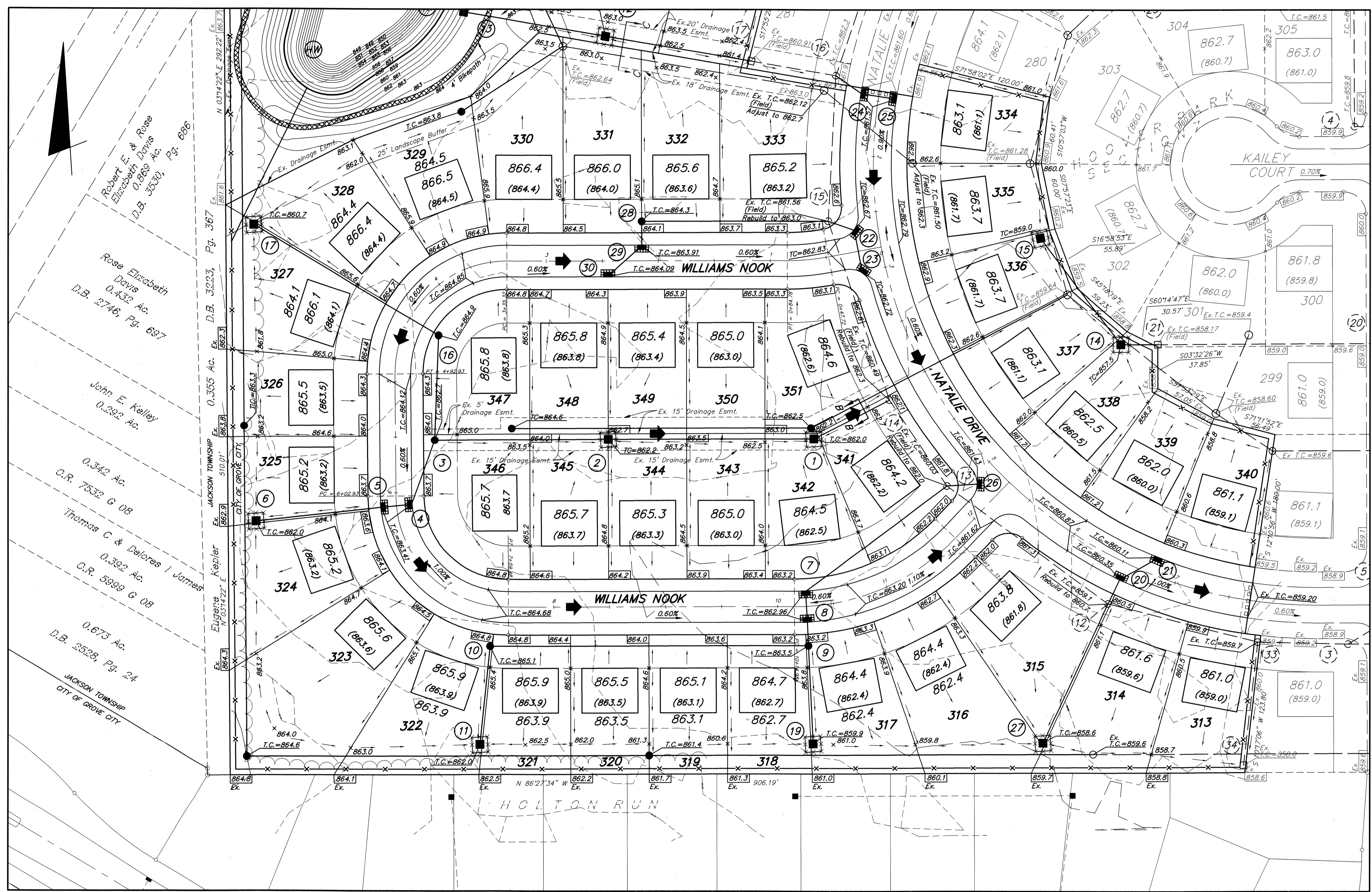
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Job No: 2001-1353  
Sheet: 5 of 9

AS BUILT INFORMATION FURNISHED BY  
HOCKADEN & ASSOCIATES

AS BUILT 4/26/06

SEE SHEET 7

NOTE:  
It is recommended that depressed driveways  
NOT be used on this project.



SECTION B-B  
TYPICAL FLOOD ROUTE SECTION

NOTE:  
The Contractor, Builder and/or Home Owner shall maintain the ditch for side yard flood routing at elevations indicated between houses at all times, even during house construction. No above grade structures, dams or other obstructions to the flow of storm water runoff are permitted within the Drainage Easement Areas.

EROSION & SEDIMENTATION  
CONTROL FEATURE LEGEND

- Beaver Dam
- Sediment Fence Drop Inlet Filter
- Sediment Fence Barrier

See Erosion & Sedimentation Control Feature Details, Sheet 8.

CITY OF GROVE CITY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT PLAN  
FOR  
**HOOVER PARK**  
SECTION 8  
MASTER GRADING, SEDIMENTATION  
AND EROSION CONTROL PLAN

**EMHT**  
INC.  
ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
EVANS, MECHWART, HAMBLETON & TILTON, INC.  
170 MILL STREET  
GAHANNA, OHIO 43230  
TELEPHONE (614) 471-5150  
FACSIMILE (614) 471-9288

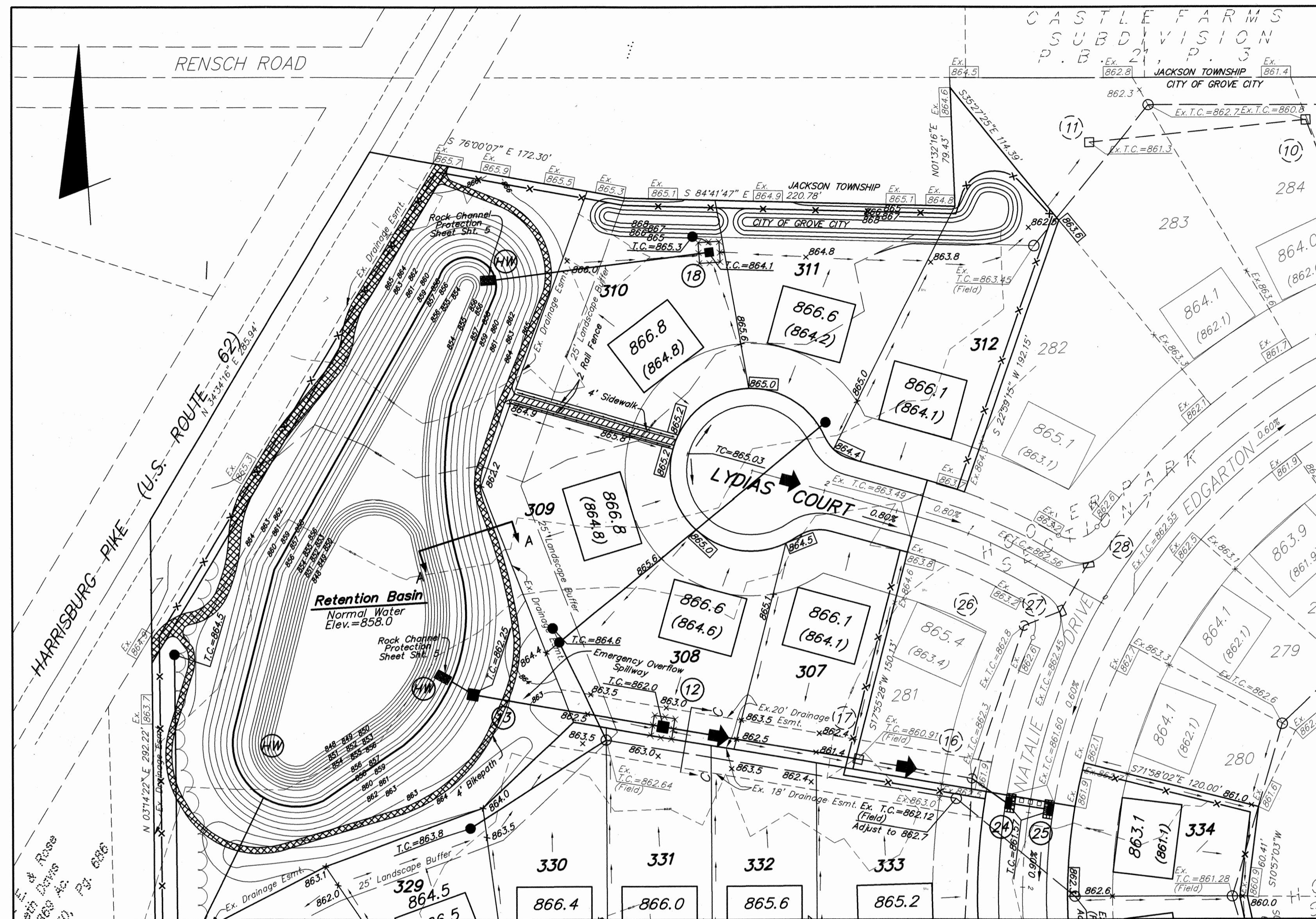
Date: July, 2004  
Scale: Hor: 1"=50' Ver: 1"=5'  
Job No: 2001-1353  
Sheet: 6 of 9

AS BUILT INFORMATION FURNISHED BY  
HOCKADEN & ASSOCIATES

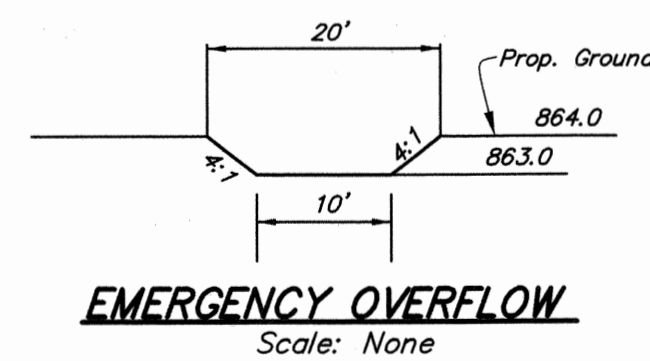
AS BUILT 4/24/06

GC4361

PROJECT: 2001.1353.DWG: 11.35.501.DWG - 4 XREFS: 11.35.501.DWG, 11.35.502.DWG, 11.35.503.DWG, 11.35.504.DWG - PLOTTED BY: JBRANDT - July 20, 2004 - 9:38 AM



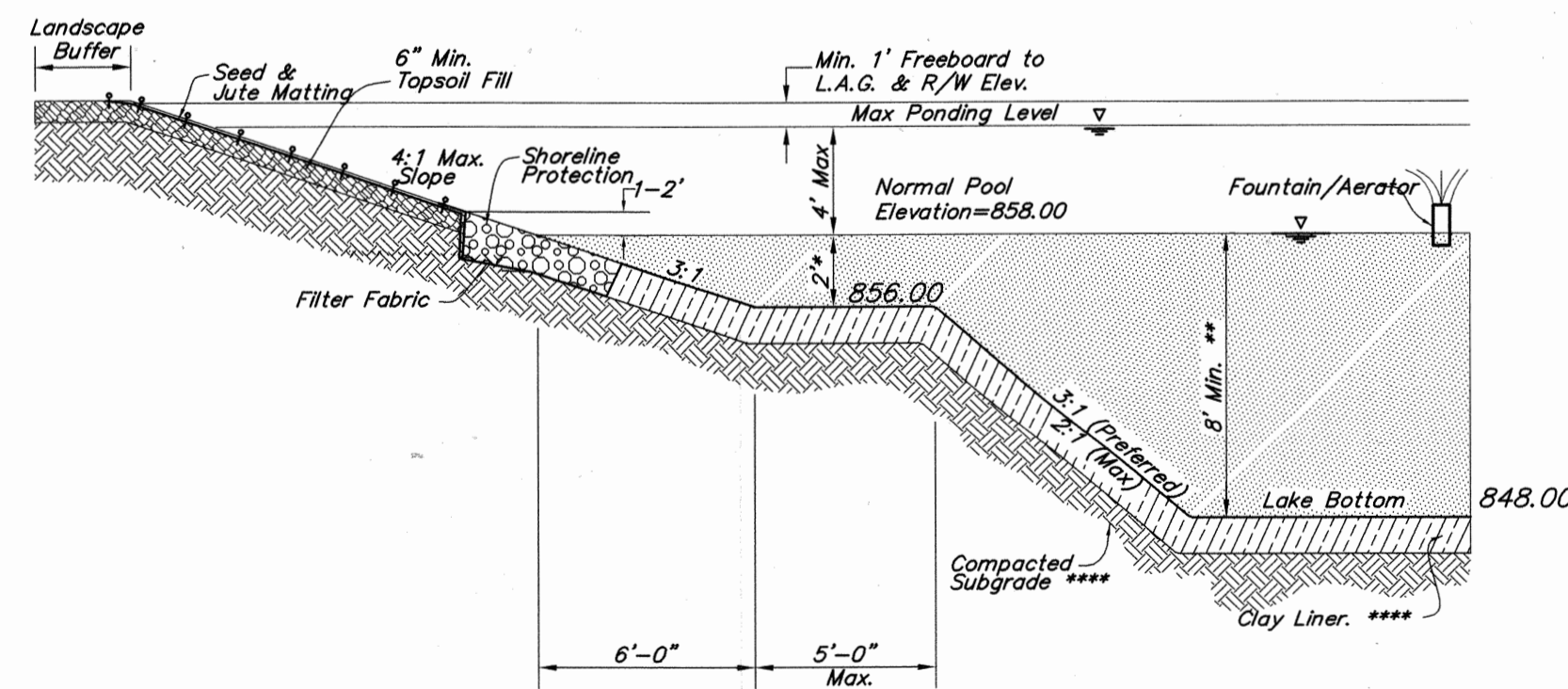
SEE SHEET 6



Notes:

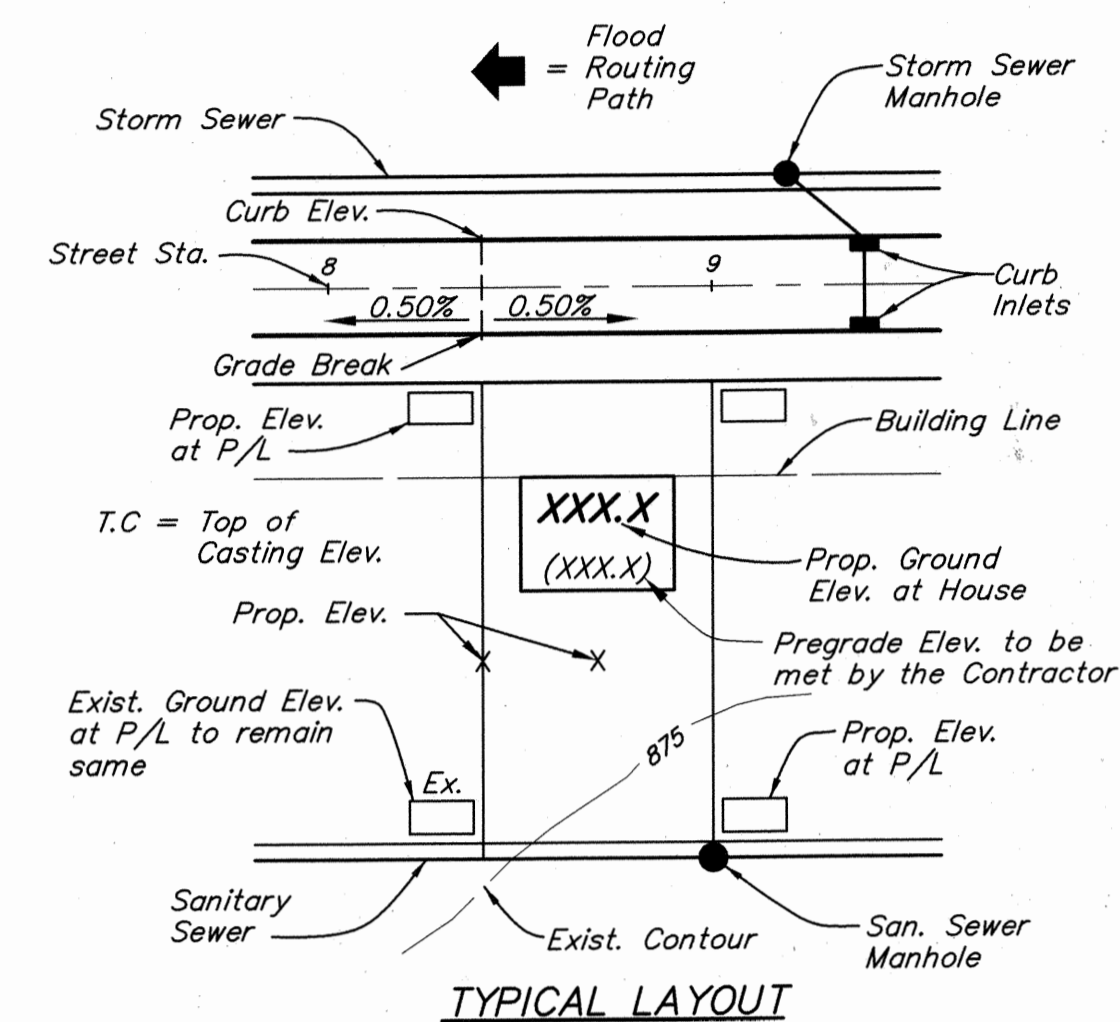
- Shoreline Protection shall be either No. 1 or No. 2 Stone (Item 601.06) with Filter Fabric; or, a geotextile meeting the minimum requirements of Item 712.11, Type "E".
- Seed and Jute Matting shall be per Item 671 (Type "B" Erosion Control Material - Item 712.11.)
- Refer to specific requirements for planting within the landscape buffer and other areas within the limits of the basin.
- Pipe inlets to pond may be submerged; submergence may only extend to first structure.
- Exposed Headwalls and other stormwater system appurtenances must be stone veneered.

[All Item references are with respect to the State of Ohio CMS, Dated 1/1/02]



STANDARD POND GRADING SECTION  
SECTION A-A  
Not to Scale

**NOTE:**  
It is recommended that depressed driveways NOT be used on this project.



SECTION C-C  
TYPICAL FLOOD ROUTE SECTION

**NOTE:**  
The Contractor, Builder and/or Home Owner shall maintain the ditch for side yard flood routing at elevations indicated between houses at all times, even during house construction. No above grade structures, dams or other obstructions to the flow of storm water runoff are permitted within the Drainage Easement Areas.

**EROSION & SEDIMENTATION  
CONTROL FEATURE LEGEND**

- Beaver Dam
- Sediment Fence Drop Inlet Filter
- Sediment Fence Barrier

See Erosion & Sedimentation Control Feature Details, Sheet 8.

\*Depth may be reduced to 6"-12" for wetland planting within the shelf area.  
\*\*10' Min. For at least 25% of total pond area  
\*\*\* Pond Liner - Geotechnical recommendations required, confirming adequacy of existing sub-grade materials or identifying criteria for a constructed liner.

AS BUILT INFORMATION FURNISHED BY  
HOCKADEN & ASSOCIATES

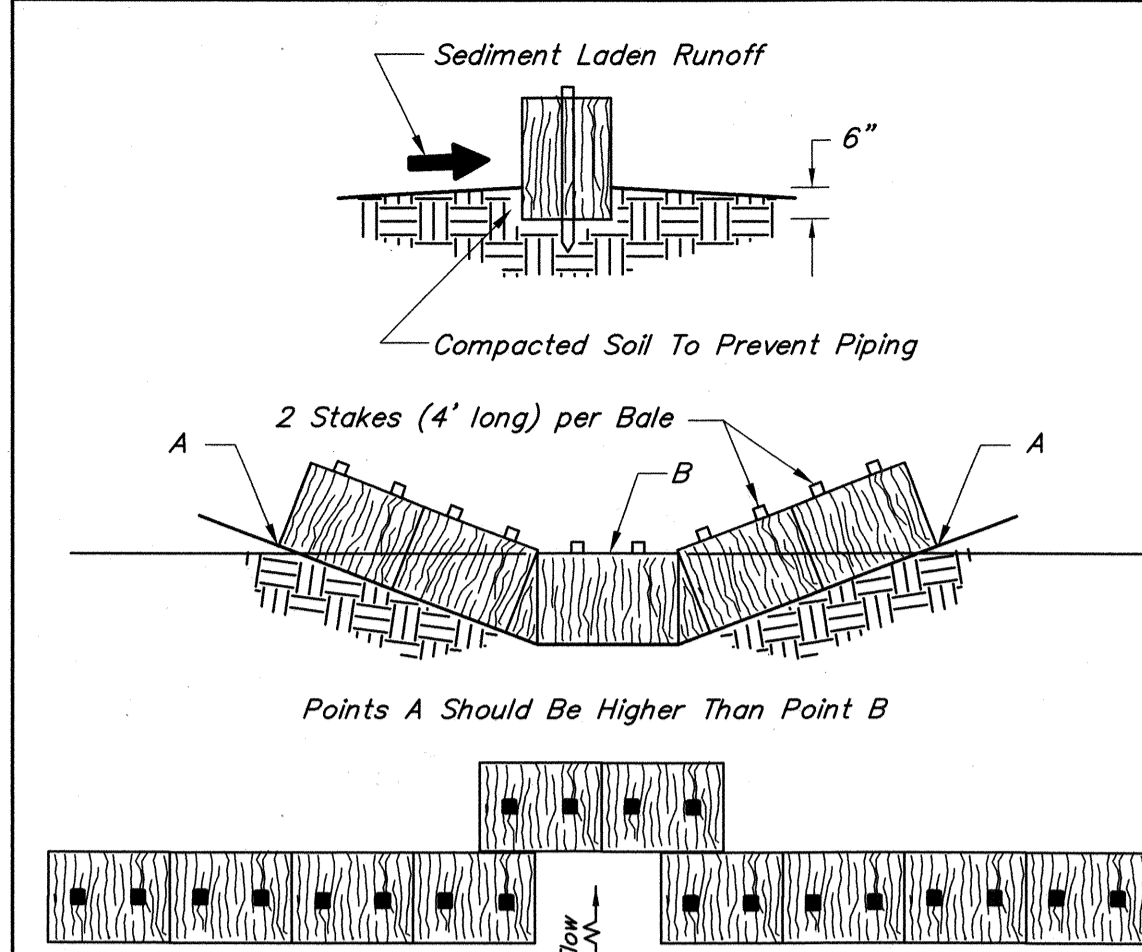
AS BUILT 4/26/06

CITY OF GROVE CITY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT PLAN  
FOR  
**HOOVER PARK**  
SECTION 8  
MASTER GRADING, SEDIMENTATION  
AND EROSION CONTROL PLAN

**EMHT**  
INC.  
ENGINEERS, SURVEYORS, PLANNERS, SCIENTISTS  
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170 MILL STREET  
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Date: July, 2004  
Scale: Hor: 1"=50' Ver: 1"=5'  
Job No: 2001-1353  
Sheet: 7 of 9

GC4362



**Channel Flow Applications**

Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one another.

The remaining steps for installing a straw bale barrier for sheet flow applications apply here, with the following addition.

The barrier shall be extended to such a length that the bottoms of the ends and bales are higher in elevation than the top of the lowest middle bale to assure that sediment-laden runoff will flow either through or over the barrier but not around it.

**NOTE:** Hay bales may be used in place of straw bales.

**Maintenance**

Straw bales shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.

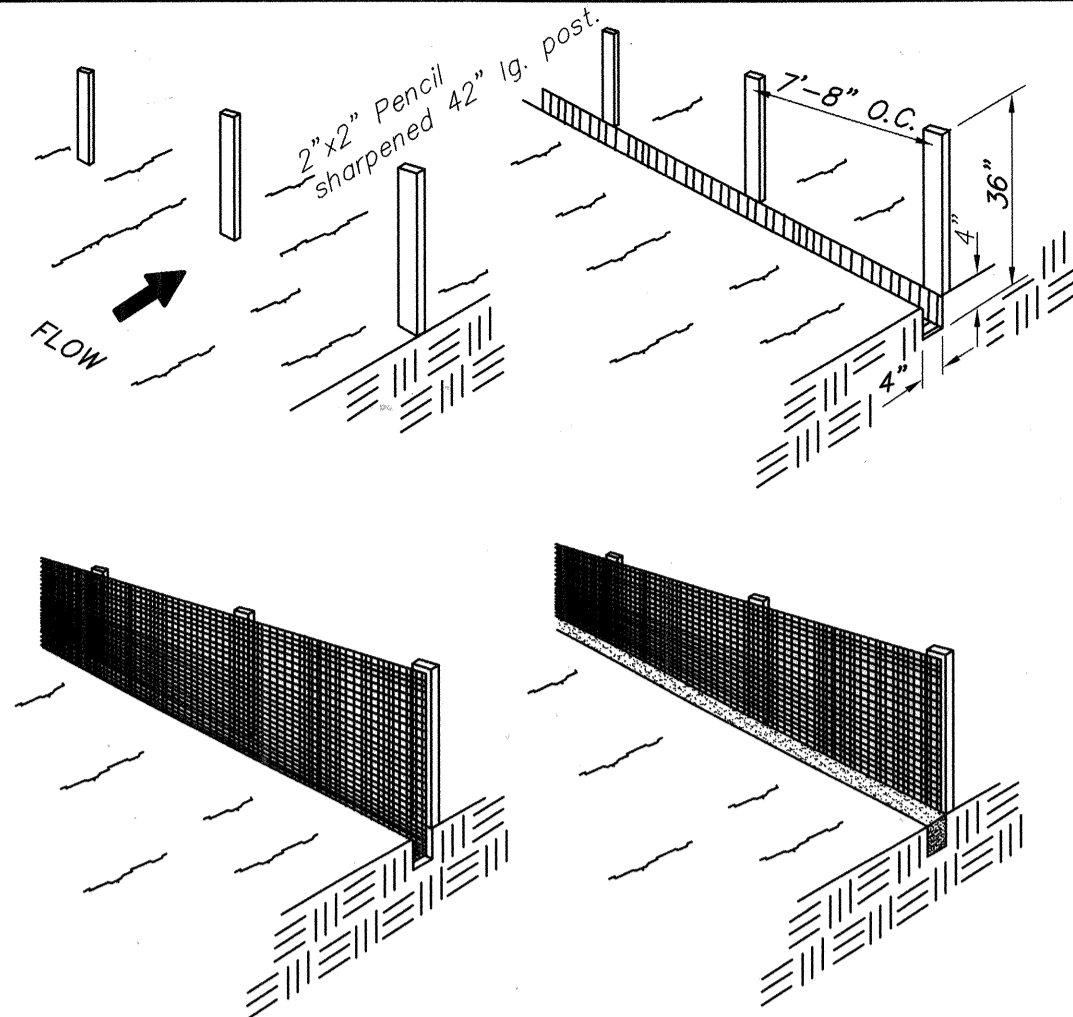
Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales.

Necessary repairs to barriers or replacement of bales shall be accomplished promptly.

Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half the height of the barrier.

Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded, and mulched. Extra stabilization of the mulch shall be required in channels over 2% in grade. Such stabilization may include, but is not limited to, jute mat, excelsior blanket, biodegradable mesh, and sodding.

**STRAW BALE BARRIER FOR DRAINAGE WAY OR SHEET FLOW**



**Silt Fence:** This sediment barrier utilizes standard strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected.

- The height of a silt fence shall not exceed 36-inches (higher fences may impound volumes of water sufficient to cause failure of the structure).
- The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum of a 6 inch overlap, and securely sealed.
- Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12-inches). When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet.
- A trench shall be excavated approximately 4-inches wide and 4 inches deep along the line of posts and upslope from the barrier.
- When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1-inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2-inches and shall not extend more than 36-inches above the original ground surface.
- The standard strength filter fabric shall be stapled or wired to the fence, and 8-inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36-inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
- When extra strength filter fabric and closer post spacing (4'-0") are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of Item No. 6 applying.
- The trench shall be backfilled and soil compacted over the filter fabric.
- Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

**Maintenance**

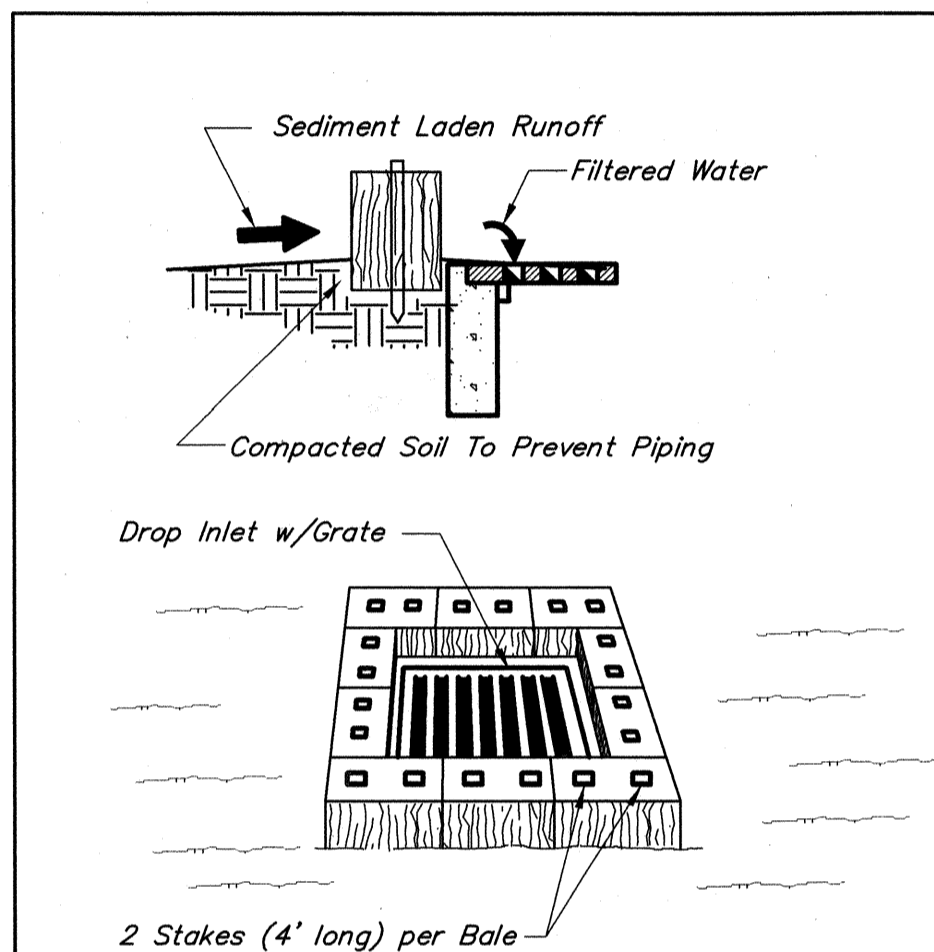
Silt fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.

Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-third the height of the barrier.

Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared, seeded and mulched.

**SEDIMENT FENCE DETAIL**



**STRAW BALE DROP INLET STRUCTURE**

Bales shall be either wire-bound or string-tied with the bindings oriented around the sides rather than over and under the bales.

Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together.

The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of a bale to a minimum depth of 4-inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier.

Each bale shall be securely anchored and held in place by at least two stakes or rebars driven through the bale.

Loose straw shall be wedged between bales to prevent water from entering between bales.

**NOTE:** Hay bales may be used in place of straw bales.

**Maintenance**

Straw bale barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.

Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales.

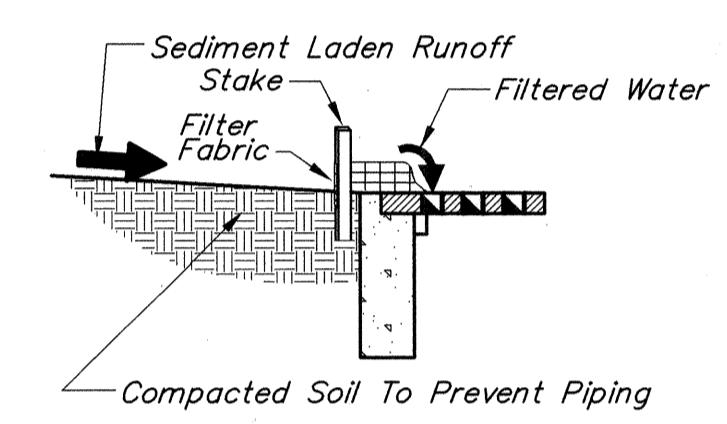
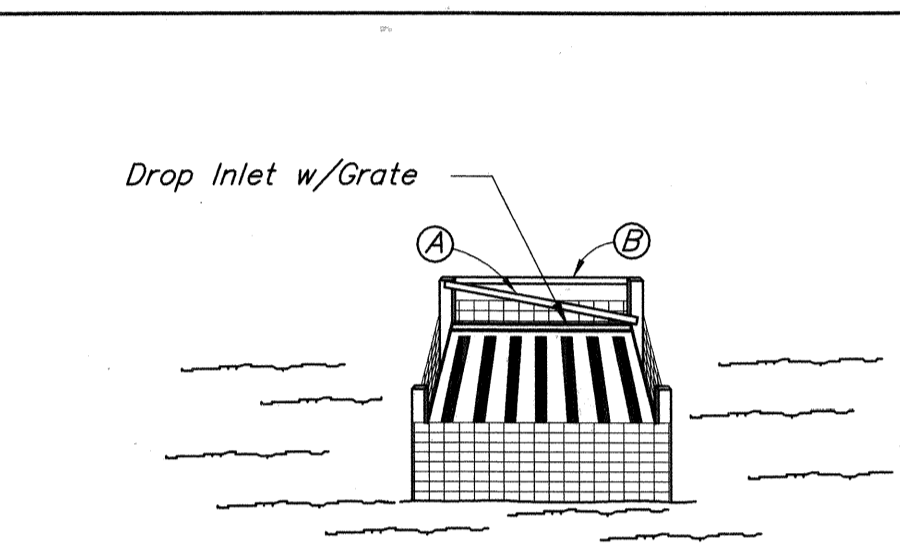
Necessary repairs to barriers or replacement of bales shall be accomplished promptly.

Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half the height of the barrier.

Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

**Alternate:** Filter Fabric Drop Inlet Sediment Filter

**STRAW BALE DROP INLET SEDIMENT FILTER DETAIL**



**Specific Application**

This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than 5 percent) where sheet or overland flows (not exceeding 0.5 cfs) are typical. This method shall not apply to inlets receiving concentrated flows, such as in street and highway medians. Corner posts shall be either Cross-Supported (A), or Top-Supported (B), as shown in Detail and placed on all 4 sides.

**NOTE:** Contractor may substitute "Dandy Bag" for Filter Fabric Drop Inlet.

**FILTER FABRIC DROP INLET SEDIMENT FILTER DETAIL**

**CONTRACTOR RESPONSIBILITY:** Details have been provided on the plans in an effort to help the Contractor provide erosion and sedimentation control. The details shown on the plan shall be considered a minimum. Additional or alternate details may be found in the S.C.S. Manual "Water Management and Sediment Control for Urbanizing Areas." The Contractor shall be solely responsible for providing necessary and adequate measures for proper control of erosion and sediment runoff from the site along with proper maintenance and inspection in compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction Activity

Prior to Construction Operations in a particular area, all sedimentation and erosion control features shall be in place. Field adjustments with respect to locations and dimensions may be made by the City Engineer.

The Contractor shall place inlet protection for the erosion control immediately after construction of the catch basins or inlets which are not tributary to a sediment basin or dam.

It may become necessary to remove portions of erosion control structures during construction to facilitate the grading operations in certain areas. However, the structures shall be in place during non-working hours or during any inclement weather.

The limits of seeding and mulching are as shown within the plan. Seeding has been assumed to 5'-0" outside the work limits or the right-of-way, whichever is greater. All areas not disturbed shall remain under natural ground cover. Those areas disturbed outside the seeding limits shall be seeded and mulched at the Contractor's expense.

**Temporary Seeding:** Any area which will be left dormant (undisturbed) for more than 45 days shall be seeded within 7 days of terminated work. If permanent seeding is not applied at this time, temporary seeding shall be done which shall consist of fertilizing, watering and seeding at the rates indicated under Item 659. Seed shall be oats from December 1 to June 1 and annual rye from June 1 to December 1.

**Permanent seeding** shall be done between March 15 and September 15. If seeding is done between September 15 and March 15, it shall be classified as "Temporary Seeding." Permanent seed shall be 40% Kentucky Bluegrass, 40% Creeping Red Fescue, 20% Annual Ryegrass. Permanent seeding shall consist of fertilizing, watering and seeding rates indicated under Item 659.

**Rates of application of Item 659:**

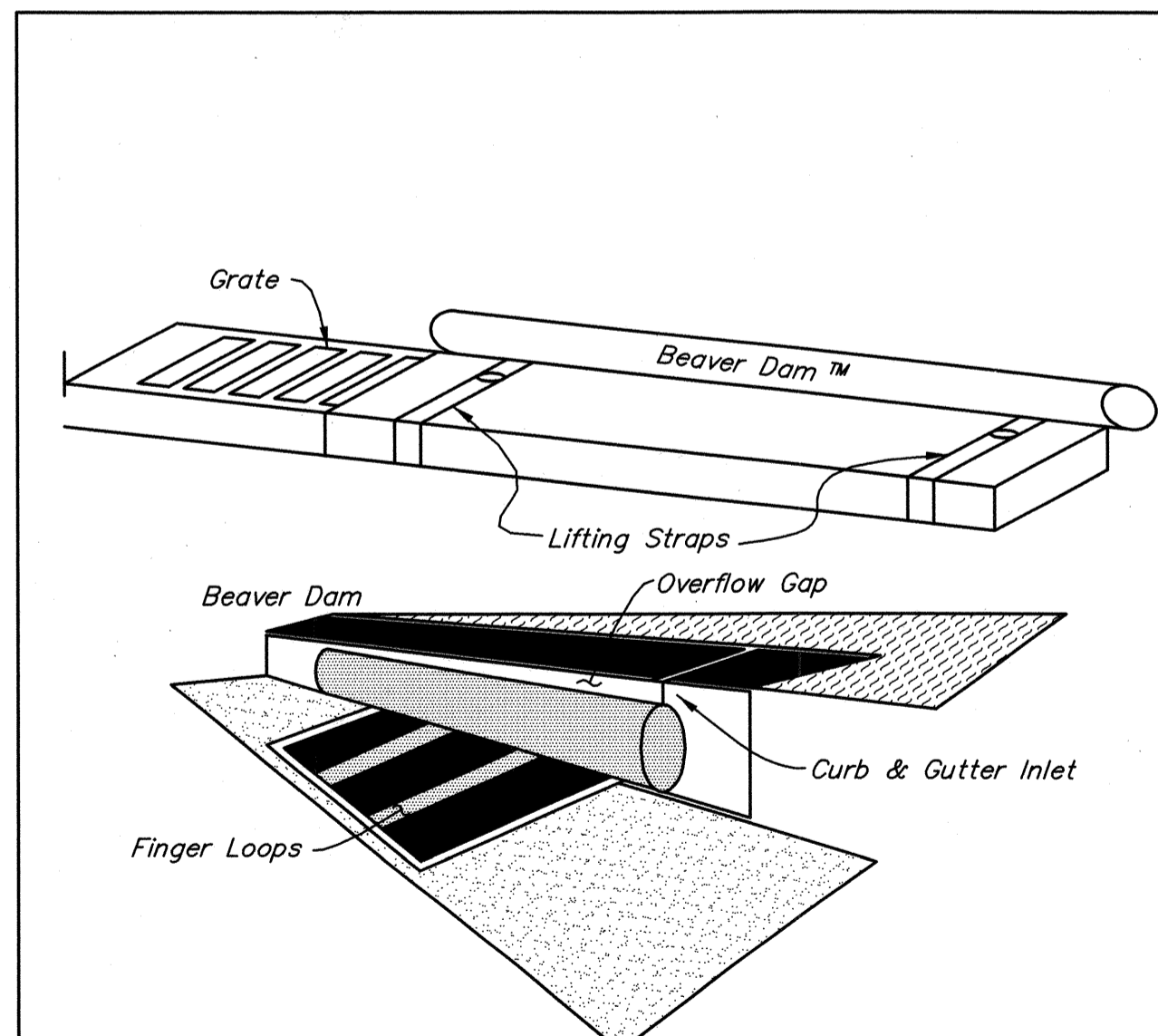
Seed:	2 lbs./1,000 Sq.Ft.
Fertilizer:	20 lbs./1,000 Sq.Ft.
Mulch:(Straw or Hay)	2 tons/acre

The cost for temporary channels, sediment dams, sediment basins, and other appurtenant earth-moving operations shall be included in the price bid for erosion and sedimentation control quantities.

ESTIMATE OF QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
207	1	Each	Stabilized Construction Entrance
207	3600	L.F.	Filter Fabric Fence
207	12	Each	Filter Fabric Drop Inlet Protection
207	13	Each	Beaver Dam Curb Inlet Filter
659	Lump	Sum	Seeding and Mulching

**MAINTENANCE:** It is the Contractor's responsibility to maintain the sediment control features used on this project. The site shall be inspected periodically and within 24 hours of a significant rainfall. Records of these inspections shall be kept and made available to jurisdictional agencies if requested. Any sediment or debris which has reduced the efficiency of a structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace at no additional cost to the Owner.

Not all details shown on this sheet may be required for this project  
Reference Sediment Control Plan.

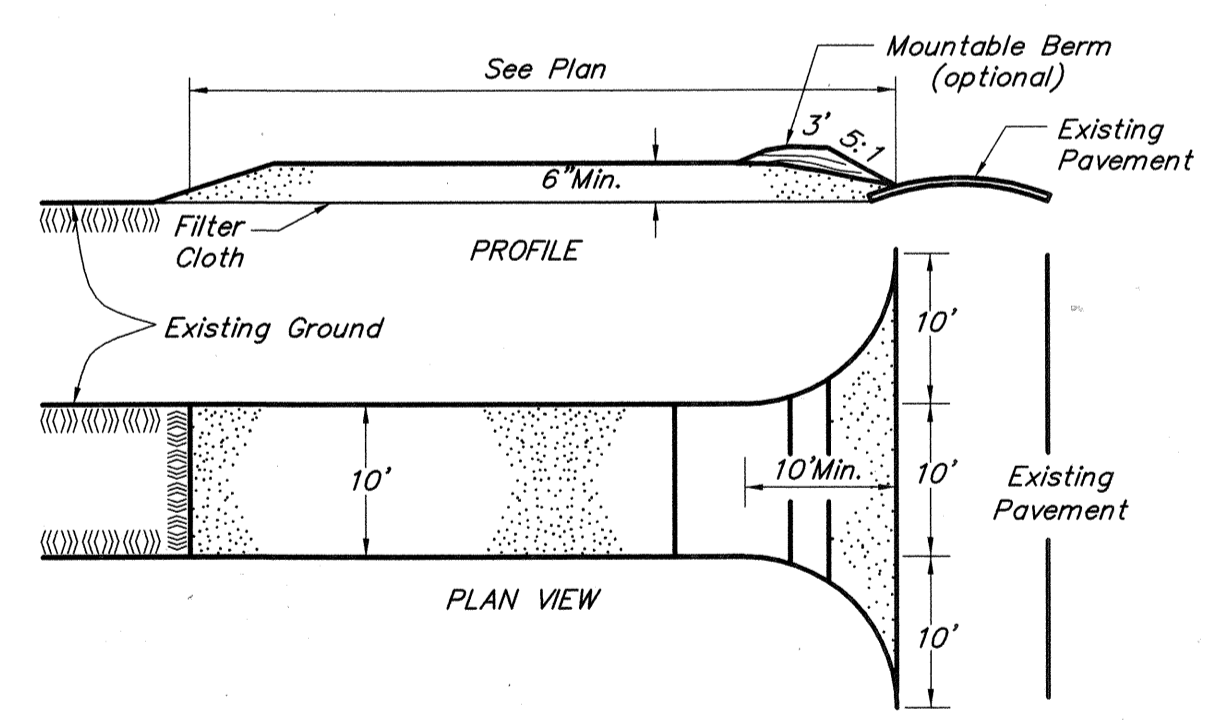


**Installation:** Stand grate on end. Slide the Beaver Dam Bag on with Dam on top of the grate. Pull all excess down. Lay unit on its side. Carefully tuck flap in. Press Velcro strips together. Install the unit making sure front edge of grate is inserted in frame first then lower back into place. Press Velcro dots together which are located under lifting straps. This insures straps remain flush with gutter.

**Maintenance:** With a stiff bristle broom sweep silt and other debris off surface after each event.

**Curb and Gutter Inlets:**

**THE BEAVER DAM**



**STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION SPECIFICATIONS**

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required.
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placing of stone.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounatable berm with 5:1 slopes will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-ways. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- Periodic inspection and needed maintenance shall be provided after each rain.

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AS BUILT 4/26/06

CITY OF GROVE CITY, OHIO

STREET, STORM SEWER AND WATER IMPROVEMENT PLAN

FOR

HOOVER PARK

SECTION 8

EROSION AND SEDIMENTATION CONTROL PLAN

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Date: January 2004

Scale: Hor:1"=50' Ver:1"=5'

Job No: 2001-1353

Sheet: 8 of 9

Contact: Homewood Corp.

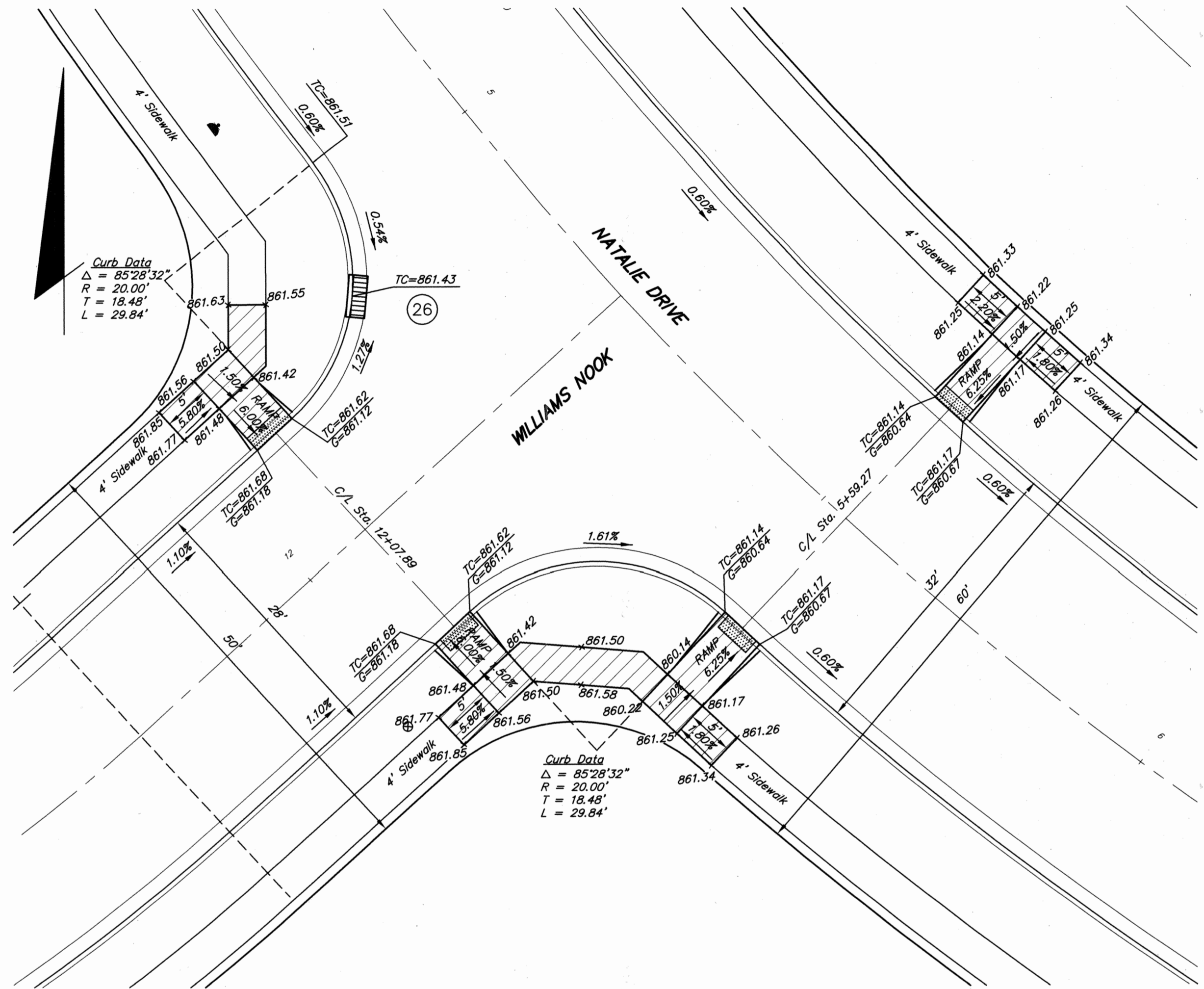
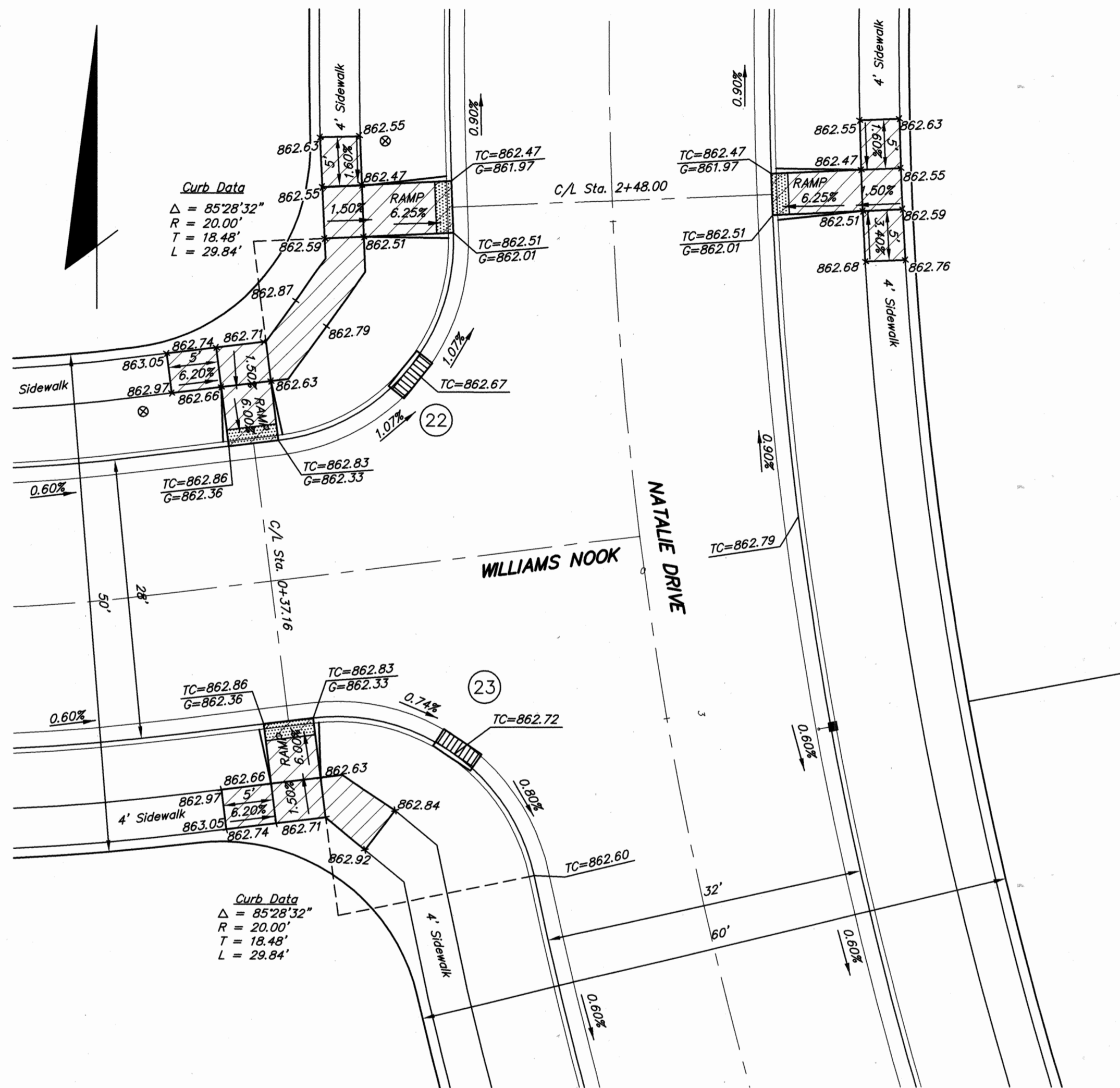
Attn: John Lind Jr.  
750 Northlawn Drive  
Columbus, Ohio 43214  
  
Phone # 459-9999  
Fax # 451-1197

**SCHEDULE:** The Contractor shall provide a schedule of operations to the owner and the City Engineer for approval. Sedimentation and erosion control features shall be placed in accordance with this schedule.

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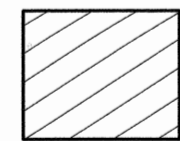
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NOTES:

All curb ramps are to be built during street construction.



Sidewalk and Ramps To Be Built By Contractor.



Type "C" Detectable warnings per city standard at time of construction.

Detectable Warning Surfaces shall be provided as required by the ADA Accessibility Guidelines (ADAAG) 4.29.2 and as modified by Section 1108 of the Architectural and Transportation Barriers Compliance Board's "Draft Guidelines for Accessible Public Rights-of-Way", dated June 17, 2002 as amended, supplemented and adopted.

Detectable warnings shall be as per City of Columbus supplemental specification 1551.

AS BUILT INFORMATION FURNISHED BY  
HOCKADEN & ASSOCIATES

AS BUILT 4/26/06

CITY OF GROVE CITY, OHIO  
STREET, STORM SEWER AND WATER IMPROVEMENT PLAN  
FOR  
**HOOVER PARK**  
SECTION 8  
CURB RAMPS

**EMH&T**  
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Date: January 2004  
Scale: Hor: 1"=10'  
Job No: 2001-1353  
Sheet: 9 of 9

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