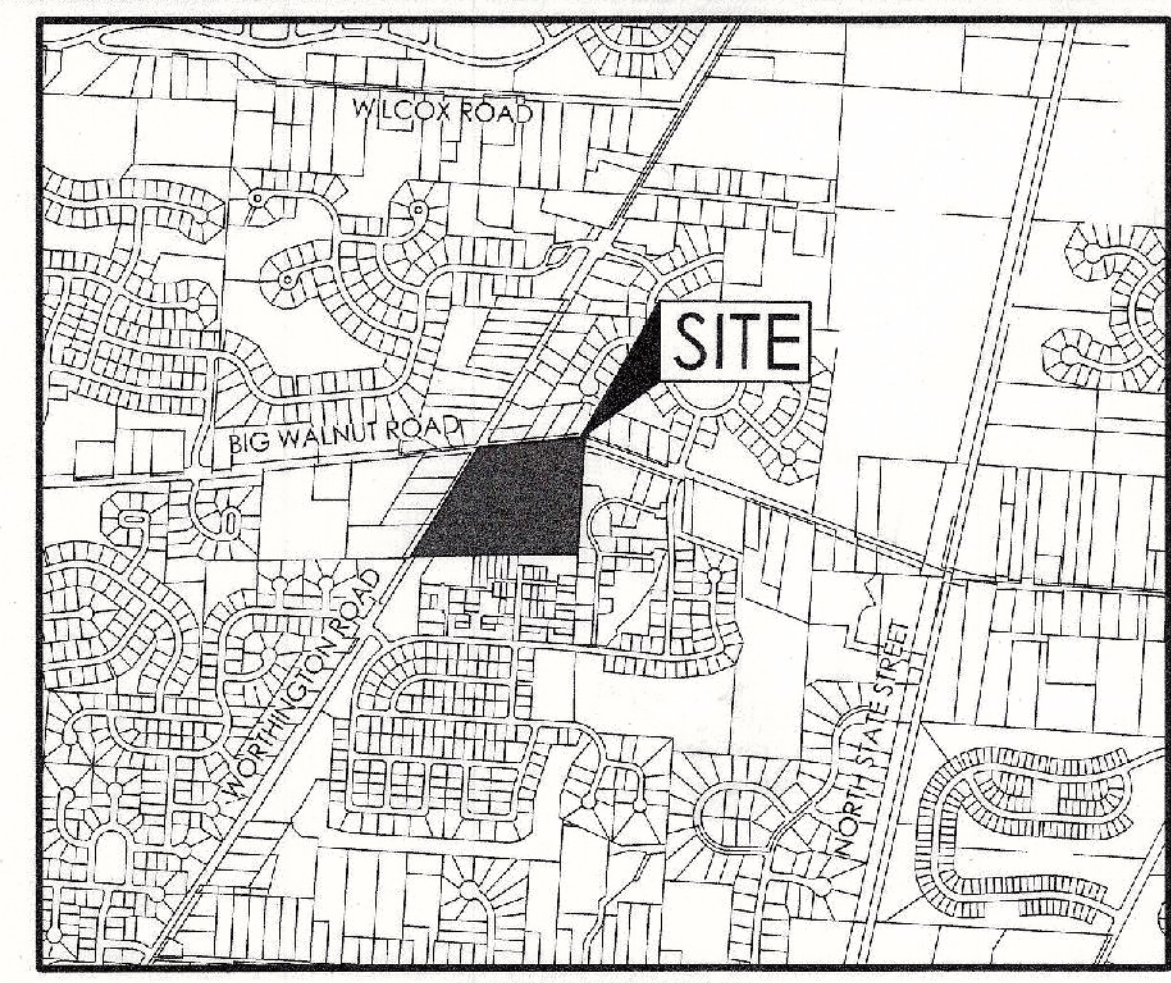


FARM LOT 13, QUARTER TOWNSHIP 2, TOWNSHIP 3, RANGE 17
UNITED STATES MILITARY DISTRICT
GENOA TOWNSHIP, DELAWARE COUNTY, OHIO
SITE IMPROVEMENTS PLAN
FOR
THE GROVE
2021

BENCH MARKS
(NAVD 1988)

- BM#1 Railroad spike in the north side of a wooden utility pole located on the south side of Big Walnut Road, being the seventh wooden utility pole (850 feet) east of the intersection with Worthington Road.
Elev = 949.14 (NAVD 1988)
- BM#2 Railroad spike in the east side of a wooden utility pole located on the west side of Worthington Road, being the second wooden utility pole (200 feet) south of the intersection with Big Walnut Road.
Elev = 959.26 (NAVD 1988)
- BM#3 Chiseled "X" on the northeast flange bolt of a fire hydrant located on the northwest corner of the intersection of Worthington Road and Victory Gate.
Elev = 964.52 (NAVD 1988)



VICINITY MAP
Not to Scale

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STORMWATER POLLUTION PREVENTION PLAN

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DELAWARE COUNTY APPROVAL

The Delaware County Engineer's Design, Construction and Surveying Standards, the Standard Specifications of the City of Columbus, current edition, including Standard Drawings and Supplemental Specifications listed shall Govern this Improvement.

The Delaware County Engineer's signature on this plan signifies only concurrence with the general purpose and location of the proposed improvement. All technical details remain the responsibility of the Professional Engineer who prepared and certified these plans.

DELAWARE COUNTY ENGINEER:

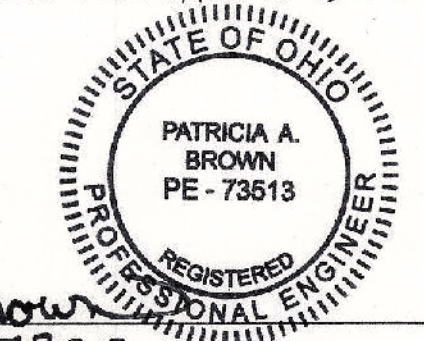
CHRIS BAUSERMAN _____ Date _____

WATER SYSTEM APPROVAL:

DEPUTY GENERAL MANAGER, DEL-CO WATER _____ Date _____

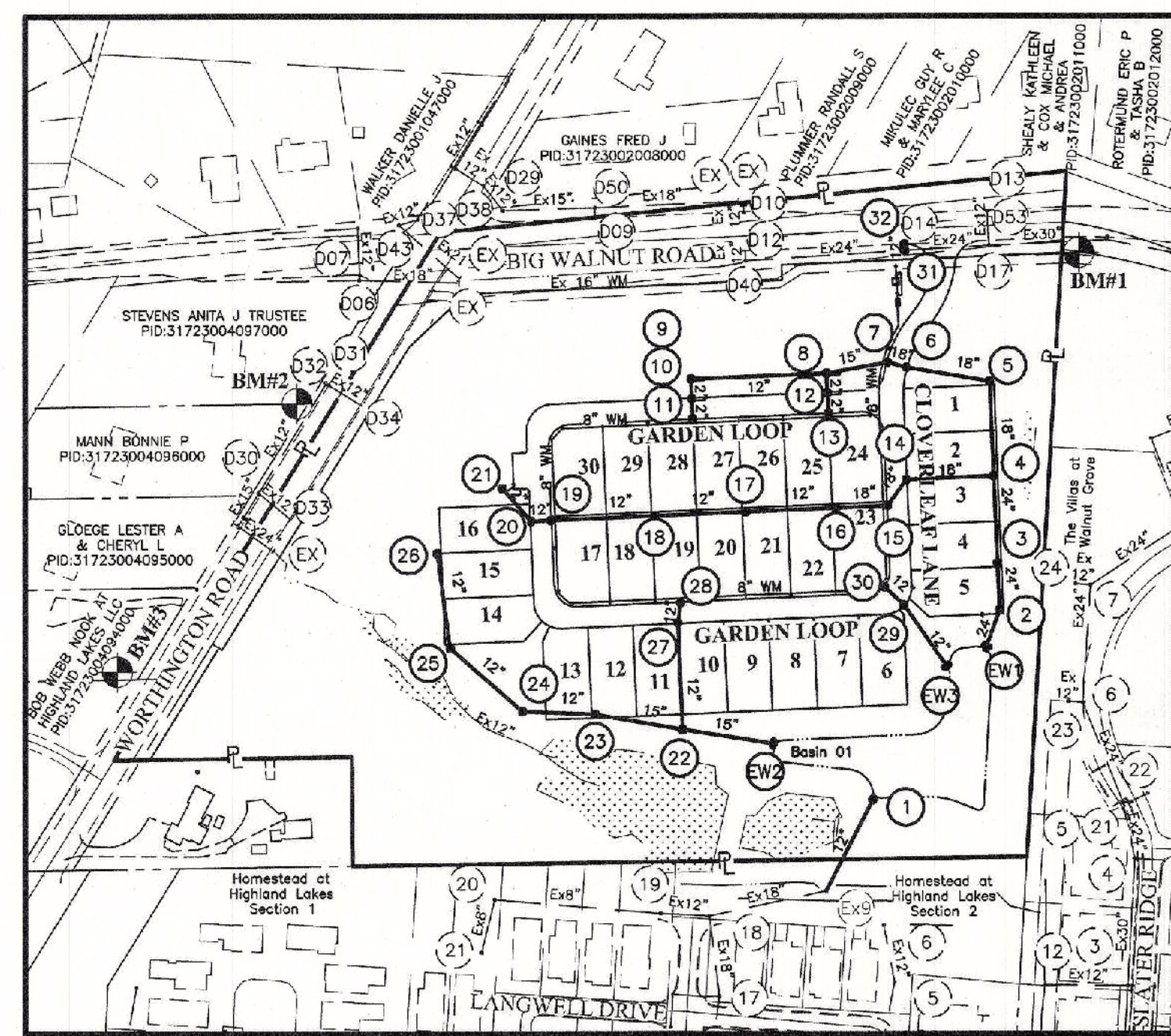
ENGINEER'S CERTIFICATION

This is to certify that good engineering practices have been utilized in the design of this project and that all of the minimum standards as delineated in the Delaware County Design, Construction and Surveying Standards Manual have been met, including those standards greater than minimum where, in my opinion, they are needed to protect the safety of the public. Any variances to the above standards are consistent with sound engineering practice and are not detrimental to the public safety and convenience. These variances have been listed herein and have been approved by the Delaware County Engineer.

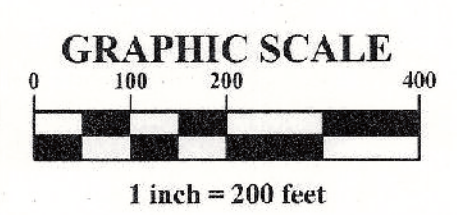


Patricia A. Brown
Registered Engineer No. 73513

10/29/2021
Date



INDEX MAP
Scale: 1" = 200'



FLOODPLAIN

All of The Grove is not located within or directly adjacent to a Flood Hazard Zone as shown on the Federal Emergency Management Agency Flood Insurance Rate Maps, Zone X (areas of 0.2% annual chance flood; areas of 1% chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), Map Numbers 39041C0270K, effective date April 16, 2009.

SITE STATISTICS:

TOTAL PRD ACREAGE:	±19.85 ACRES
PRD R/W DEDICATION:	±2.62 ACRES
GROSS PROJECT AREA (PRD ONLY):	±17.23 ACRES
NET DEVELOPABLE AREA:	±13.66 ACRES (SEE NOTE 1)
TOTAL NUMBER OF LOTS:	30
NET DENSITY:	
30 LOTS/±13.66 ACRES:	±2.20 LOTS/ACRE
OPEN SPACE:	
REQUIRED (±17.23 ACRESx40%):	±6.89 ACRES
PROVIDED:	±5.89 ACRES (40%)
COMMON SPACE:	
REQUIRED (±17.23 ACRESx50%):	±8.62 ACRES
PROVIDED:	±8.62 ACRES (SEE NOTE 2)
RESERVE "A":	±11.03 ACRES
RESERVE "B":	±1.10 ACRES
ZONING:	
SCHOOL DISTRICT:	PRD W/ CONSERVATION STANDARDS OLENTANGY
DISTURBED AREA:	±10.89 ACRES
PRE-DEVELOPED IMPERVIOUS AREA:	±0.00 ACRES
POST-DEVELOPED IMPERVIOUS AREA:	±4.42 ACRES

DEVELOPMENT STANDARDS:

MINIMUM LOT FRONTAGE (BUILDING LINE):	60 FEET
MINIMUM LOT AREA:	7,200 SQUARE FEET
MINIMUM FRONT YARD SETBACK:	30 FEET (SEE NOTE 3)
MINIMUM SIDE YARD SETBACK:	20 FEET FROM SIDE STREET
MINIMUM REAR YARD SETBACK:	7.5 FEET (TOTAL 15 FEET)
MINIMUM BUILDING HEIGHT:	20 FEET
MAXIMUM BUILDING HEIGHT:	35 FEET
NOTE 1: NET DEVELOPABLE AREA IS DERIVED FROM SUBTRACTING 15% OF GROSS AREA (2.585) AND WETLANDS TO REMAIN (0.98)=17.23-3.57=13.66 ACRES	
NOTE 2: COMMON OPEN SPACE DOES NOT INCLUDE THE PROPOSED POND NOR WETLANDS TO REMAIN AREAS.	
NOTE 3: FRONT YARD SETBACK IS MEASURED FROM THE BUILDING FACE TO THE BACK OF CURB. THE NON-GARAGE PORTION OF ANY HOME MAY ENCR OACH 5 FEET.	

DRAWING SET STATUS

- ☐ PRELIMINARY ENGINEERING SET
- ☐ COUNTY REVIEW SET
- ☒ CONSTRUCTION DOCUMENT SET
- ☐ AS-CONSTRUCTED DOCUMENT SET

DEVELOPER/OWNER
Romanelli and Hughes Building Co.
148 West Schrock Road
Westerville, Ohio 43081
Tel: (614)-891-2042
Fax: (614)-891-2045
johnlin@rh-homes.com

ENGINEER
EMHT Inc.
Patricia Brown, PE
5500 New Albany Road
Columbus, Ohio 43054
Tel: (614) 775-4396
Fax: (614) 775-4804
pbrown@emht.com



CHANGE ORDER SCHEDULE						
CHANGE	PREPARED	DATE OF CHANGE	DESCRIPTION OF CHANGE	SHEET NO.	APPROVED	DATE OF APPROVAL

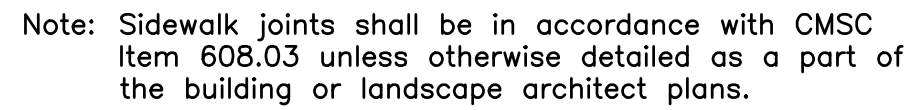
MARK	DATE	DESCRIPTION

Romanelli & Hughes

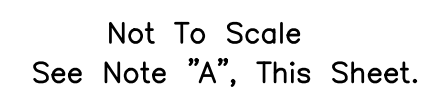
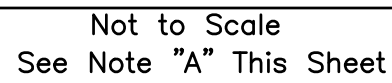
FARM LOT 13, QUARTER TOWNSHIP 2, TOWNSHIP 3, RANGE 17
GENOA TOWNSHIP, DELAWARE COUNTY, OHIO
SITE IMPROVEMENTS PLAN
FOR
THE GROVE
TITLE SHEET



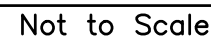
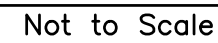
DATE	October, 2021
SCALE	As Noted
JOB NO.	2020-1326
SHEET	1/28



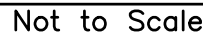
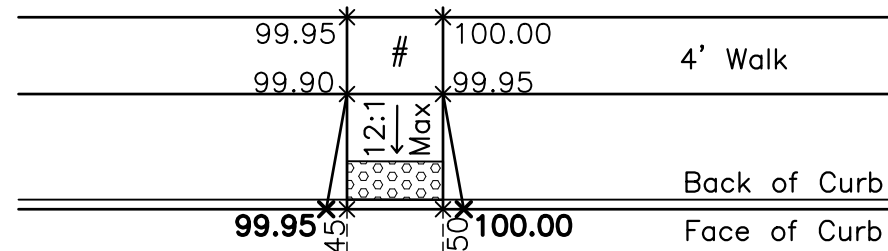
Not to Scale
See Note "A" This Sheet



NOTE A:
Pavement Composition Is Typical of Similar Projects. A
Pavement Specific Laboratory Assessment Was Not Performed
For The Site. Contractor Shall Verify Final Design with Owner or
Site Soil Engineer.



Scale: None



PAVEMENT SECTION THICKNESS - $6\frac{3}{4}" = T$ (T shall be a minimum of 6")
1.26 C.F. CONCRETE PER L.F.

*TOP OF PAVEMENT MUST BE FLUSH TO THE GUTTER AT ALL HANDICAP RAMPS.
SLOPE OF THE GUTTER PAN SHALL NOT EXCEED 1.5% AT ALL HANDICAP RAMPS

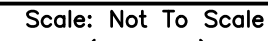
ALL EXPOSED SURFACES OF CONCRETE CURB AND GUTTER SHALL HAVE A BROOM FINISH

CHRIS E. BAUSERMAN, P.E., P.S. Delaware County Engineer	STANDARD CONSTRUCTION DRAWING 6 INCH CONCRETE COMBINED CURB & GUTTER (FOR LOCAL ROADS)	DELAWARE COUNTY ENGINEER'S OFFICE 50 Shanning Street Delaware, Ohio 43015 PHONE: (740)833-2400 FAX: (740)833-2391 www.co.delaware.oh.us
APPROVED 1-22-2008	REVISED 10-21-2014	Drawn ☒ KS sheet of 1 FILE NO. Checked ☒ SM FILE R-201

1. Verify with Owner any special signage/stripping requirements.
2. All regulatory signs and traffic control signs shall comply with the Ohio Manual of Uniform Traffic and Control Devices for Streets and Highways, as well as state, and local requirements.
3. The support manufacturer shall certify that the sign posts, and parts furnished meet all applicable federal, state, and local requirements.
4. Handicap parking sign shall conform with current state and local codes and regulations.



Not to Scale



(ADT<200)
Leaf Lane - Sta 2+10 to 4+99
Garden Loop



(200<ADT<1500)
Cloverleaf Lane - Sta 0+72 to 2+10

1	ITEM 441 - 1 1/2" Asphalt Concrete Surface Course, Type 1 (448), PG64-22
2	ITEM SS-1523 - 6" Roller Compacted Concrete (RCC) Base (SS-1523 DCEO App B)
3	ITEM 304 - 4" Aggregate Base
4	ITEM 204 - Subgrade Compaction
5	ITEM 609 - 6" Combination Curb & Gutter, Type Standard
6	ITEM 605 - 4" Pipe Underdrain
7	No 8 or No 57 Aggregate
8	ITEM 659 - Seeding and Mulching
9	Per Dwg DCED-R2300 - 4" Sidewalk

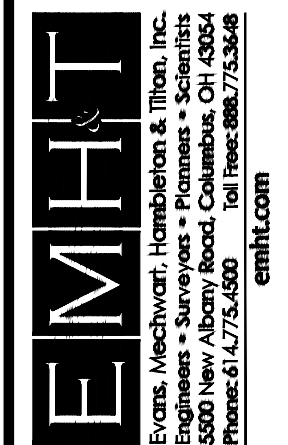
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Romanelli & Hughes

**FARM LOT 13, QUARTER TOWNSHIP 2, TOWNSHIP 3, RANGE 17
UNITED STATES MILITARY DISTRICT
GENOA TOWNSHIP, DELAWARE COUNTY, OHIO
SITE IMPROVEMENTS PLAN**

FOR
THE GROVE

DETAILS, TYPICAL SECTIONS & GRADING DETAILS



DATE _____

October, 2021

SCALE

NONE

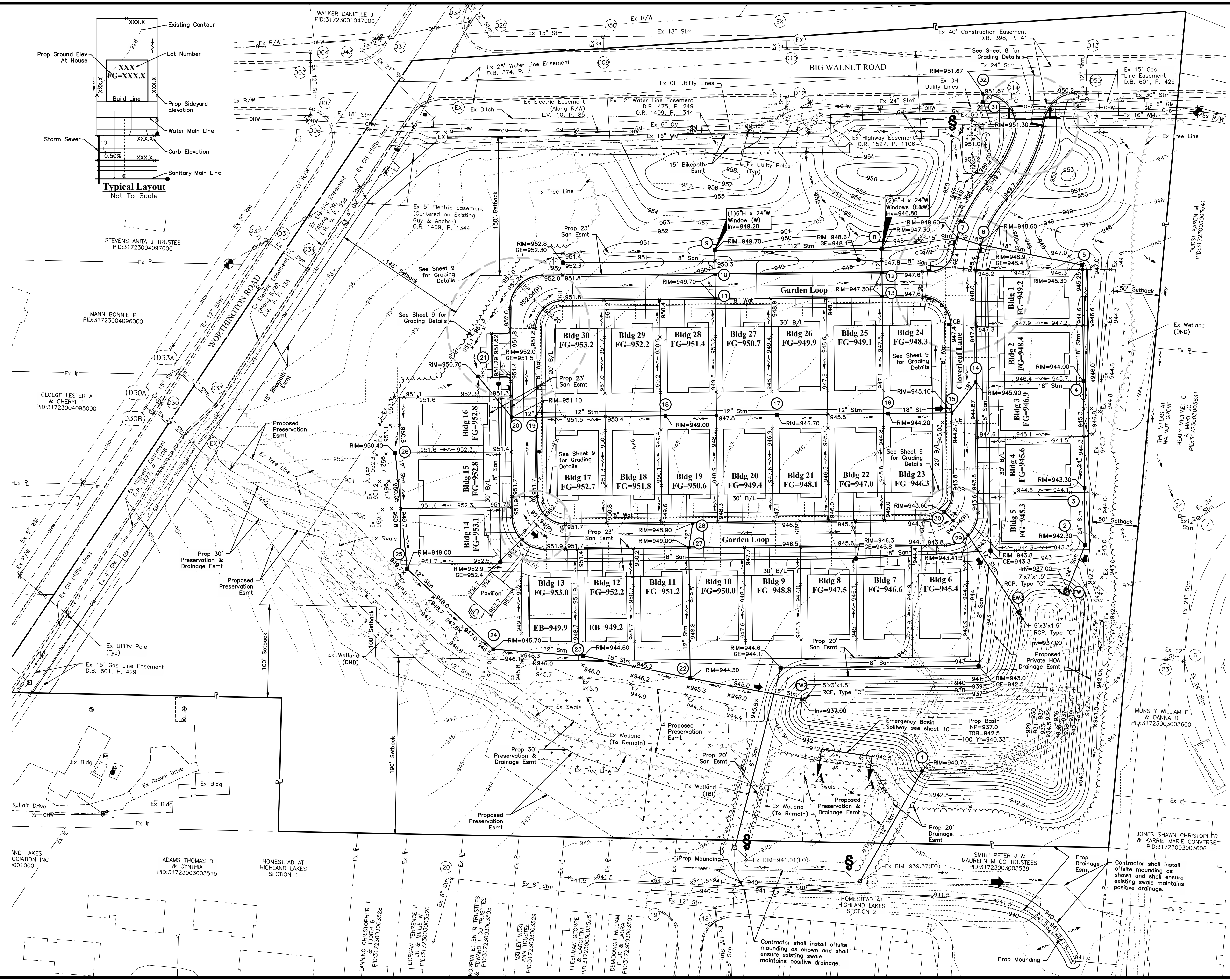
JOB NO.

2020-1326

SHEET

4/28

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NOTES:

See sheet 8 & 9 for Intersection & Handicap Parking Grading Details.

See sheet 11-12 for storm sewer profiles and sheet 16 for composite utility plan for additional storm sewer information.

Contractor shall follow the construction sequence regarding sediment/erosion control as indicated on the Stormwater Pollution Prevention Plan Sheets 22-28.

Contractor shall ensure that drainage is maintained during the course of the different phases of construction.

Contractor shall utilize temporary end of pipes and temporary pipes where necessary to ensure that all stormwater drainage is diverted to storm sewer & routed through proposed basin.

GRADING ACTIVITIES

Fill shall be placed in accordance with Delaware County Design Standards, including all supplements thereto.

The placement of fill shall not encroach within any existing drainage ditches or swales. Fill slopes shall not exceed 2:1 (horizontal to vertical). Contractor shall install erosion control matting for all 2:1 slopes.

Contractor shall provide a level working area around pond for building construction. Final pond grading shall be completed upon building construction.

POND EXCAVATION

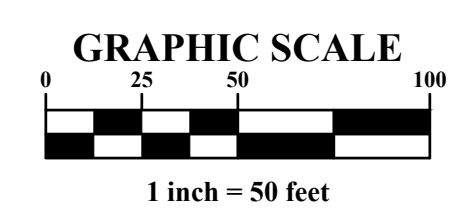
All pond grading and clay liners shall be performed in accordance with the recommendation provided by a Registered Geotechnical Consultant.

LEGEND

	Proposed Storm Sewer
	Proposed Sanitary Sewer
	Proposed Watermain
	Existing Storm Sewer
	Existing Sanitary Sewer
	Existing Watermain
	Existing Minor Contours
	Existing Major Contours
	Proposed Minor Contours
	Proposed Major Contours
	Flow Arrow
	Flood Routing Arrow
	Contractor to verify elevation and location of existing utility prior to construction.
	Finished Grade
	Exposed Block
	Match Existing
	Pavement Elevation
	Top of Curb Elevation

All Road elevations are Top of Curb elevations unless otherwise noted.

RIM= Top of Curb Elevation for curb & gutter inlets within the roadway.



REVISIONS	
MARK	DESCRIPTION

Romanelli & Hughes

THE GROVE

STORM SEWER & GRADING PLAN

FARM LOT 13, QUARTER TOWNSHIP 2, RANGE 17, TIER 15, COLUMBIANA COUNTY, OHIO
GENOA TOWNSHIP, OHIO
SITE IMPROVEMENTS PLAN

DATE
October, 2021

SCALE
1" = 50'

JOB NO.
2020-1326

SHEET
7/28

EMHT
E.M. HUGHES & COMPANY, INC.
Engineers - Surveyors - Planners - Scientists
5800 New Albany Road, Columbus, OH 43244
Phone: 614.757.5500 Fax: 614.757.5500
emht.com

GRADING ACTIVITIES

Fill shall be placed in accordance with Delaware County Design Standards, including all supplements thereto. The placement of fill shall not encroach within any existing drainage ditches or swales. Fill slopes shall not exceed 2:1 (horizontal to vertical).

Contractor shall provide a level working area around basin for building construction. Final basin grading shall be completed upon building construction

BASIN EXCAVATION

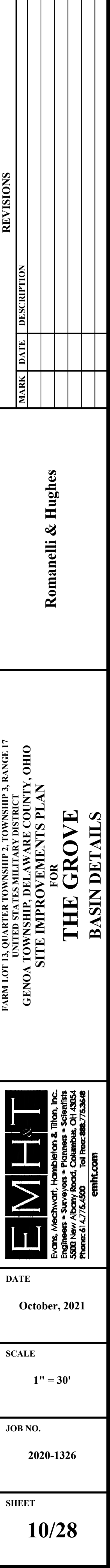
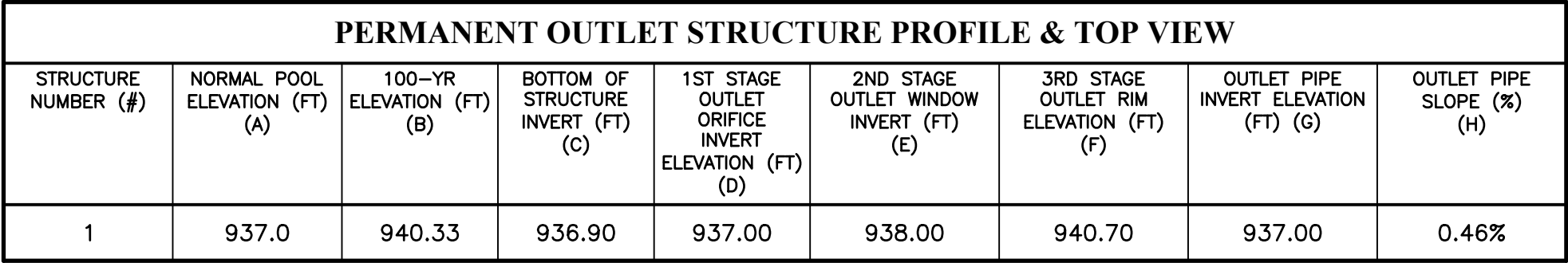
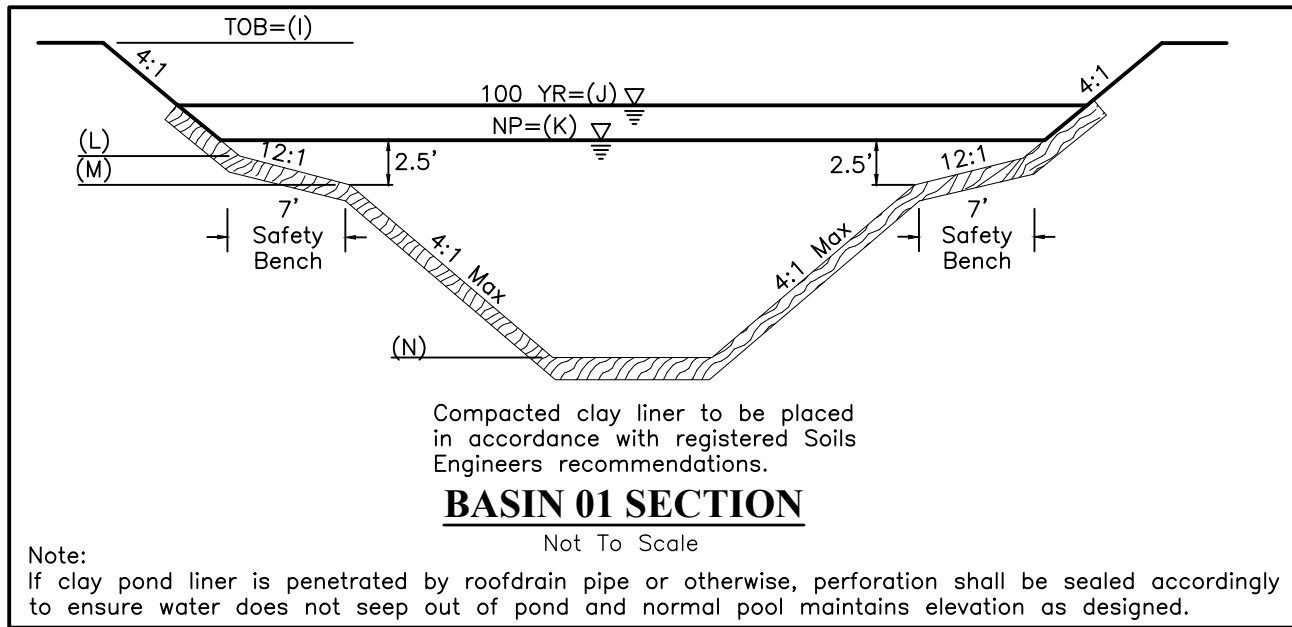
All basin grading and clay liners shall be performed in accordance with Delaware County Standards and the recommendation provided by a Registered Geotechnical Consultant.

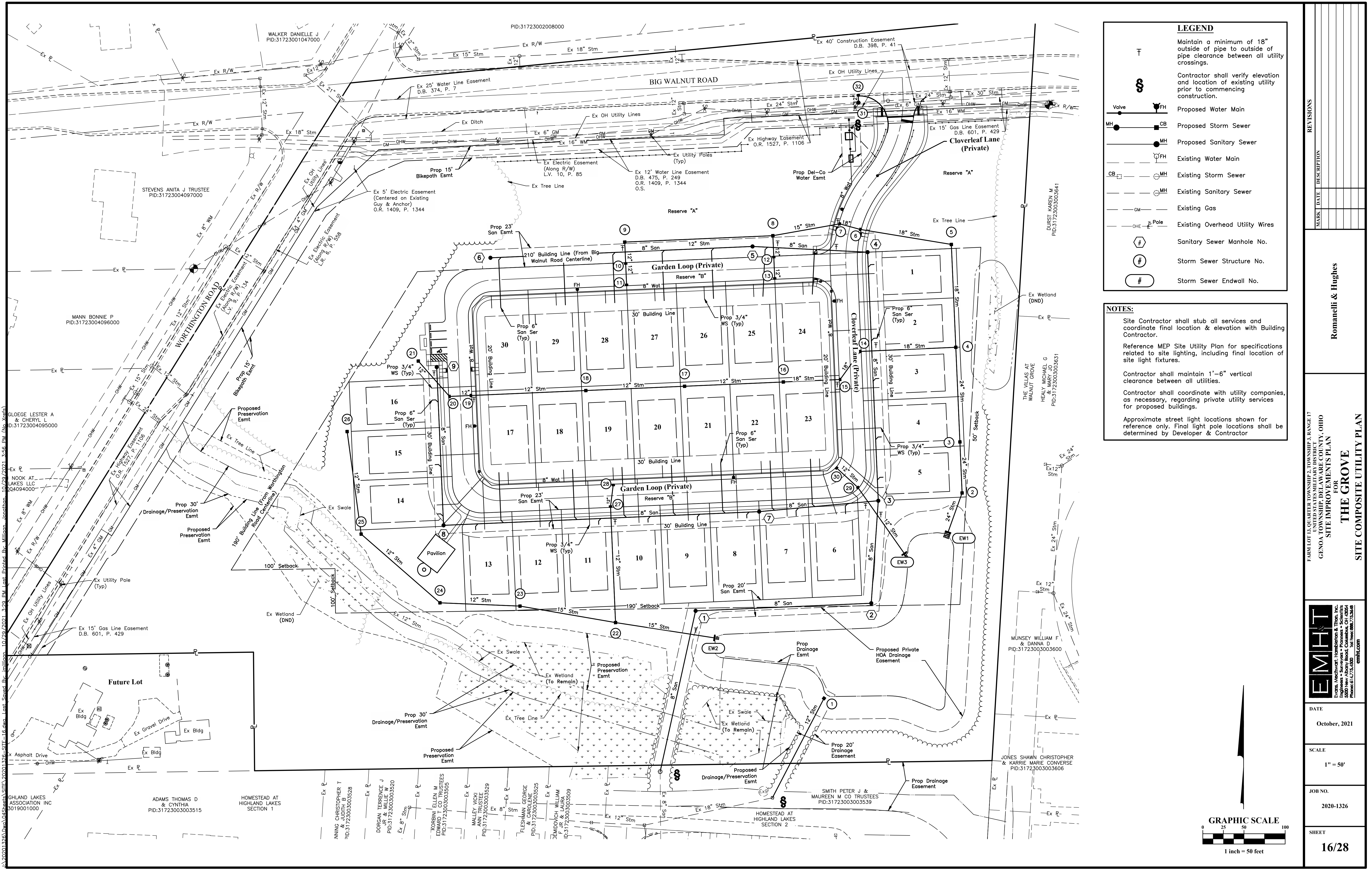
NOTES

Contractor shall follow the construction sequence regarding sediment/erosion control as indicated on the Stormwater Pollution Prevention Plan (Sheet 22–28).

Contractor shall ensure that drainage is maintained during the course of the different phases of construction.

Contractor shall utilize temporary end of pipes and temporary pipes where necessary to ensure that all stormwater drainage is diverted to storm sewer & routed through proposed basin.





LEGEND

- Valve
- Proposed Water Main
- Proposed Storm Sewer
- Proposed Sanitary Sewer
- Existing Water Main
- Existing Storm Sewer
- Existing Sanitary Sewer
- Existing Gas
- Existing Overhead Utility Wires
- Sanitary Sewer Manhole No.
- Storm Sewer Structure No.
- Storm Sewer Endwall No.

NOTES:

Site Contractor shall stub all services and coordinate final location & elevation with Building Contractor.

Reference MEP Site Utility Plan for specifications related to site lighting, including final location of site light fixtures.

Contractor shall maintain 1'-6" vertical clearance between all utilities.

Contractor shall coordinate with utility companies, as necessary, regarding private utility services for proposed buildings.

Approximate street light locations shown for reference only. Final light pole locations shall be determined by Developer & Contractor

FARM LOT 13, QUARTER TOWNSHIP 2, TOWNSHIP 3, RANGE 17
TOWNSHIP 2, TOWNSHIP 3, RANGE 17
GENOA TOWNSHIP, OHIO
SITE IMPROVEMENTS PLAN
FOR
THE GROVE
SITE COMPOSITE UTILITY PLAN

EMHT
ENGINEERS & ARCHITECTS
5800 New Albany Road, Columbus, OH 43244
Phone: 614.775.5500 Fax: 614.775.5501
emht.com

DATE
October, 2021

SCALE
1" = 50'

JOB NO.
2020-1326

SHEET
16/28