# THE VILLAS AT CANTERWOOD FARMS IN

#### SITE DATA

<u>SITE_AREA</u> OVERALL_PARCEL <u>PARCEL_A</u> NET_RCD_PARCEL	35.3509 ACRES <u>1.1359 ACRES</u> 34.215 ACRES	
PARCEL BREAKDOWN RIGHT OF WAY PARCELS OPEN SPACE TOTAL	3.56 ACRES 18.23 ACRES 12.42 ACRES 34.21	
<u>LOTS</u> SINGLE FAMILY	<u>TOTA</u> L 59	
<u>OPEN_SPACE</u> TOTAL_AREA PERCENTAGE	12.42 ACRES	OPEN SPACE – LESS LANDSCAPE TOTAL AREA PERCENTAGE

mar hand \* STORMWATER MANAGEMENT AREAS WILL BE WITHIN DEDICATED EASEMENTS LOCATED IN OPEN SPACE AREAS

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E EASEMENTS

\_12.34 ACRE

ROADWAY LENGTH <u>±2450 LF</u>

#### WETLAND DATA

WETLAND	CATEGORY	AREA (ACRES)	DISTURBED (ACRES)	2
W-A	2	0.43	0.00	)
W-B	1	0.09	0.01	)
W-C	2	0.32	0.05	5
<u>W</u> -D	2	1.37	<b>0.00</b>	<b>〈</b>
TOTAL		2.21	0.06	3
				2

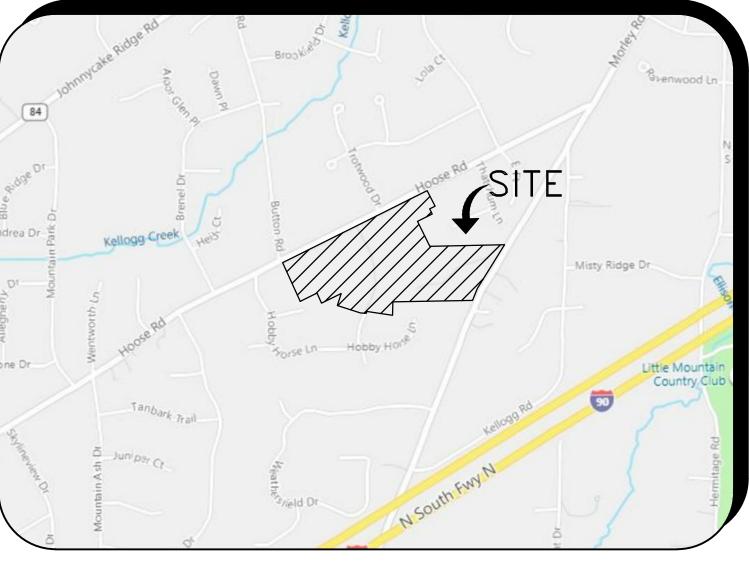
# TOWNSHIP CODIFIED ORDINANCES

CURRENT ZONING DISTRICT: R1 RESIDENTIAL

	<u>UBJECT</u> IN. PROJECT AREA	REQUIRED 20 ACRES		<u>PROVIDED</u> SEE SITE DATA	
10.22 W	IN. PROJECT AREA	ZU AURES		SEE SHE DATA	
16.24 P	ERMITTED DENSITY				
	BASE DENSITY (YIELD PLAN) DENSITY BONUS (8%)				
	TOTAL ALLOWABLE	59 UNITS		59 UNITS	
		-			
	IN. OPEN SPACE (SEE CRITERIA)	10%		SEE SITE DATA	
· · ·	IN. LOT AREA IN. LOT WIDTH	MAY BE VA	(10,890 SF)	0.25 ACRES (10	J,890 SF)
	IN. FRONT YARD SETBACK	30'		30'	
	ACCESSORY STRUCTURE	30'			
М	IN. SIDE YARD SETBACK	10'		10'	
14	ACCESSORY STRUCTURE	10' 30'		30'	16.
IVI	ACCESSORY STRUCTURE	10 <b>'</b>		50	
16.10(D) M	AX BUILDING HEIGHT	35'			1. C
					2. P 3. T
<u>RIPARIAN SE</u> 17.04(B)(1)		HAN 20 SO MILES	. 1	20'	J. 1 a.
17.04(B)(2)	STREAMS DRAINING AREA GREATER T STREAMS DRAINING AREA UP TO 20	SQ MILES	7	20 '5'	b.
17.04(B)(3)	CLASS III PRIMARY HEADWATER HABI	TAT STREAM	5		с.
	STREAMS DRAINING AREA UP TO 1 S		2	25'	d.
					e. f.
<u>WETLAND_SE</u> 17.04(D)(4)	CATEGORY 3 WETLANDS		5	50 <b>'</b>	g.
17.04(D)(4)	CATEGORY 2 WETLANDS			50'	
	CATEGORY 1 WETLANDS		Ν	IO SETBACK LISTED	
	COUNTY, OHIO				۸D
	•		BELOW ARE ONL THAT EFFECT PL		
<b>SORDI</b>	VISION STANDARD	15	ARE NOT ALL IN		DE
DATED: J	ANUARY 29, 2013				ALM
					2167 PAINI
SEC. 3(D)	MINIMUM HORIZONTAL CURVE RADIUS	5	200'		PHON
	MINIMUM PAVEMENT WIDTH		11' PER LANE'		ATTN
	MINIMUM CURB RADIUS		30' 50'		
SEC. 3(B)	MINIMUM TANGENTS BETWEEN REVER CUL-DE-SACS	SE CURVES	50		
	MAXIMUM LENGTH W/ AVERAGE SUB	LOT < 150'	1000'		** 7
	MAXIMUM LENGTH W/ AVERAGE SUB		2000'		W
	MIN. PAVEMENT DIAMETER		100'		CC
	MIN. PROPERTY LINE DIAMETER		110'		FLIC
	MIN. PAVEMENT RADII AT INTERSECTI MINIMUM INTERSECTION ANGLE	IONS	30' 70 DEGREES		2063
SEC. 3(B)(3) SEC. 3(B)(12)		FSFTS	200'		AKR
SEC. 3(B)(12)			150'		PHO
SEC. 3(G)	BLOCKS				
	MAXIMUM LENGTH W/ AVERAGE SUB		1400'		
	MAXIMUM LENGTH W/ AVERAGE SUB	LOT > 150'	2100'		
SEC. 4(A)	EASEMENTS		15'		
	UTILITY EASEMENT ALONG R/W		10		

# PRELIMINARY PLANS FOR

# TOWNSHIP OF CONCORD, COUNTY OF LAKE, STATE OF OHIO



VICINITY MAP



## .24(C) OPEN SPACE CRITERIA

- CONSERVE SIGNIFICANT NATURAL/HISTORICAL/CULTURAL ELEMENTS PRESERVED IN NATURAL STATE THE FOLLOWING CAN NOT BE INCLUDED
- PUBLIC ROADS
- PARKING/ACCESS/DRIVE AREAS
- REQUIRED SETBACKS (B/W BUILDINGS, PARKING, BOUNDARIES) REQUIRED SETBACKS (B/W BUILDINGS & STREETS) PRIVATE YARDS
- 15' BETWEEN BUILDINGS
- SMALL, FRAGMENTED OR ISOLATED OPEN SPACE MIN. DIMENSION OF 25' (R-1 DISTRICTS) LESS THAN 1 ACRE IN AREA
- PPLICANT/ EVELOPER: LAKE PROPERTIES
- MENTOR AVE. IESVILLE TOWNSHIP, OHIO 44077 NE: (440) 354-5602



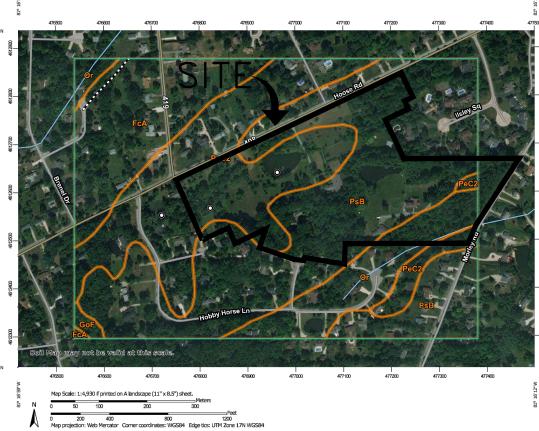
KINGER GEOSERVICES GROUP. LTD. 3 WILLIAMSTON COURT ON, OHIO 44313 NE: (330) 931–9124

#### **CIVIL ENGINEER** & SURVEYOR:

NEFF & ASSOCIATES 6405 YORK ROAD PARMA HEIGHTS, OHIO 44130 PHONE: (440) 884-3100 ATTN: DÀNIEL J. NEFF, P.E.

#### LANDSCAPE ARCHITECT

NEFF & ASSOCIATES 6405 YORK ROAD PARMA HEIGHTS, OHIO 44130 PHONE: (440) 884-3100 ATTN: BRIAN M. UHLENBROCK, ASLA, PLA



Soil Map-Lake County, Ohio

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FcA	Fitchville silt loam, 1 to 4 percent slopes	17.5	14.49
GoF	Gosport silty clay loam, 25 to 70 percent slopes	0.6	0.5%
Or	Orrville silt loam	12.0	9.9%
PeC2	Pierpont silt loam, 6 to 12 percent slopes, eroded	34.2	28.19
PsB	Platea silt loam, 2 to 6 percent slopes	57.4	47.2%
Totals for Area of Interest		121.8	100.0%

SOIL MAP NOT TO SCLE'

#### INDEX TO

TITLE SHEET . . .

#### SURVEY:

OVERALL EXISTING OVERALL EXISTING EXISTING CONDITIONS EXISTING CONDITION

<u>YIELD PLAN</u> R1 YEILD PLAN .

#### PRELIMINARY RC OVERALL PRELIMINA PHASING MAP .

PRELIMINARY SITE RELIMINARY SITE ( ELIMINARY SITE ( RELIMINARY SITE U RELIMINARY SITE U FI IMINARY ROAD

#### SITE LANDSCAPI

LANDSCAPE NOTES SITE LANDSCAPE F SITE LANDSCAPE P SITE LANDSCAPE PI SITE LANDSCAPE PI LANDSCAPE DETAILS

## PRELIMINARY PLAN NOTES

STORMWATER MANAGEMENT TO MEET THE LAKE COUNTY REQUIREMENTS IN ADDITION TO THE OHIO EPA (WHEN APPLICABLE). ANY DETENTION AREA SHOWN ON THIS PLAN IS PRELIMINARY ONLY AND COULD VARY

WETLANDS ARE BASED ON A WETLAND DELINEATION PERFORMED BY FLICKINGER GEOSERVICES GROUP, LTD. DATED SEPTEMBER 28, 2020. ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION LETTER WILL BE RECIEVED.

THIS DESIGN IS SUBJECT TO THE APPROVAL OF ALL GOVERNING AGENCIES

EROSION & SEDIMENT CONTROL WILL BE HANDLED BY UTILIZING ALL STORM WATER BASINS AS TEMPORARY SEDIMEN BASINS. ALL DISTURBED AREAS OF THE SITE WILL BE DIRECTED TOWARD THESE SEDIMENT BASINS USING OVERLAND DIVERSIONS AND CHECK DAMS. PERIMETER OF DISTURBED AREA WILL UTILIZE SILT FENCE OR FILTER SOCK TO PREVENT SEDIMENT RUNOFF. ONCE STORM SEWER STRUCTURES ARE INSTALLED, OVERLAND DRAINAGE WILL BE DIRECTED TO INLETS PROTECTED WITH INLET PROTECTION. THE SITE WILL BE STABILIZED USING TEMPORARY AND PERMANENT SEEDING PER THE RAINWATER AND LAND DEVELOPMENT GUIDE PUBLISHED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES. A FULL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE DEVELOPED WITH THE FINAL CONSTRUCTION DOCUMENTS FOR REVIEW AND APPROVAL FOR THIS PROJECT.

## FILLING OF EXISTING PONDS

ALL POND FILLS SHALL FOLLOW THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO TESTING, REMOVAL OF ORGANIC/SOFTENED SOILS AND PLACEMENT OF ENGINEERED FILL.

# SCHOOL DISTRICTS

THIS SUBDIVISION WILL BE IN TWO SCHOOL DISTRICTS (SEPARATED BY THE LOT LINE BETWEEN ORIGINAL LOT 21 AND ORIGINAL LOT 22). MENTOR PUBLIC SCHOOLS (TAX DISTRICT 10A) AND RIVERSIDE LOCAL SCHOOLS (TAX DISTRICT 08A). SUBLOTS 52, 53, 54, 55 AND 56 WILL BE IN BOTH SCHOOL DISTRICTS. EACH ONE OF THESE PARCELS WILL BE GIVEN TWO PARCEL NUMBERS. ONE BEING WITH 10A AND ONE BEING WITH 08A.

#### **UTILITY NOTES**

WATER SUPPLY WILL BE PUBLIC WITH SERVICE FROM AQUA OHIO. THE PRELIMINARY ESTIMATED FIRE AND DOMESTIC PEAK WATER DEMAND IS CALCULATED TO BE APPROXIMATELY 1,500 GPM. SANITARY SERVICE WILL BE PUBLIC WITH SERVICE FROM LAKE COUNTY DEPARTMENT OF PUBLIC UTILITIES.

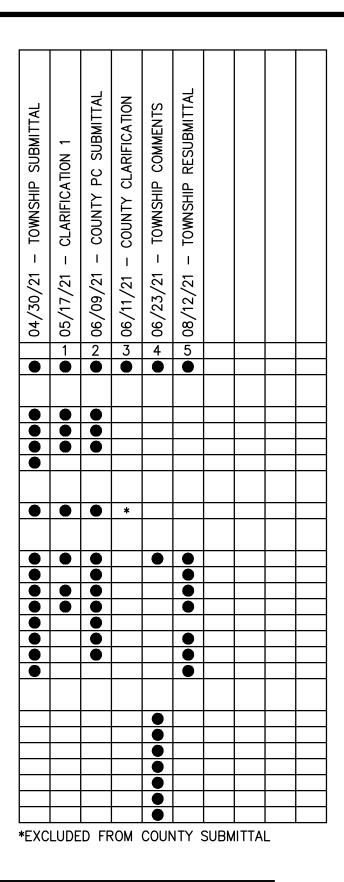
## **BUTTON FARM CEMETERY**

EXISTING BUTTON FARM CEMETERY IS LOCATED ON SITE. INTERNED TO BE MOVED TO A CEMETERY OR APPROPRIATE BURIAL SITE TO VACATE THE CEMETERY.

## **FLOODPLAINS**

THIS SITE OCCURS IN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) BASED ON MAP NUMBER 39085C0117F, EFFECTIVE DATE FEBRUARY 3, 2010.

DRAWINGS:	REVISION #
<u>DRAWINGS.</u>	T1.0
CONDITIONS – BOUNDARY & ESMTS CONDITIONS – TOPOGRAPHY S – TOPO & UTILITIES	20F4 
D. PLANS	Y1.0
PLANS         RY PLAN         SEOMETRIC PLAN         SEOMETRIC PLAN         SRADING PLAN         JTILITY PLAN         JTILITY PLAN         SECTION AND TYPICAL LOTS	P1.0A P2.0 P3.0 P4.0 P5.0 P6.0
<b>PLANS</b> AN - CLUBHOUSE ENLARGEMENT	L2.1
LAN—CUL—DE—SACENLARGEMENT.LAN—ENTRYLANDSCAPESSS	L2.3



THE DESIGN SHOWN IS PRELIMINARY ONLY AND BASED ON SITE INFORMATION AVAILABLE AT THE TIME OF DESIGN.

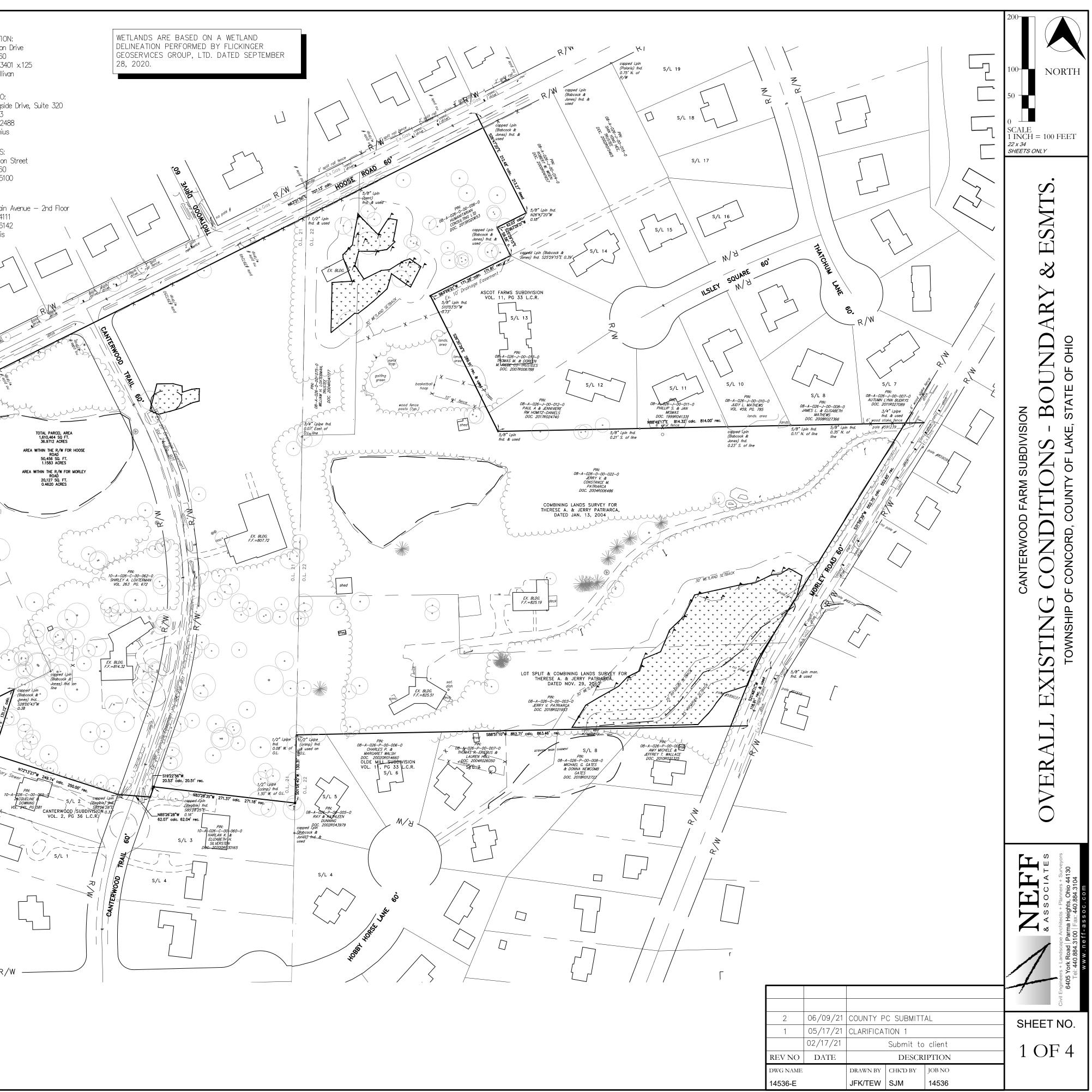
BOUNDARY INFORMATION HAS BEEN TAKEN FROM A SURVEY PREPARED BY NEFF & ASSOCIATES

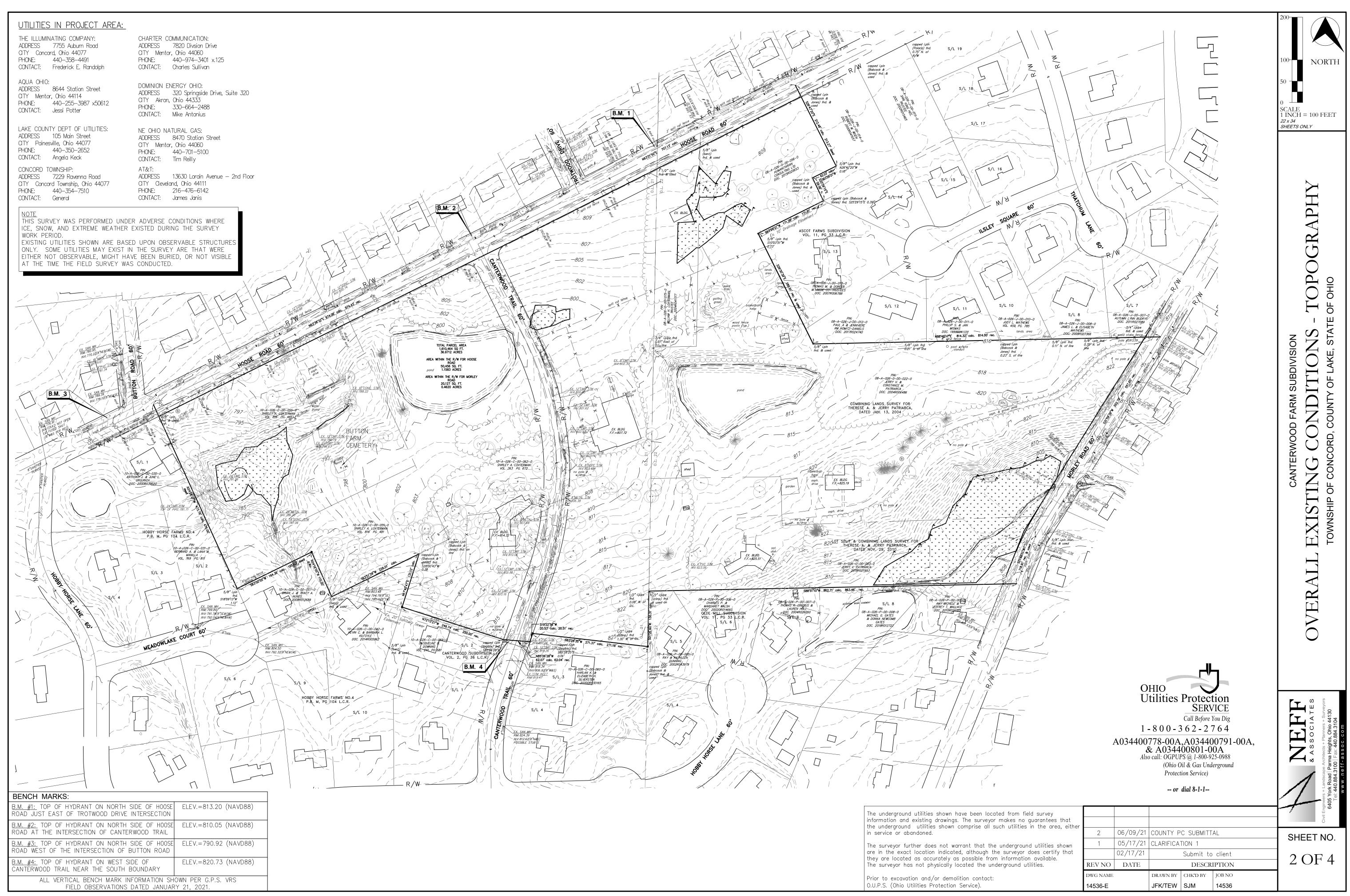


Civil Engineers + Landscape Architects + Planners + Surveyors 6405 York Road Parma Heights, Ohio 44130 Tel: 440.884.3100 Fax: 440.884.3104 www.neff-assoc.com

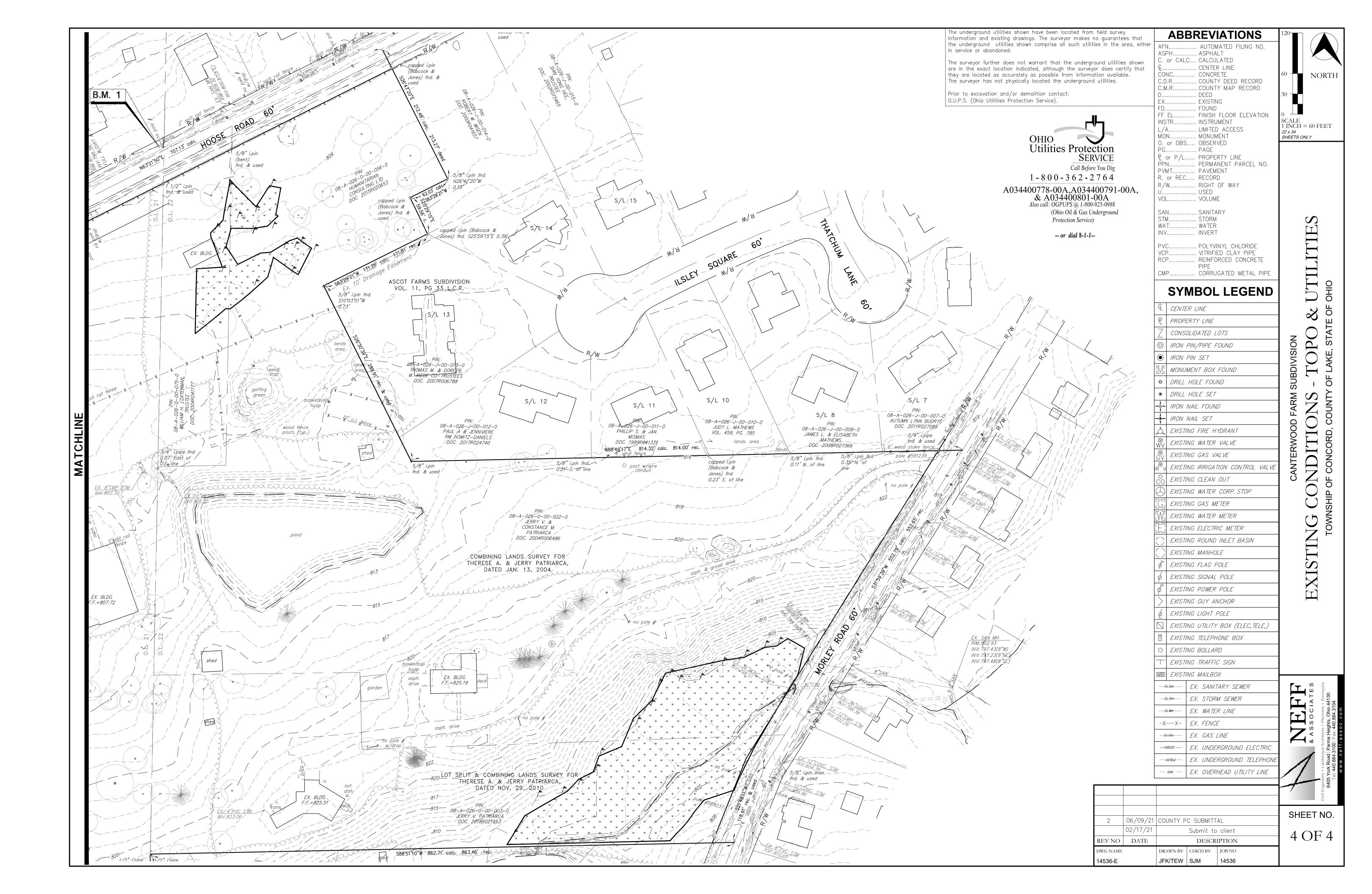
SHEET NO. T1.0

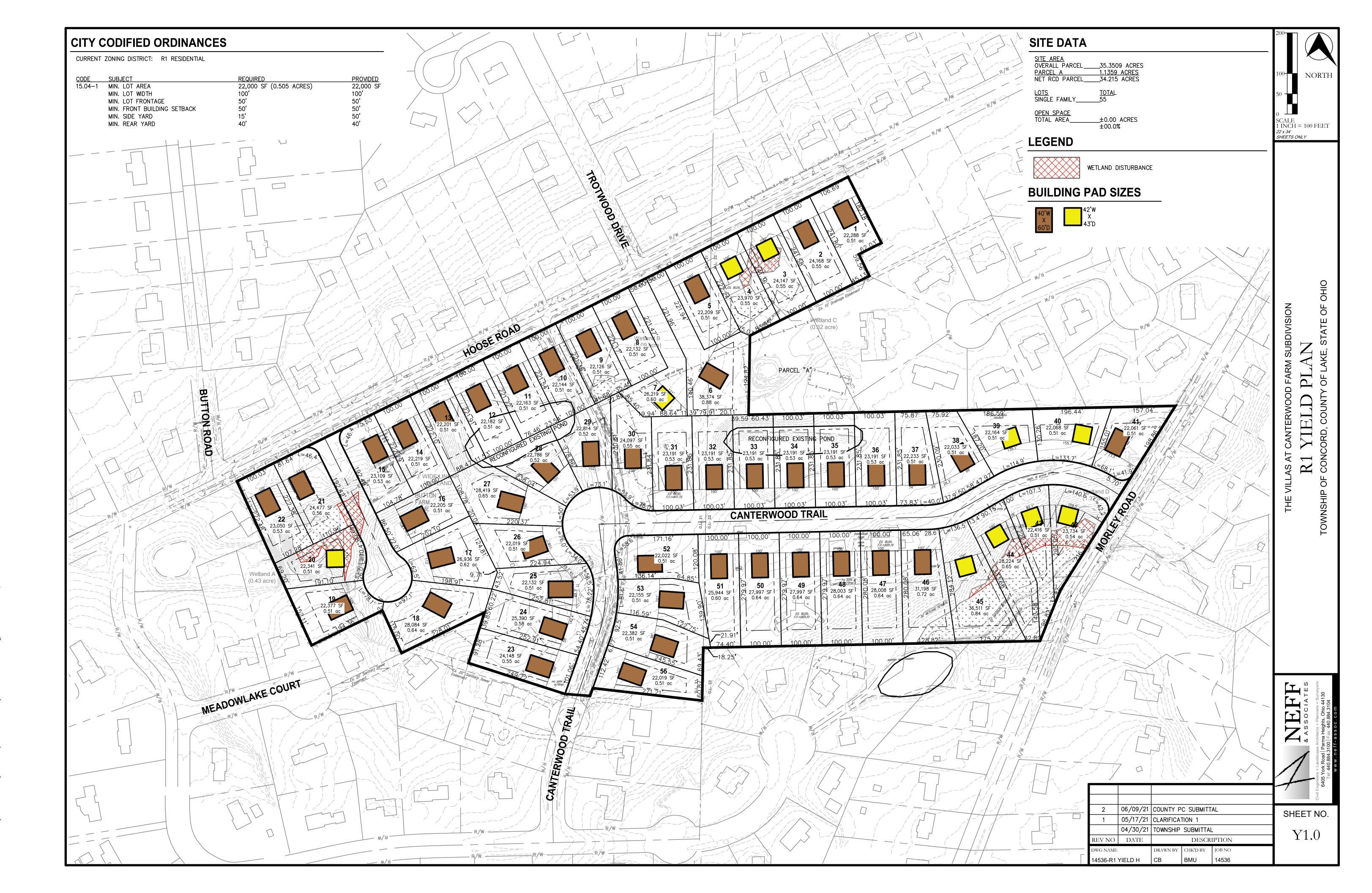
NOTE: UTILITIES IN PROJECT AREA: THIS SURVEY WAS MADE WITHOUT THE BENEFIT OF A TITLE RESEARCH REPORT. THE ILLUMINATING COMPANY: CHARTER COMMUNICATION: SURVEY CERTIFICATION ADDRESS 7755 Auburn Road ADDRESS 7820 Divsion Drive This survey on which it is based was prepared in accordance with and CITY Concord, Ohio 44077 CITY Mentor, Ohio 44060 satisfy the minimum standards for boundary surveys in the State of Ohio, PHONE: 440-358-4491 PHONE: 440-974-3401 x.125 as codified in Chapter 4733-37 of the Ohio Administrative Code in effect at CONTACT: Frederick E. Randolph CONTACT: Charles Sullivan the time. AQUA OHIO: Distances shown hereon are given in feet and decimal parts thereof. ADDRESS 8644 Station Street The basis of bearings for this survey is NAD83 (CORS96) Ohio State Plane CITY Mentor, Ohio 44114 CITY Akron, Ohio 44333 Coordinate System, North Zone (3401) and is used to denote angles only. Field work was performed on 01-27-2021. PHONE: 440-255-3987 x50612 PHONE: 330-664-2488 CONTACT: Jessi Potter CONTACT: Mike Antonius TE OF I hereby state to the best of my professional knowledge, information and belief, all to be correct. LAKE COUNTY DEPT OF UTILITIES: NE OHIO NATURAL GAS: ADDRESS 105 Main Street ADDRESS 8470 Station Street STEVEN J. CITY Painesville, Ohio 44077 CITY Mentor, Ohio 44060 METCALF PHONE: 440-350-2652 PHONE: 440-701-5100 S-8622 CONTACT: Angela Keck CONTACT: Tim Reilly FEBRUARY 17, 2021 Date AT&T: CONCORD TOWNSHIP: Registered Surveyor No. 8622-Ohio ADDRESS 13630 Lorain Avenue – 2nd Floor ADDRESS 7229 Ravenna Road CITY Concord Township, Ohio 44077 PHONE: 440-354-7510 CONTACT: James Janis CONTACT: General NOTE THIS SURVEY WAS PERFORMED UNDER ADVERSE CONDITIONS WHERE ICE, SNOW, AND EXTREME WEATHER EXISTED DURING THE SURVEY WORK PERIOD. EXISTING UTILITIES SHOWN ARE BASED UPON OBSERVABLE STRUCTURES ONLY. SOME UTILITIES MAY EXIST IN THE SURVEY ARE THAT WERE EITHER NOT OBSERVABLE, MIGHT HAVE BEEN BURIED, OR NOT VISIBLE AT THE TIME THE FIELD SURVEY WAS CONDUCTED.  $\square$ 10-A-026-C-00-055-0 SHIRLEY A. LOXIERMAN VOL. 816/PG. 481 BUTTON FARM CEMETERY 5' Grence S/L 1 10-A-026-07 ANTHONY J. & JUNE L. GRGURICH DOC. 2000R039620 PIN: 10–A–026–C–00–051–0 SHIRLEY A. LOXTERMAN VOL. 816 PG. 481 HOBBY HORSE FARMS NO.4 P.B. M, PG 104 L.C.R. 10-A-026-C-00-031-0 BERNARD A. & LANA M. MANILLA VOL, 769 PG. 811 S/L 2 S/L 3 MEADOWLAKE COURT 60 10-A-026-C-00-042-0 YEVIN C. & BARBARA L. KILFOYLE DOC. 2014R005962 5/8" i.pin (bent) fnd. & used S/L 6 S/L 9 HOBBY HORSE FARMS NO.4 P.B. M, PG 104 L.C.R. S/L 10











#### LEGEND



OPEN SPACE

with

LANDSCAPE EASEMENT

# **KEY NOTES**

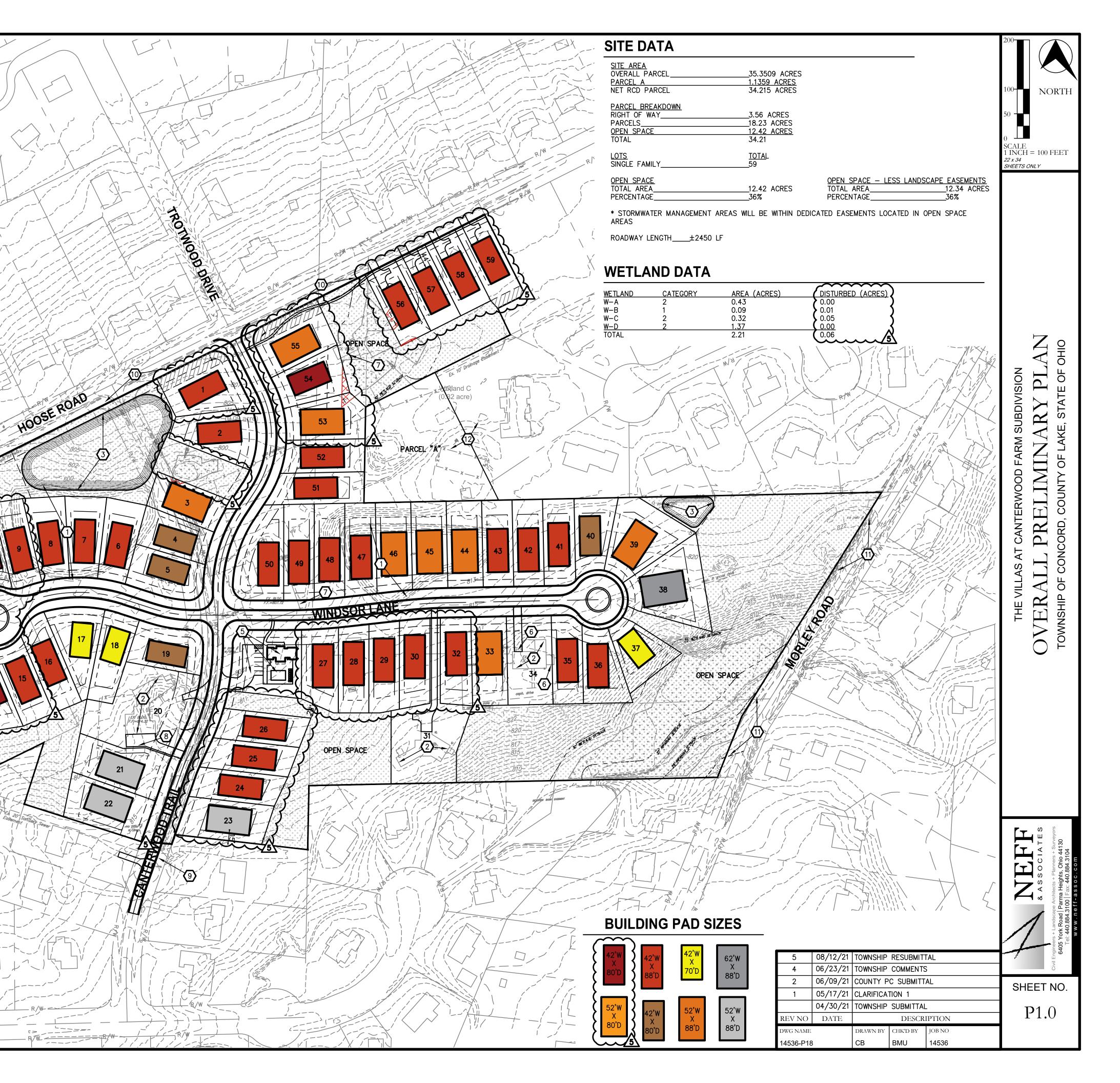
- 1 PONDS TO BE FILLED
- 2 EXISTING HOUSE TO REMAIN, MODIFY AS REQUIRED TO FIT DEVELOPMENT
- 3 STORMWATER MANAGEMENT
- 4 EXISTING CEMETERY TO BE VACATED
- 5 PROPOSED CLUBHOUSE, POOL AND PARKING
- 6 REMOVE DECK, CHANGE FRONT DOOR AND GARAGE DOOR LOCATIONS
- T STRUCTURE TO BE REMOVED
- 8 EXISTING DRIVEWAY TO BE RECONFIGURED
- 9 MODIFY EXISTING CUL-DE-SAC, DESIGN PENDING
- 10 PROPOSED FENCING, MONUMENT SIGN AND LANDSCAPING TO MAINTAIN EXISTING CHARACTER
- THE REMOVE EXISTING DRIVE AND MAINTAIN EXISTING VEGETATION ALONG MORLEY ROAD

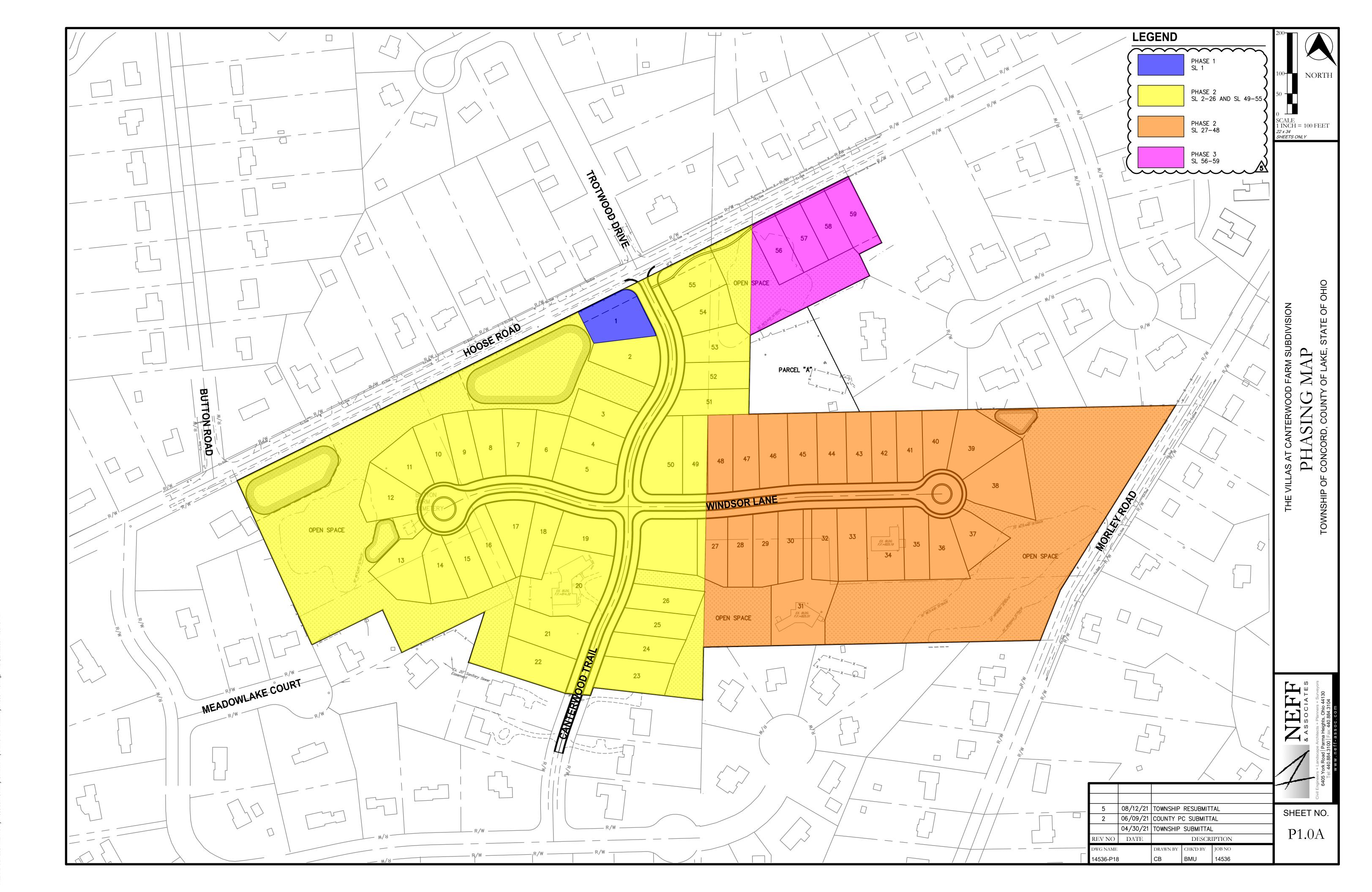
B

ROAD

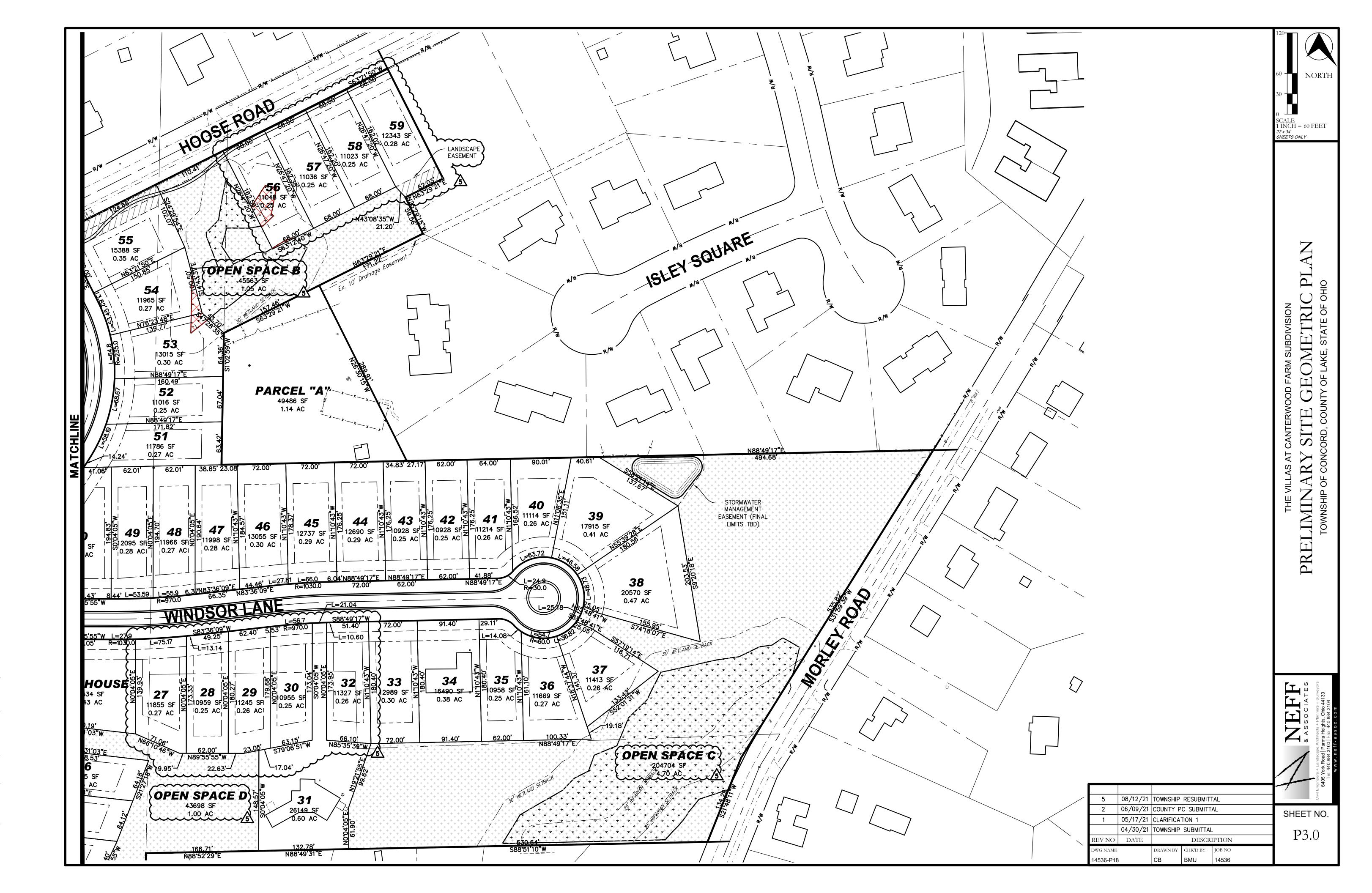
MEADOWLAKE COURT

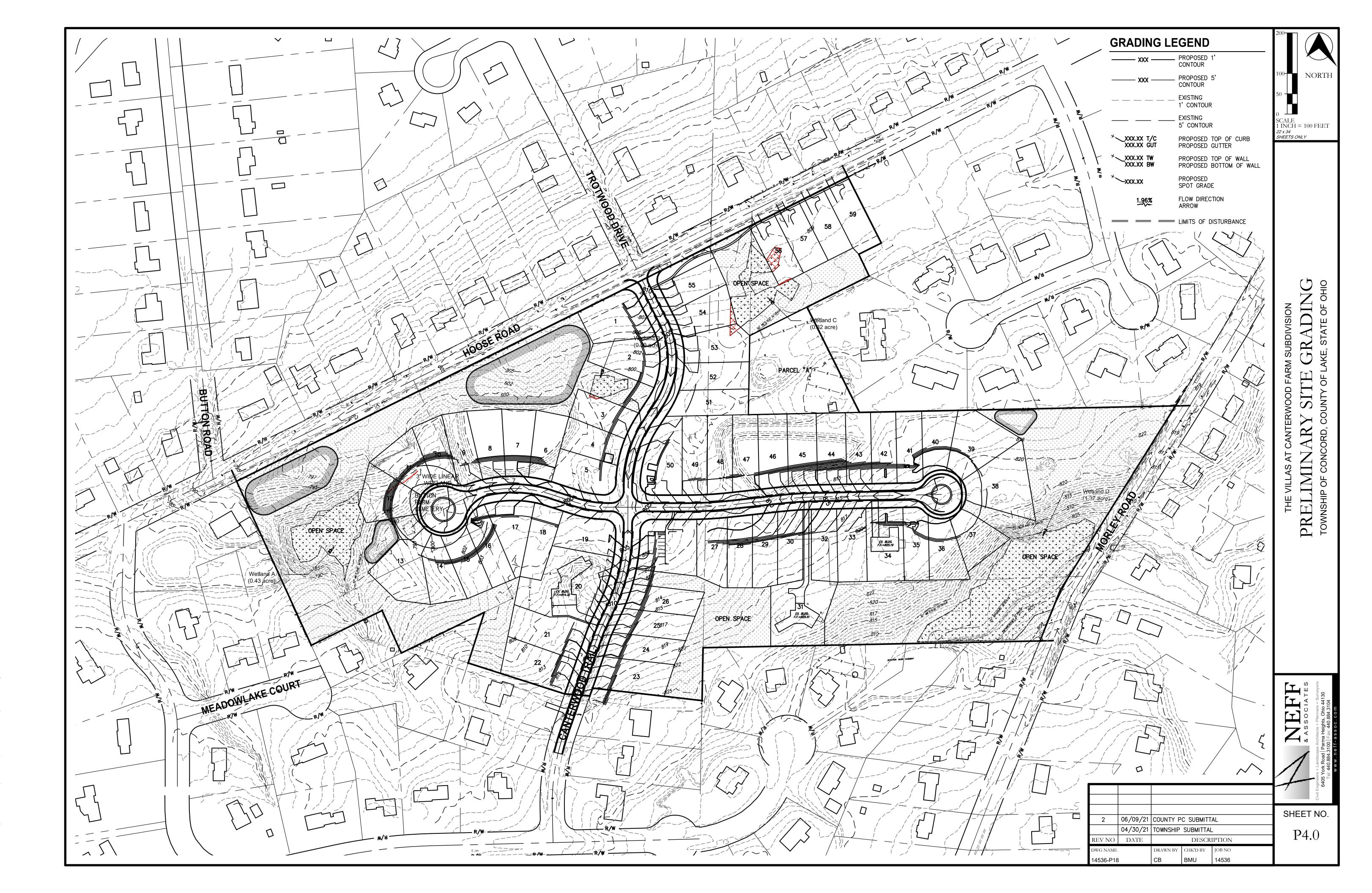
12 PARCEL A TO BE CONSOLIDATED WITH ADJACENT PARCEL (PIN 08-A-026-J-00-013-0)

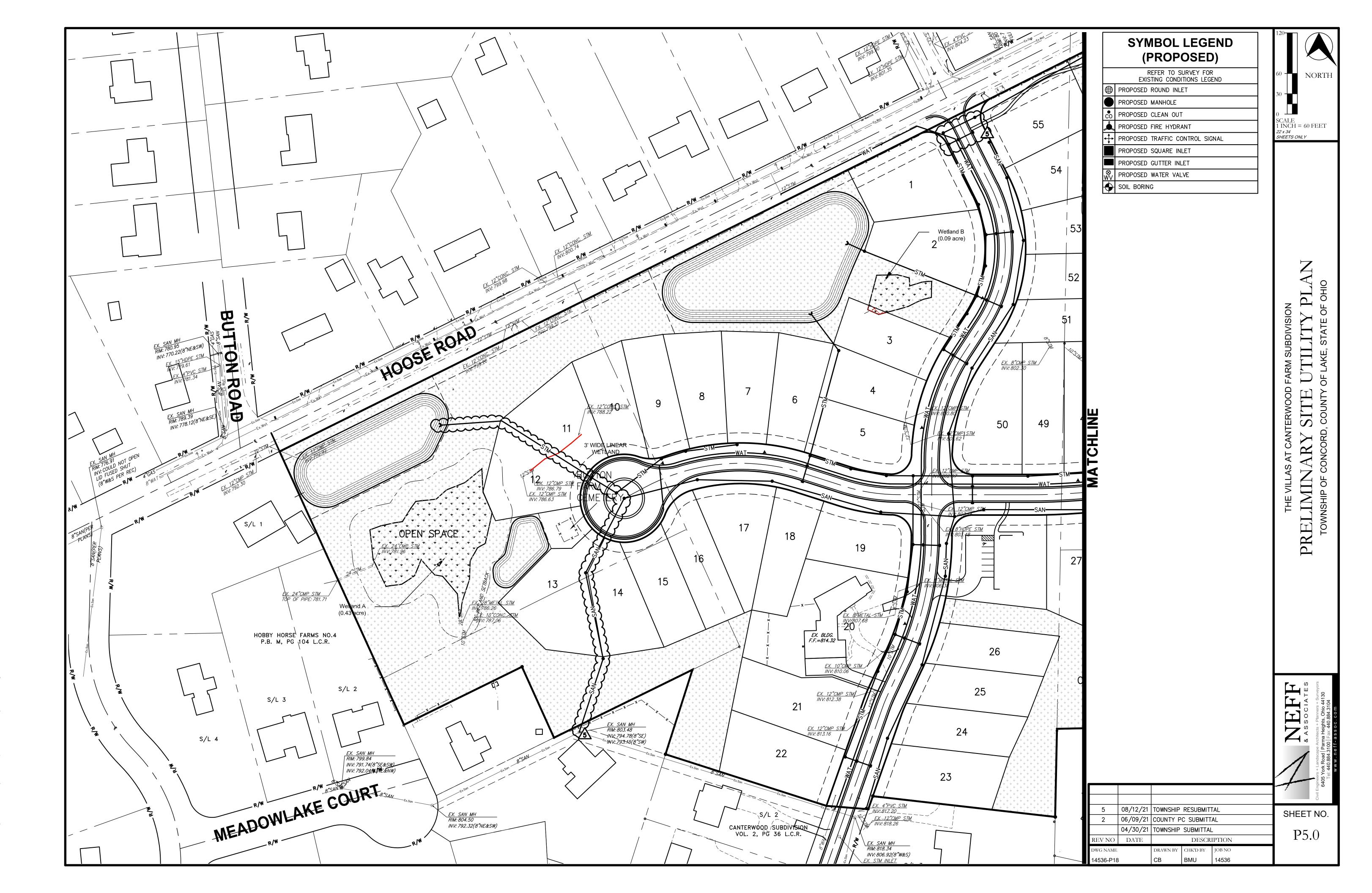




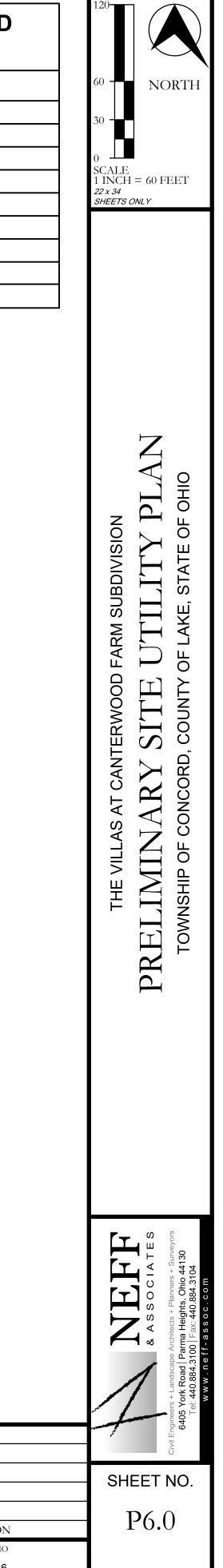


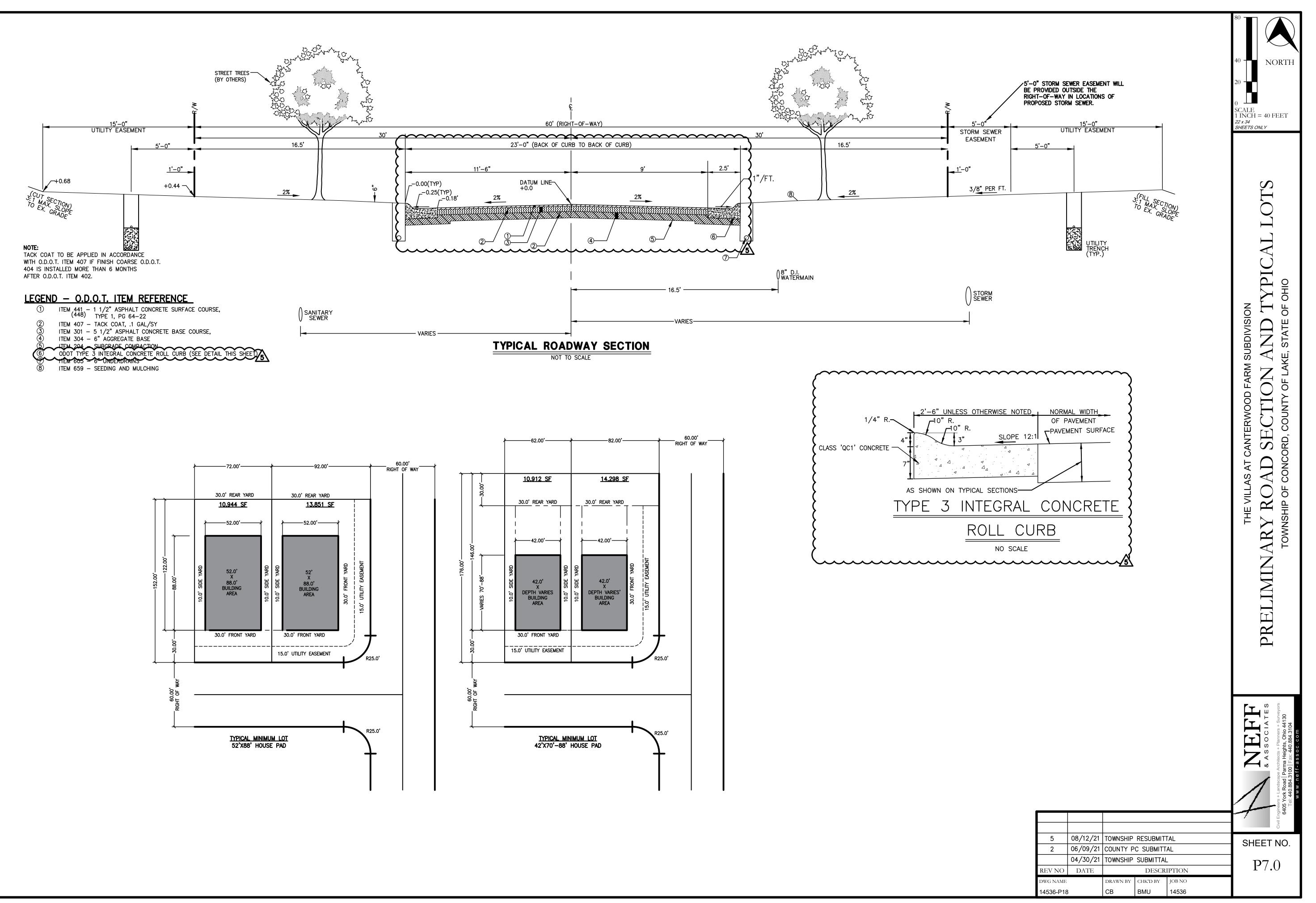


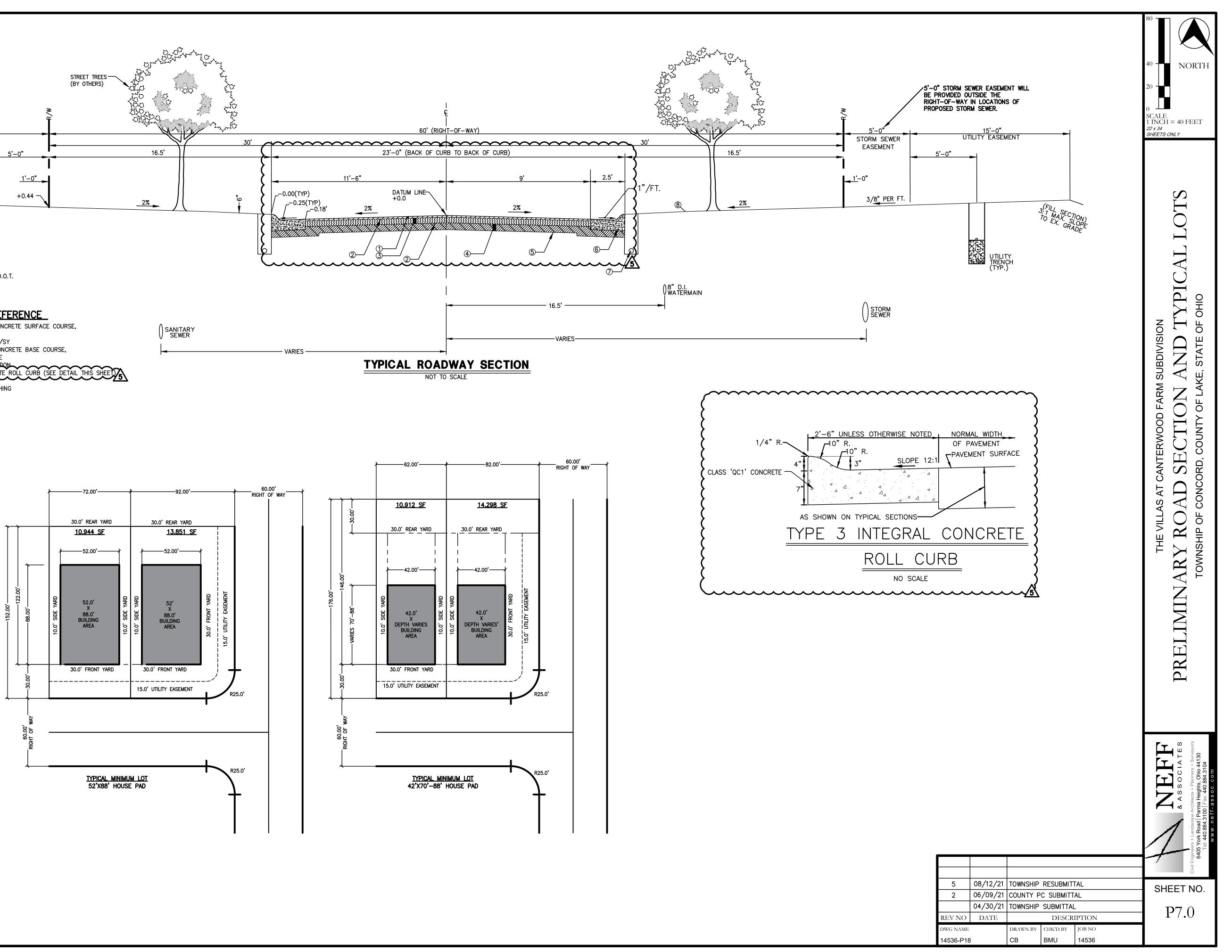












#### ANDSCAPE SPECIFICATIONS

#### <u> PART 1 – GENERAL</u>

- 1.1 SUMMARY
- A. SECTION INCLUDES:
- 1. PLANTING OF DROUGHT TOLERANT TREES, SHRUBS, LAWN SEED, GROUNDCOVER, AND ASSOCIATED MATERIALS. 1.2 REFERENCES
- A. THE PUBLICATIONS LISTED BELOW FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED. PUBLICATIONS ARE REFERENCED WITHIN THE TEXT BY THE BASIC DESIGNATION ONLY.
- B. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI):
- 1. ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK.
- C. ASTM INTERNATIONAL (ASTM):
- 1. ASTM D5268 TOPSOIL USED FOR LANDSCAPING PURPOSES.
- 2. ASTM C602 AGRICULTURAL LIMING MATERIALS. D. EROSION CONTROL TECHNOLOGY COUNCIL (ECTC):
- 1. STANDARD SPECIFICATION FOR ROLLED EROSION CONTROL PRODUCTS.
- .3 SUBMITTALS
- A. MATERIALS TEST REPORTS: SUBMIT TOPSOIL BORROW AREA TEST REPORTS TO THE ARCHITECT A MINIMUM 6 WEEKS PRIOR TO DELIVERY TO SITE.
- 1. PROVIDE LOCATION OF TOPSOIL BORROW AREA.
- PROVIDE NAME OF INDEPENDENT SOIL TESTING LABORATORY. 3. PROVIDE DATE OF SAMPLING AND TESTING.
- B. PRODUCT DATA:
- 1. SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS, SOD, AND SEED VERIFYING TYPE AND PURITY TO ARCHITECT
- .4 QUALITY ASSURANCE A. PLANT MATERIAL SELECTION:
- 1. SHRUBS: DELIVER REPRESENTATIVE SAMPLES OF EACH SHRUB VARIETY AND SIZE TO THE PROJECT SITE FOR VERIFICATION OF SPECIFICATION COMPLIANCE. MARK SHRUBS WITH SIZE, GENUS, SPECIES, CULTIVAR, AND
- 2. OWNER AND LANDSCAPE ARCHITECT MAY OBSERVE TREES AND SHRUBS FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, PESTS, DISEASE SYMPTOMS, INJURIES, AND LATENT DEFECTS.
- 3. REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.
- 3. PLANT MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1. SPREAD, HEIGHT, OR CONTAINER SIZES SHOWN ON THE DRAWINGS ARE MINIMUM ACCEPTABLE SIZES. DO NOT PRUNE TO OBTAIN REQUIRED SIZES. IF RANGE OF SIZES IS GIVEN, NO PLANT SHALL BE LESS THAN MINIMUM SIZE, AND AT LEAST 50 PERCENT OF PLANTS SHALL BE AS LARGE AS UPPER HALF OF RANGE SPECIFIED.
- 1. TREES AND SHRUBS: MEASURE WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE HEIGHT MEASUREMENTS FROM OR NEAR THE TOP OF THE ROOT FLARE FOR FIELD-GROWN STOCK AND CONTAINER GROWN STOCK. MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD. DO NOT MEASURE BRANCHES OR ROOTS TIP TO TIP. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE THE ROOT FLARE FOR TREES UP TO 4-INCH CALIPER SIZE, AND 12 INCHES ABOVE THE ROOT FLARE FOR LARGER SIZES.
- 2. OTHER PLANTS: MEASURE WITH STEMS, PETIOLES, AND FOLIAGE IN THEIR NORMAL POSITION C. QUALITY ASSURANCE INSPECTIONS: CONDUCT THE FOLLOWING INSPECTIONS DURING THE COURSE OF THE WORK IN THE PRESENCE OF THE LANDSCAPE ARCHITECT TO VERIFY CONFORMANCE TO SPECIFICATION REQUIREMENTS. CORRECT NOTED DEFICIENCIES DURING EACH INSPECTION PRIOR TO PROCEEDING WITH SUBSEQUENT WORK.
- 1. SUBSTANTIAL COMPLETION INSPECTION: CONVENE A SUBSTANTIAL COMPLETION INSPECTION TO OBSERVE COMPLETED WORK. LANDSCAPE ARCHITECT WILL RECORD THE DEFICIENT OR INCOMPLETE ITEMS WITHIN 3
- CALENDAR DAYS OF INSPECTION DATE. 2. FINAL INSPECTION: WITHIN 30 DAYS OF SUBSTANTIAL COMPLETION DATE, CONVENE A FINAL INSPECTION TO OBSERVE THAT ALL WORK IS COMPLETED AS SPECIFIED AND SHOWN ON THE DRAWINGS.
- 5 PROJECT CONDITIONS
- A. PERFORM WORK ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO HEALTH AND WELFARE OF PLANTS. OWNER SHALL DETERMINE SUITABILITY OF SUCH WEATHER CONDITIONS.
- 6 WARRANT
- A. GUARANTEE PLANT MATERIAL FOR A PERIOD OF 12 MONTHS FOLLOWING THE SUBSTANTIAL COMPLETION DATE.
- 1. A LIMIT OF ONE REPLACEMENT OF EACH PLANT SHALL BE REQUIRED, EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS. 2. REMOVE FROM SITE ANY PLANT THAT IS DEAD OR UNSATISFACTORY TO OWNER, JURISDICTION HAVING
- AUTHORITY, OR LANDSCAPE ARCHITECT. REPLACE PLANTS DURING NORMAL PLANTING SEASON. <u> ART 2 - PRODUCT</u>
- 2.1 WOODY PLANT MATERIALS
- A. FURNISH NURSERY-GROWN TREES AND SHRUBS COMPLYING WITH ANSI Z60.1 AND THE FOLLOWING REQUIREMENTS:
- 1. PROVIDE PLANTS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. 2. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS,
- LARVAE, AND DEFECTS SUCH AS DISFIGURING KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. 3. PROVIDE SELECTED SPECIMEN QUALITY PLANTS BEING EXCEPTIONALLY HEAVY, SYMMETRICAL, TIGHT KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF
- BRANCHES, COMPACTNESS AND SYMMETRY. 4. DO NOT PRUNE PLANTS BEFORE DELIVERY.
- 5. TREES WITH FRESH CUTS OF LIMBS OVER 1 1/4-INCH, WHICH HAVE NOT COMPLETELY CALLOUSED, SHALL BE REJECTED. 6. PROVIDE PLANTS TYPICAL OF THEIR SPECIES OR VARIETY AND EXHIBITING A NORMAL HABIT OF GROWTH AND
- BE LEGIBLY TAGGED WITH PROPER NAME. PROVIDE PLANTS GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE OF SITE OR HAVE BEEN ACCLIMATED TO SUCH CONDITION FOR AT LEAST 2 YEARS. 7. ROOT SYSTEM OF EACH PLANT SHALL BE WELL-PROVIDED WITH FIBROUS ROOTS. PARTS SHALL BE SOUND,
- HEALTHY, VIGOROUS, WELL-BRANCHED, AND DENSELY FOLIATED WHEN IN LEAF.
- 8. PLANTS DESIGNATED BALL AND BURLAP SHALL BE MOVED WITH ROOT SYSTEMS AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP AND COMPLY WITH THE FOLLOWING:
- a. DIAMETER AND DEPTH OF BALLS OF EARTH SHALL BE SUFFICIENT TO ENCOMPASS FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR HEALTHY DEVELOPMENT OF PLANT. b. NO PLANT SHALL BE ACCEPTED WHEN BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN CRACKED OR
- BROKEN PREPARATORY TO OR DURING PROCESS OF PLANTING. BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. c. HEEL-IN PLANTS THAT CANNOT BE PLANTED IMMEDIATELY BY SETTING IN GROUND AND COVERING BALLS
- WITH SOIL OR MULCH AND THEN WATERING. d. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, TWINE SHALL BE CUT FROM AROUND TRUNK AND BURLAP SHALL BE REMOVED.
- 9. PROVIDE SINGLE TRUNK TREES GROWING FROM SINGLE UN-MUTILATED CROWN OF ROOTS. NO PART OF TRUNK SHALL BE CONSPICUOUSLY CROOKED AS COMPARED WITH NORMAL TREES OF SAME VARIETY.
- 10. PROVIDE SHRUBS WITH THICKNESS CORRESPONDING TO TRADE CLASSIFICATION "NO.1". SINGLE-STEMMED OR THIN PLANTS SHALL NOT BE ACCEPTED. SIDE BRANCHES SHALL BE GENEROUS, WELL-TWIGGED, AND PLANT AS WHOLE WELL-BRANCHED TO GROUND. PLANTS SHALL BE IN MOIST CONDITION, FREE FROM DEAD WOOD, BRUISES, OR OTHER ROOT OR BRANCH INJURIES.
- 2.2 LAWN SEED
- A. PROVIDE FRESH, CLEAN, NEW CROP LAWN SEED MIXTURE. FURNISH TO OWNER DEALERS GUARANTEED STATEMENT OF COMPOSITION OF MIXTURE AND PERCENTAGE OF PURITY AND GERMINATION OF EACH VARIETY. B. SEED MIXTURE: PROVIDE SEED OF GRASS SPECIES AND VARIETIES, PROPORTIONS BY WEIGHT AND MINIMUM
- PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED. SEED MIXTURES VARY BY REGION AND SEASON AND SHALL COMPLY WITH STATE DOT AND LOCAL SOIL CONSERVATION SERVICE STANDARDS FOR LAWN TURF.
- 2.3 GROUNDCOVER
- A. PROVIDE GROUNDCOVER ESTABLISHED AND WELL ROOTED IN POTS OR SIMILAR CONTAINERS AND COMPLY WITH ANSI Z60.1.
- 2.4 TOPSOIL
- A. ASTM D5268, NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 7.4 PERCENT, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN 1-INCH IN DIAMETER, STUMPS, ROOTS, TRASH, HERBICIDES, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS. TOP SOIL SHALL CONTAIN A MINIMUM OF THREE PERCENT ORGANIC MATERIAL.
- B. TOPSOIL SHALL BE TESTED IN ACCORDANCE WITH PART 3 BELOW.
- C. SALVAGED OR EXISTING TOPSOIL: REUSE SUITABLE TOPSOIL STOCKPILED ON-SITE OR EXISTING TOPSOIL UNDISTURBED BY GRADING OR EXCAVATION OPERATIONS. CLEAN TOPSOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
- D. VERIFY AMOUNT OF SUITABLE TOPSOIL STOCKPILED IF ANY, AND SUPPLY ADDITIONAL IMPORTED TOPSOIL AS

## NEEDED.

- EXISTING QUANTITIES ARE INSUFFICIENT.
- INCHES DEEP; DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, OR MARSHES.
- OBTAIN WRITTEN CONFIRMATION THAT PERMITS ARE CURRENT AND ACTIVE.
- BE CURRENT AND ACTIVE.
- 2.5 ORGANIC SOIL AMENDMENTS
- SOIL, WEED SEED, AND MATERIAL HARMFUL TO PLANT GROWTH.
- B. BACK TO NATURE COTTON BURR COMPOST OR APPROVED EQUIVALENT.
- AND/OR HAY, MIXED WITH SOIL.
- D. PECAN HULLS: COMPOSTED PECAN HULLS FOR LOCAL SOURCE.
- E. BIOSOLIDS: USE GRADE 1 CONTAINING LOWER PATHOGEN LEVELS
- F. WORM CASTINGS: EARTHWORMS. 2.6 INORGANIC SOIL AMENDMENTS
- PASSING NO. 60 SIEVE.
- PERCENT PASSING NO. 6 SIEVE AND A MAXIMUM OF 10 PERCENT PASSING NO. 40 SIEVE.
- E. SAND: CLEAN, WASHED, NATURAL OR MANUFACTURED, FREE OF TOXIC MATERIALS. 2.7 PLANTING ACCESSORIES
- A. NON SELECTIVE HERBICIDE: ROUNDUP-PRO, FINALE OR EQUIVALENT. B. SELECTIVE POST EMERGENT HERBICIDE: EPA REGISTERED AND APPROVED, OF TYPE RECOMMENDED BY
- MANUFACTURER FOR APPLICATION. C. SELECTIVE PRE-EMERGENT HERBICIDE: EPA REGISTERED AND APPROVED, OF TYPE RECOMMENDED BY MANUFACTURER FOR APPLICATION.
- 2.8 PLANTING SOIL MIX BUILDING DEBRIS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
- 2.9 FERTILIZER
- FORMALDEHYDE, PHOSPHOROUS, AND POTASSIUM.
- GEOTECHNICAL ENGINEERING COMPANY AND THE CTL. B. SLOW-RELEASE FERTILIZER: USE ONE OF THE FOLLOWING:
- PERCENT PHOSPHOROUS, AND 13 PERCENT POTASSIUM, BY WEIGHT.
- AND 17 PERCENT POTASSIUM, BY WEIGHT.
- OWNER. STORE FERTILIZER IN SUCH MANNER THAT IT SHALL BE KEPT DRY.
- 2.10 MULCH
- SOURCE HARVESTED IN A SUSTAINABLE MANNER AND SALT FREE AND FREE FROM DELETERIOUS MATERIALS AND DEBRIS.

- 3. COLOR: BLACK. C. PINE BARK OR PINE NEEDLE MULCH SHALL NOT BE USED.
- 2.11 WATER A. POTABLE WATER, HOSE, AND OTHER WATERING EQUIPMENT.
- PART 3 EXECUTION
- 3.1 PREPARATION
- THE FOLLOWING:
- WITHOUT ADDITIONAL COST TO OWNER.
- SHALL BE CONSIDERED AS INCIDENTAL, WITHOUT ADDITIONAL COST TO OWNER.
- ORDER TO INSTALL PROPER REMEDIAL MEASURES. FOLLOWING:

- TO WORK. NO PLANT MATERIAL SHALL BE PLANTED IN FROZEN GROUND. E. TREE AND SHRUB PREPARATION

MOSS.

FIBROUS ROOTS.

E. IMPORTED TOPSOIL: SUPPLEMENT SALVAGED TOPSOIL WITH IMPORTED TOPSOIL FROM OFF-SITE SOURCES WHEN

1. OBTAIN TOPSOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 6 2. VERIFY BORROW AND DISPOSAL SITES ARE PERMITTED AS REQUIRED BY STATE AND LOCAL REGULATIONS. 3. OBTAIN PERMITS REQUIRED BY STATE AND LOCAL REGULATIONS FOR TRANSPORTING TOPSOIL. PERMITS SHALL

A. MANURE: WELL-ROTTED, UNLEACHED, STABLE OR CATTLE MANURE CONTAINING NOT MORE THAN 25 PERCENT BY VOLUME OF STRAW, SAWDUST, OR OTHER BEDDING MATERIALS; FREE OF TOXIC SUBSTANCES, STONES, STICKS,

C. COMPOST: DECOMPOSED ORGANIC MATERIAL INCLUDING LEAF LITTER, MANURE, SAWDUST, PLANT TRIMMINGS

#### A. LIME: ASTM C602, CLASS O AGRICULTURAL LIMESTONE CONTAINING A MINIMUM OF 80 PERCENT CALCIUM CARBONATE EQUIVALENT WITH A MINIMUM OF 95 PERCENT PASSING NO. 8 SIEVE AND MINIMUM OF 55 PERCENT

B. SULFUR: GRANULAR, BIODEGRADABLE, CONTAINING A MINIMUM OF 90 PERCENT SULFUR, WITH A MINIMUM OF 99 C. IRON SULFATE: GRANULATED FERROUS SULFATE CONTAINING A MINIMUM OF 20 PERCENT IRON AND 10 PERCENT

D. AGRICULTURAL GYPSUM: FINELY GROUND, CONTAINING A MINIMUM OF 90 PERCENT CALCIUM SULFATE.

A. ASTM D 5268 TOPSOIL, WITH PH RANGE OF 5.5 TO 7. A MINIMUM OF 4 PERCENT ORGANIC MATERIAL CONTENT. EXISTING, NATIVE SURFACE TOPSOIL FORMED UNDER NATURAL CONDITIONS WITH THE DUFF LAYER RETAINED DURING EXCAVATION PROCESS AND EXISTING, IN-PLACE SURFACE SOIL. IMPORTED TOPSOIL OR MANUFACTURED TOPSOIL FROM OFF-SITE SOURCES; DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS OR MARSHES. VERIFY SUITABILITY OF SOIL TO PRODUCE VIABLE PLANTING SOIL. CLEAN SOIL OF ROOTS, PLANTS, SOD, STONES, CLODS, CLAY LUMPS. POCKETS OF COARSE SAND, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER,

A. COMMERCIAL FERTILIZER: COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST- AND SLOW-RELEASE NITROGEN, 50 PERCENT DERIVED FROM NATURAL ORGANIC SOURCES OF UREA

1. COMPOSITION: NITROGEN, PHOSPHOROUS, AND POTASSIUM IN AMOUNT REQUIRED TO REMEDY DEFICIENCIES IDENTIFIED IN THE RESULTS OF THE EXISTING TOPSOIL AND IN-PLACE TOPSOIL TEST PERFORMED BY THE

1. OSMOCOTE STANDARD GRANULAR FERTILIZER BY SCOTTS COMPANY COMPOSED OF 13 PERCENT NITROGEN, 13 2. MULTI-COTE ALL PURPOSE BY SCHULTZ COMPOSED OF 17 PERCENT NITROGEN, 17 PERCENT PHOSPHOROUS,

C. DELIVER FERTILIZER, MIXED AS SPECIFIED, IN ORIGINAL UNOPENED STANDARD SIZE BAGS SHOWING WEIGHT ANALYSIS AND NAME OF MANUFACTURER. CONTAINERS SHALL BEAR MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS, OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE COVERING ANALYSIS SHALL BE FURNISHED TO

A. STRAW MULCH: STRAW MULCH SHALL USED FOR SEEDING PURPOSES ONLY AND SHALL BE AIR-DRY, CLEAN, MILDEW AND SEED FREE, SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY. B. WOOD MULCH: WOOD MULCH SHALL BE SHREDDED HARDWOOD OR SOFTWOOD MULCH OBTAINED FROM A LOCAL

SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS. MULCH SHALL HAVE THE CHARACTERISTICS OF RETAINING MOISTURE, FORMING A MAT NOT SUSCEPTIBLE TO SPREADING BY WIND OR RAIN, AND PROVIDING A SUITABLE GROWTH MEDIUM FOR PLANTS AND SHALL BE FREE OF SOIL, ROCKS, WEEDS, SAWDUST, DIRT, GARBAGE, OR OTHER

1. HARDWOOD MULCH: SHREDDED HARDWOOD MULCH SHALL CONSIST OF LONG FIBROUS INTERLOCKING STRANDS. 2. SOFTWOOD MULCH: SOFTWOOD MULCH SHALL BE MEDIUM SIZED SOFTWOOD MATERIAL ½ TO 3 INCHES WITH FINES OF ½ INCHES AND BELOW PRODUCED FROM DOUGLAS FIR, HEMLOCK, OR RED CEDAR.

A. IF PROJECT COMPLETION DATE PROHIBITS IN\_SEASON PLANTING, PREPARE FOR OUT\_OF\_SEASON SEEDING OR SODDING SO THAT LAWNS SHALL BE COMPLETED AND READY FOR ACCEPTANCE AT TIME OF PROJECT COMPLETION. B. UNSUITABLE SUBSOILS: LOCATIONS CONTAINING UNSUITABLE SUBSOIL SHALL BE TREATED BY ONE OR MORE OF

1. WHERE UNSUITABILITY IS DEEMED BY OWNER TO BE DUE TO EXCESSIVE COMPACTION CAUSED BY HEAVY EQUIPMENT AND WHERE NATURAL SUBSOIL IS OTHER THAN AASHTO CLASSIFICATION OF A6 OR A7. LOOSEN SUCH AREAS WITH SPIKES, DISCING, OR OTHER MEANS TO LOOSEN SOIL TO CONDITION ACCEPTABLE TO OWNER, LOOSEN SOIL TO MINIMUM DEPTH OF 12 INCHES WITH ADDITIONAL LOOSENING AS REQUIRED TO OBTAIN ADEQUATE DRAINAGE. CONTRACTOR MAY INTRODUCE PEAT MOSS, SAND, OR ORGANIC MATTER INTO THE SUBSOIL TO OBTAIN ADEQUATE DRAINAGE. SUCH REMEDIAL MEASURES SHALL BE CONSIDERED AS INCIDENTAL,

2. WHERE UNSUITABILITY IS DEEMED BY OWNER TO BE DUE TO PRESENCE OF BOARDS, MORTAR, CONCRETE, OR OTHER CONSTRUCTION MATERIALS IN SUB\_GRADE AND WHERE NATURAL SUBSOIL IS OTHER THAN AASHTO CLASSIFICATION OF A6 OR A7, REMOVE DEBRIS AND OBJECTIONABLE MATERIAL. SUCH REMEDIAL MEASURES

3. WHERE UNSUITABILITY IS DEEMED BY OWNER TO BE BECAUSE NATURAL SUBSOIL FALLS INTO AASHTO CLASSIFICATION OF A6 OR A7 AND CONTAINS MOISTURE IN EXCESS OF 30 PERCENT, THEN INSTALLATION OF SUB\_DRAINAGE SYSTEM OR OTHER MEANS DESCRIBED ELSEWHERE IN SPECIFICATIONS SHALL BE USED. WHERE SUCH CONDITIONS HAVE NOT BEEN KNOWN OR REVEALED PRIOR TO PLANTING TIME AND THEY HAVE NOT BEEN RECOGNIZED IN PREPARATION OF THE DRAWINGS AND SPECIFICATIONS, THEN OWNER SHALL ISSUE PRICING

C. UNSUITABLE TOPSOIL: LOCATIONS CONTAINING UNSUITABLE TOPSOIL SHALL BE TREATED BY ONE OR MORE OF THE

1. WHERE UNSUITABILITY IS DEEMED BY OWNER TO BE BECAUSE OF PRESENCE OF OBJECTIONABLE WEEDS; LITTER; SODS; STIFF CLAY; TOXIC SUBSTANCES; HERBICIDES OR OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH, THEN TOPSOIL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER. 2. WHERE UNSUITABILITY IS DEEMED BY OWNER TO BE BECAUSE OF PRESENCE OF THE STUMPS, ROOTS; STONES LARGER THAN 1 INCH IN DIAMETER; LESS THAN 3 PERCENT ORGANIC MATERIAL; LOW OR HIGH PH RANGE, REMOVE OBJECTIONABLE MATERIAL AND AMEND TOPSOIL TO MEET THE REQUIREMENTS SPECIFIED IN PART 2 ABOVE. SUCH REMEDIAL MEASURES SHALL BE CONSIDERED AS INCIDENTAL, WITHOUT ADDITIONAL COST TO

D. PERFORM PLANTING OPERATIONS AT STEADY RATE OF WORK UNLESS WEATHER CONDITIONS MAKE IT IMPOSSIBLE

1. DIG BARE-ROOTED SHRUBS WITH ADEQUATE FIBROUS ROOTS. COVER ROOTS WITH UNIFORMLY THICK

COATING OF MUD BY BEING PUDDLED IMMEDIATELY AFTER THEY ARE DUG, OR PACKED IN MOIST STRAW OR 2. DIG BALL AND BURLAP PLANTS WITH FIRM NATURAL BALLS OF EARTH OF DIAMETER AND DEPTH TO INCLUDE

3. PROTECT ROOTS OR BALLS OF PLANTS AT ALL TIMES FROM SUN AND DRYING WINDS. 4. BALL AND BURLAP PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY UPON DELIVERY SHALL BE SET ON GROUND AND PROTECTED WITH SOIL, WET MOSS, OR OTHER ACCEPTABLE MATERIAL. HEEL-IN BARE ROOTED

- PLANTS THAT CANNOT BE PLANTED IMMEDIATELY UPON DELIVERY. ALL SHALL BE KEPT MOIST 5. OPEN AND SEPARATE BUNDLES OF PLANTS BEFORE ROOTS ARE COVERED. PREVENT AIR POCKETS AMONG ROOTS. DURING PLANTING OPERATIONS, COVER BARE ROOTS WITH CANVAS, HAY, OR OTHER SUITABLE MATERIAL. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE WHICH WILL RESULT IN DAMAGE TO BARK OR
- F. SOD AND SEED BED PREPARATION

BRANCHES

- 1. NEWLY GRADED SUBGRADES:
- a. DO NOT PLACE TOPSOIL UNTIL SUBGRADE HAS BEEN APPROVED IN ACCORDANCE WITH SECTION 02300. b. BEFORE PLACING TOPSOIL, RAKE SUBSOIL SURFACE CLEAR OF STONES, DEBRIS, AND ROOTS. DISK, DRAG, HARROW, OR HAND RAKE SUBGRADE TO DEPTH OF 4 INCHES AND REMOVE STONES LARGER THAN 1-1/2 INCHES TO PROVIDE BOND FOR TOPSOIL.
- c. SPREAD TOPSOIL TO A DEPTH OF 4 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. ADJUST DEPTH OF TOPSOIL IN AREAS ADJACENT TO PAVED SURFACES OR CURBS TO ALLOW FOR THE PLACEMENT OF SOD OR SEED. 2. UNCHANGED SUBGRADES: IF LAWNS ARE TO BE PLANTED IN AREAS UNALTERED OR UNDISTURBED BY EXCAVATING, GRADING, OR SURFACE-SOIL STRIPPING OPERATIONS, PREPARE SURFACE AS FOLLOWS:
- a. REMOVE EXISTING GRASS, VEGETATION, AND TURF. DO NOT MIX INTO SURFACE SOIL
- b. DISK, DRAG, OR HARROW SURFACE SOIL TO A DEPTH OF AT LEAST 6 INCHES.
- c. REMOVE STONES LARGER THAT 1- $\frac{1}{2}$  INCH IN ANY DIMENSION AND STICKS, ROOTS, TRASH, AND OTHER EXTRANEOUS MATTER. d. LEGALLY DISPOSE OF WASTE MATERIAL, INCLUDING GRASS, VEGETATION, AND TURF.
- e. ADJUST DEPTH OF TOPSOIL IN AREAS ADJACENT TO PAVED SURFACES OR CURBS TO ALLOW FOR THE PLACEMENT OF SOD OR SEED. 3. INCORPORATE SOIL AMENDMENTS AND COMMERCIAL FERTILIZER INTO THE TOP 4 INCHES OF TOPSOIL TO
- ACHIEVE THE SPECIFIED TOPSOIL REQUIREMENTS. TILL SOIL TO A HOMOGENOUS MIXTURE OF FINE TEXTURE.
- 4. GRADE AREAS TO FINISH GRADES, FILLING AS NEEDED OR REMOVING SURPLUS TOPSOIL. FLOAT AREAS TO SMOOTH, UNIFORM GRADE AS INDICATED ON THE DRAWINGS. LAWN AREAS SHALL SLOPE TO DRAIN.
- 5. WHERE NO GRADES ARE SHOWN, AREAS SHALL HAVE A SMOOTH AND CONTINUAL GRADE BETWEEN EXISTING OR FIXED CONTROLS, SUCH AS WALKS, CURBS, CATCH BASIN, STEPS, OR BUILDINGS. ROLL, SCARIFY, RAKE, AND LEVEL AS NECESSARY TO OBTAIN TRUE, EVEN LAWN SURFACES. FINISH GRADES SHALL MEET APPROVAL OF OWNER. 6. SOD AND SEED BEDS SHALL BE FIRMED BY ROLLING BEFORE SEEDING BEGINS.
- G. GROUNDCOVER BED PREPARATION:
- 1. GRADE AREAS TO FINISH GRADES, FILLING AS NEEDED OR REMOVING SURPLUS TOPSOIL. FLOAT AREAS TO SMOOTH, UNIFORM GRADE AS INDICATED ON THE DRAWINGS. 2. SET OUT AND SPACE GROUNDCOVER AS SPECIFIED ON PLANS.
- 3. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS, AND BACKFILL WITH PLANTING SOIL.
- 4. REMOVE GROUNDCOVER FROM POTS.
- 5. WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTION AROUND PLANTS TO HOLD WATER. 6. WATER THOROUGHLY AFTER PLANTING TAKING CARE NOT TO COVER PLANT CROWNS WITH WET SOIL.
- 7. PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION WHEN PLANTS SHOW EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.
- H. ISLAND PREPARATION:
- 1. EXCAVATE COMPACTED SOIL TO A DEPTH OF 24 INCHES.
- 2. MAINTAIN REQUIRED ANGLES OF REPOSE OF ADJACENT MATERIALS AS SHOWN ON THE DRAWINGS. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.
- 3. SCARIFY SIDES OF EXCAVATION PIT SMEARED OR SMOOTHED DURING EXCAVATION 4. SUBSOIL OR TOPSOIL REMOVED FROM ISLANDS SHALL NOT BE USED IN PLANTING SOIL MIX.
- 5. NOTIFY OWNER'S CEC IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION WITHIN EXCAVATION AREA.
- 6. BACKFILL ISLANDS IN 9 INCH LIFTS WITH PLANTING SOIL MIX SPECIFIED HEREIN. TAMP EACH LIFT LIGHTLY TO PREVENT SETTLING. 7. GRADE AREAS TO FINISH GRADES, FILLING AS NEEDED TO ALLOW POSITIVE DRAINAGE. FLOAT AREAS TO A SMOOTH, UNIFORM GRADE AS INDICATED ON THE DRAWINGS.
- 3.2 PROTECTION
- A. TOPSOIL WHICH MUST BE TRANSPORTED ACROSS FINISHED SIDEWALKS SHALL BE DELIVERED IN SUCH MANNER THAT NO DAMAGE WILL BE DONE TO SIDEWALKS.
- B. BEFORE COMMENCING WORK, TREES AND SHRUBS THAT ARE TO BE SAVED SHALL BE PROTECTED FROM DAMAGE BY PLACEMENT OF FENCING FLAGGED FOR VISIBILITY OR SOME OTHER SUITABLE PROTECTIVE PROCEDURE APPROVED BY OWNER.
- C. TRUCKS OR OTHER EQUIPMENT SHALL NOT BE DRIVEN OR PARKED WITHIN DRIP LINE OF ANY TREE UNLESS TREE OVERSPREADS PAVED AREA.
- D. USE PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, SIDEWALKS, PAVEMENTS, UTILITIES, AND OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED.
- E. ADJUST DEPTH OF EARTHWORK AND TOPSOIL WHEN WORKING IMMEDIATELY ADJACENT TO AFOREMENTIONED FEATURES IN ORDER TO PREVENT DISTURBING TREE ROOTS, UNDERMINING SIDEWALKS AND PAVEMENTS, AND DAMAGE IN GENERAL TO OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED.
- F. COVER PLANTS TRANSPORTED TO PROJECT IN OPEN VEHICLES WITH TARPAULINS OR OTHER SUITABLE COVERS SECURELY FASTENED TO BODY OF VEHICLE TO PREVENT INJURY TO PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR IMPROPER HANDLING OR STORAGE SHALL BE CAUSE FOR REJECTION PLANTS SHALL BE KEPT MOIST FRESH AND PROTECTED SLICH PROTECTIO ENTIRE PERIOD DURING WHICH PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
- G. PLANTS SHALL NOT BE DELIVERED TO THE SITE MORE THAN SEVEN DAYS PRIOR TO PLANTING. PLANTS NOT PLANTED WITHIN 48 HOURS OF DELIVERY, SHALL BE HEALED IN (COVERED WITH SAWDUST, SOIL OR MULCH), AND THE CONTAINERS OR BALLS PROTECTED FROM WIND AND TEMPERATURE AND KEPT MOIST UNTIL PLANTING.
- H. WHERE EXCAVATION, FILL, OR GRADING IS REQUIRED WITHIN DRIP LINE OF TREES THAT ARE TO REMAIN, WORK SHALL BE PERFORMED AS FOLLOWS:
- 1. TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN. TREE ROOTS SHALL NOT BE CUT BUT TRENCH SHALL BE TUNNELED UNDER OR AROUND ROOTS BY CAREFUL HAND DIGGING WITHOUT INJURY TO ROOTS.
- 2. RAISING GRADES: a. WHERE FILL NOT EXCEEDING 16 INCHES IS REQUIRED, CLEAN, WASHED GRAVEL GRADED FROM
- 1 INCH TO 2 INCHES IN SIZE SHALL BE PLACED DIRECTLY AROUND TREE TRUNK. EXTEND GRAVEL OUT FROM TRUNK ON ALL SIDES MINIMUM OF 18 INCHES AND FINISH APPROXIMATELY 2 INCHES ABOVE FINISHED GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH TRUNKS OF TREES REQUIRING FILL
- 3. LOWERING GRADES: EXISTING TREES IN AREAS WHERE NEW FINISH GRADE IS TO BE LOWERED SHALL HAVE REGRADING WORK DONE BY HAND TO ELEVATION INDICATED ON THE DRAWINGS. ROOTS AS REQUIRED SHALL BE CUT CLEANLY 3 INCHES BELOW FINISHED GRADE AND SCARS COVERED WITH TREE PAINT.
- 3.3 PLANTING BED ESTABLISHMENT
- A. PRIOR TO PREPARING PLANTING BEDS, THE AREA SHALL CONFORM TO THE LINES AND GRADES SHOWN ON THE PLANS AND THE CONDITION OF THE SUBSOIL SHALL BE APPROVED BY THE OWNER.
- B. CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UNDERGROUND UTILITIES ON SITE.
- C. PLANTING BEDS WHERE EXISTING SUBSOIL IS DETERMINED BY OWNER TO BE UNSUITABLE FOR PLANT GROWTH IN ACCORDANCE PARAGRAPH UNSUITABLE SUBSOIL HEREIN SHALL BE EXCAVATED TO A DEPTH OF 24 INCHES OR AS NEEDED TO PROVIDE ADEQUATE DRAINAGE. REPLACE EXCAVATED SOIL WITH PLANTING SOIL MIX.
- D. PLANTING BEDS WHERE EXISTING SUBSOIL IS ACCEPTABLE BY OWNER SHALL BE PREPARED AS FOLLOWS:
- 1. SEVEN DAYS PRIOR TO COMMENCING ESTABLISHMENT OF THE PLANTING AREAS, APPLY NON SELECTIVE HERBICIDE. REMOVE DEAD VEGETATION.
- 2. LOOSEN SUBSOIL TO A DEPTH OF 12 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION, STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF SITE. 3. SPREAD 3 INCHES OF SOIL CONDITIONER OVER THE SURFACE OF THE PLANTING AREA AND INCORPORATE INTO THE TOP 12 INCHES OF THE SOIL. PRIOR TO SPREADING SOIL CONDITIONER, ADD OR REMOVE TOPSOIL AS
- NEEDED TO ACCOMMODATE ADDITION OF SOIL CONDITIONER AND TO ACHIEVE FINISH GRADE. 4. TILL PLANTING SOIL MIX TO A HOMOGENOUS MIXTURE OF FINE TEXTURE.
- 5. FLOAT AREAS TO SMOOTH, UNIFORM GRADE PROVIDING POSITIVE DRAINAGE OUT OF PLANTING BEDS AND AWAY FROM STRUCTURES OR AS INDICATED ON THE DRAWINGS.
- E. APPLY SLOW RELEASE FERTILIZER AT A RATE OF 1-1/2 POUNDS PER 100 SQUARE FEET FOR BEDS AREAS OR AS RECOMMENDED BY MANUFACTURER AND INCORPORATE INTO THE TOP 8 INCHES.

3.4 TREE AND SHRUB PLANTING

- A. PLANTS TOO LARGE FOR 2 PERSONS TO LIFT IN AND OUT OF HOLES SHALL BE PLACED WITH SLING. DO NOT ROCK TREES IN HOLES TO RAISE.
- B. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, OWNER MAY REQUIRE PLANT PITS TO BE RELOCATED, PITS ENLARGED, OR PLANTS DELETED FROM PROJECT.
- C. MAKE ADJUSTMENTS IN LOCATIONS AS DIRECTED. IN EVENT THAT PITS OR AREAS FOR PLANTING ARE PREPARED AND BACKFILLED WITH PLANTING SOIL MIX OR TOPSOIL TO GRADE PRIOR TO COMMENCEMENT OF LAWN OPERATIONS, THEY SHALL BE SO MARKED THAT WHEN PLANTING PROCEEDS, THEY CAN BE READILY LOCATED. IN CASE UNDERGROUND OBSTRUCTIONS SUCH AS LEDGES OR UTILITIES ARE ENCOUNTERED, CHANGE LOCATION UNDER DIRECTION OF OWNER WITHOUT CHARGE.
- D. HOLES FOR TREES SHALL BE AT LEAST 2 FEET GREATER IN DIAMETER THAN SPREAD OF ROOT SYSTEM AND AT LEAST 6 INCHES DEEPER THAN ROOT BALL OR AS SHOWN ON THE DRAWINGS. HOLES FOR SHRUBS SHALL BE AT LEAST 2 FEET GREATER IN DIAMETER THAN THE SPREAD OF ROOT SYSTEM AND AT LEAST 2 FEET DEEP OR AS SHOWN ON THE DRAWINGS. HOLES FOR VINES SHALL BE AT LEAST 12 INCHES GREATER IN DIAMETER THAN THE

E.	BACKFILL TREE HOLES AND SHRUB BEDS WITH PLANTING SOIL MIX. APPLY SLOW RELEASE FERTILIZER AT A RATE OF ¼ POUNDS PER CALIPER INCH FOR TREES. INCORPORATE FERTILIZER INTO THE PLANTING SOIL MIX.	
F.	<ul> <li>PLANTS SHALL BE PLANTED AT SAME DEPTH AS THEY HAD PREVIOUSLY GROWN OR AS SHOWN ON THE DRAWINGS. BACKFILL PLANTING SOIL MIX IN LAYERS OF NOT MORE THAN 8 INCHES AND EACH LAYER WATERED SUFFICIENTLY TO SETTLE BEFORE NEXT LAYER IS PLACED. TAMP PLANTING SOIL MIX UNDER EDGES OF BALLED PLANTS. USE ENOUGH PLANTING SOIL MIX TO BRING SURFACES TO FINISH GRADE WHEN SETTLED.</li> <li>1. PROVIDE SAUCER AROUND EACH PLANT AS SHOWN ON THE DRAWINGS.</li> <li>2. SOAK PLANTS WITH WATER TWICE WITHIN FIRST 24 HOURS AFTER TIME OF PLANTING. APPLY WATER WITH LOW PRESSURE SO AS TO SOAK IN THOROUGHLY WITHOUT DISLODGING TOPSOIL.</li> </ul>	
G.	TREE STAKING: AS SPECIFIED ON PLANS. TREE STAKING REQUIREMENT MAY BE WAIVED FOR TREES LOCATED IN PROTECTED AREAS UPON APPROVAL OF THE LANDSCAPE ARCHITECT.	
3.5	MISCELLANEOUS INSTALLATIONS	
A.	MULCH: PLACE 3 INCHES OF MULCH AS A TOP DRESSING IN PLANTING BEDS. MULCH SINGLE TREES OR SHRUBS TO OUTSIDE EDGE OF SAUCER OR AS SPECIFIED ON PLANS.	
В.	PEG SODDED SLOPES GREATER THAN 3:1 TO HOLD IN PLACE.	
C.	AREAS TO BE COVERED WITH EROSION CONTROL BLANKETS SHALL BE PROPERLY PREPARED, FERTILIZED, AND SEEDED BEFORE BLANKET IS APPLIED. WHEN BLANKET IS UNROLLED, NETTING SHALL BE ON TOP AND FIBERS IN CONTACT WITH SOIL. IN DITCHES, APPLY BLANKET IN DIRECTION OF FLOW OF WATER. ON SLOPES, APPLY BLANKETS VERTICALLY ON SLOPE. OVERLAP ENDS AND SIDES 6 INCHES AND STAPLE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.	
3.6	AREAS TO BE TURFED	
A.	UNLESS OTHERWISE SHOWN ON THE PLANS, DISTURBED AREAS SHALL BE PERMANENTLY SODDED AND/OR SEEDED.	
В.	CONTINUALLY SEED DISTURBED AREAS UNTIL FULLY TURFED WITH NO BARE SPOTS.	
3.7	SEEDING	
A.	DO NOT PERFORM SEEDING IN WINDY CONDITIONS.	
В.	SEEDING SHALL BE DISPERSED IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.	
C.	PERMANENTLY SEED AND MULCH CUT AND FILL SLOPES AS CONSTRUCTION PROCEEDS TO EXTENT CONSIDERED DESIRABLE AND PRACTICAL. IN THE EVENT IT IS NOT PRACTICAL TO SEED AREAS, SLOPES SHALL BE STABILIZED WITH STRAW MULCH AND TACKIFIER, BONDED FIBER MATRIX, NETTING, BLANKETS OR OTHER MEANS TO REDUCE THE EROSIVE POTENTIAL OF THE AREA.	
D.	SEED LAWN AREAS BY SOWING EVENLY WITH APPROVED MECHANICAL SEEDER AT RATE OF MINIMUM OF 3 POUNDS PER 1,000 SQUARE FEET. CULTI-PACKER OR APPROVED SIMILAR EQUIPMENT MAY BE USED TO COVER SEED AND TO FORM SEEDBED IN ONE OPERATION. IN AREAS INACCESSIBLE TO CULTI_PACKER, LIGHTLY RAKE SEEDED GROUND WITH FLEXIBLE RAKES AND ROLL WITH WATER BALLAST ROLLER. AFTER ROLLING MULCH WITH STRAW MULCH AT THE RATE OF 2 TONS PER ACRE.	
E.	SURFACE LAYER OF SOIL FOR SEEDED AREAS SHALL BE KEPT MOIST DURING GERMINATION PERIOD. WATER SEEDED AREAS TWICE FIRST WEEK TO MINIMUM DEPTH OF 6 INCHES WITH FINE SPRAY AND ONCE PER WEEK THEREAFTER AS NECESSARY TO SUPPLEMENT NATURAL RAIN TO EQUIVALENT OF 6 INCHES DEPTH.	N
3.8	SODDING	DIVISION
A.	CUT AND LAY SOD ON SAME DAY. ONLY HEALTHY VIGOROUS GROWING SOD SHALL BE LAID.	Ś
В.	LAY SOD ACROSS SLOPE AND TIGHTLY TOGETHER TO RESULT IN SOLID COVERAGE FREE OF GAPS.	
	ROLL OR FIRMLY BUT LIGHTLY TAMP NEW SOD WITH SUITABLE WOODEN OR METAL TAMPER SUFFICIENTLY TO SET	ш

B. LAY SOD ACROSS SLOPE AND TIGHTLY TOGETHER TO RESULT IN S

C. ROLL OR FIRMLY BUT LIGHTLY TAMP NEW SOD WITH SUITABLE WOODEN OR METAL TAMPER SUFFICIENTLY TO SE OR PRESS SOD INTO UNDERLYING SOIL.

D. ALL FINISHED SODDING SHALL BE SMOOTH AND FREE OF LUMPS AND DEPRESSIONS. E. AFTER SODDING HAS BEEN COMPLETED, CLEAN UP AND THOROUGHLY WATER NEWLY-SODDED AREAS.

3.9 MAINTENANCE DURING CONSTRUCTION

SPREAD OF ROOTBALL AT LEAST 12 INCHES DEEP.

3.7 SEEDING

3.8 SODDING

E. BACKFILL TREE HOLES AND SHRUB BEDS WITH PLANTING SOIL MI

A. BEGIN MAINTENANCE OPERATIONS IMMEDIATELY AFTER EACH PLANT IS PLANTED AND CONTINUE AS REQUIRED UNTIL ACCEPTANCE. WATER, MULCH, WEED, PRUNE, SPRAY, FERTILIZE, CULTIVATE, AND OTHERWISE MAINTAIN AND PROTECT PLANTS. RESET SETTLED PLANTS TO PROPER GRADE AND POSITION, RESTORE PLANTING SAUCERS, AND REMOVE DEAD, DISEASED, OR UNHEALTHY PLANT MATERIAL. TIGHTEN AND REPAIR STAKES AND WIRES. CORRECT DEFECTIVE WORK AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.

B. UPON COMPLETION OF THE PLANTING OPERATIONS, CLEAN UP LANDSCAPED AREAS TO BE FREE OF STONES, CONTAINERS, TRASH, AND OTHER WASTE AND DEBRIS TO LEAVE AREA IN A NEAT AND WELL GROOMED APPEARANCE

C. SUPPLEMENT RAINFALL AS REQUIRED TO PROVIDE AN EQUIVALENT OF 1 INCH OF WATER PER WEEK UNTIL THE PLANTS HAVE ROOTED AND ARE ESTABLISHED.

D. MAINTAIN ALL PLANT MATERIAL IN A HEALTHY, VIGOROUS GROWING CONDITION.

E. MAKE WEEKLY INSPECTIONS TO DETERMINE MOISTURE CONTENT OF SOIL AND ADJUST WATERING SCHEDULE ESTABLISHED BY IRRIGATION SYSTEM INSTALLER TO FIT CONDITIONS.

F. AFTER GRASS GROWTH HAS STARTED, RESEED OR SOD AREAS THAT FAIL TO SHOW UNIFORM STAND OF GRASS IN ACCORDANCE WITH THE DRAWINGS AND AS SPECIFIED HEREIN. CONTINUE RESEEDING AND SODDING SUCH AREAS REPEATEDLY UNTIL AREAS ARE COVERED WITH SATISFACTORY GROWTH OF GRASS. PERFORM REMOVAL AND REPLACEMENT OR TOPSOIL CONDITIONING IF REQUIRED TO FACILITATE ESTABLISHMENT OF GRASS.

G. WATER IN SUCH MANNER AND AS FREQUENTLY AS IS DEEMED NECESSARY BY OWNER TO ASSURE CONTINUED OF HEALTHY GRASS. WATER AREAS OF SITE IN SUCH A MANNER AS IO PREVENT EROSIO EXCESSIVE QUANTITIES APPLIED OVER SMALL AREAS AND TO AVOID DAMAGE TO FINISHED SURFACE DUE TO WATERING EQUIPMENT.

H. PROVIDE WATER FOR EXECUTION AND MAINTENANCE AT NO EXPENSE TO OWNER. FURNISH PORTABLE TANKS, PUMPS, HOSE, PIPE, CONNECTIONS, NOZZLES, AND ANY OTHER EQUIPMENT REQUIRED TO TRANSPORT WATER FROM AVAILABLE OUTLETS AND APPLY IT TO SEEDED AREAS IN APPROVED MANNER. I. MOWING

1. INITIATE MOWING OF TURF GRASS AREAS WHEN GRASS HAS ATTAINED HEIGHT OF 3 INCHES AND ROOTS ARE FIRMLY ESTABLISHED. MAINTAIN TURF GRASS HEIGHT AT 2 1/2 TO 3 INCHES AT SUBSEQUENT CUTTINGS DEPENDING ON TIME OF YEAR. REMOVE NO MORE THAN 1/3 OF GRASS LEAF AT ANY CUTTING AND CUTTING SHALL NOT OCCUR MORE THAN 10 DAYS APART. 2. MOW NATIVE GRASS AREAS NO MORE THAN 3 TIMES PER YEAR TO A HEIGHT OF NO LESS THAN 4 INCHES.

J. REMOVE HEAVY CUTTINGS TO PREVENT DESTRUCTION OF UNDERLYING TURF. IF WEEDS OR OTHER UNDESIRABLE VEGETATION THREATEN TO SMOTHER PLANTED SPECIES, SUCH VEGETATION SHALL BE MOWED OR, IN CASE OF RANK GROWTHS. SHALL BE UPROOTED. RAKED AND REMOVED FROM AREA BY METHODS APPROVED BY OWNER. K. REMOVE WEEDS AND OTHER UNDESIRABLE VEGETATION BY APPLYING HERBICIDES AS RECOMMENDED BY THE

MANUFACTURER OR BY UPROOTING. RAKE AND REMOVE UPROOTED VEGETATION FROM AREA BY METHODS APPROVED BY OWNER. L. PROTECT SEEDED AREA FROM PEDESTRIAN OR VEHICULAR TRESPASSING WHILE GRASS IS GERMINATING. PROVIDE

FENCES, SIGNS, BARRIERS, OR OTHER NECESSARY TEMPORARY PROTECTIVE DEVICES. REPAIR DAMAGE RESULTING FROM TRESPASS, EROSION, WASHOUT, SETTLEMENT, OR OTHER CAUSES.

M. REMOVE FENCES, SIGNS, BARRIERS, OR OTHER TEMPORARY PROTECTIVE DEVICES AFTER FINAL ACCEPTANCE.

N. REMOVE AND REPLACE DISEASED, DISTRESSED, DEAD, OR REJECTED PLANTS PRIOR TO SUBSTANTIAL COMPLETION O. REPLACEMENTS SHALL BE PLANTS OF SAME VARIETY AND SIZE SPECIFIED ON THE DRAWINGS. FURNISH AND

PLANT AS SPECIFIED HEREIN. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES WILL BE APPROVED AND PAID FOR BY OWNER.

P. GRASSED AREAS DAMAGED DURING PROCESS OF WORK SHALL BE RESTORED OR REPAIRED TO CONDITION SATISFACTORY TO THE OWNER. FILL, GRADE, RE-FERTILIZE, REPLANT, OR MULCH AS REQUIRED TO RESTORE TO CONTRACT REQUIREMENTS.

MEFF & ASSOCIATES	Civil Engineers + Landscape Architects + Planners + Surveyors 6405 York Road   Parma Heights, Ohio 44130 Tel: 440.884.3100   Fax: 440.884.3104
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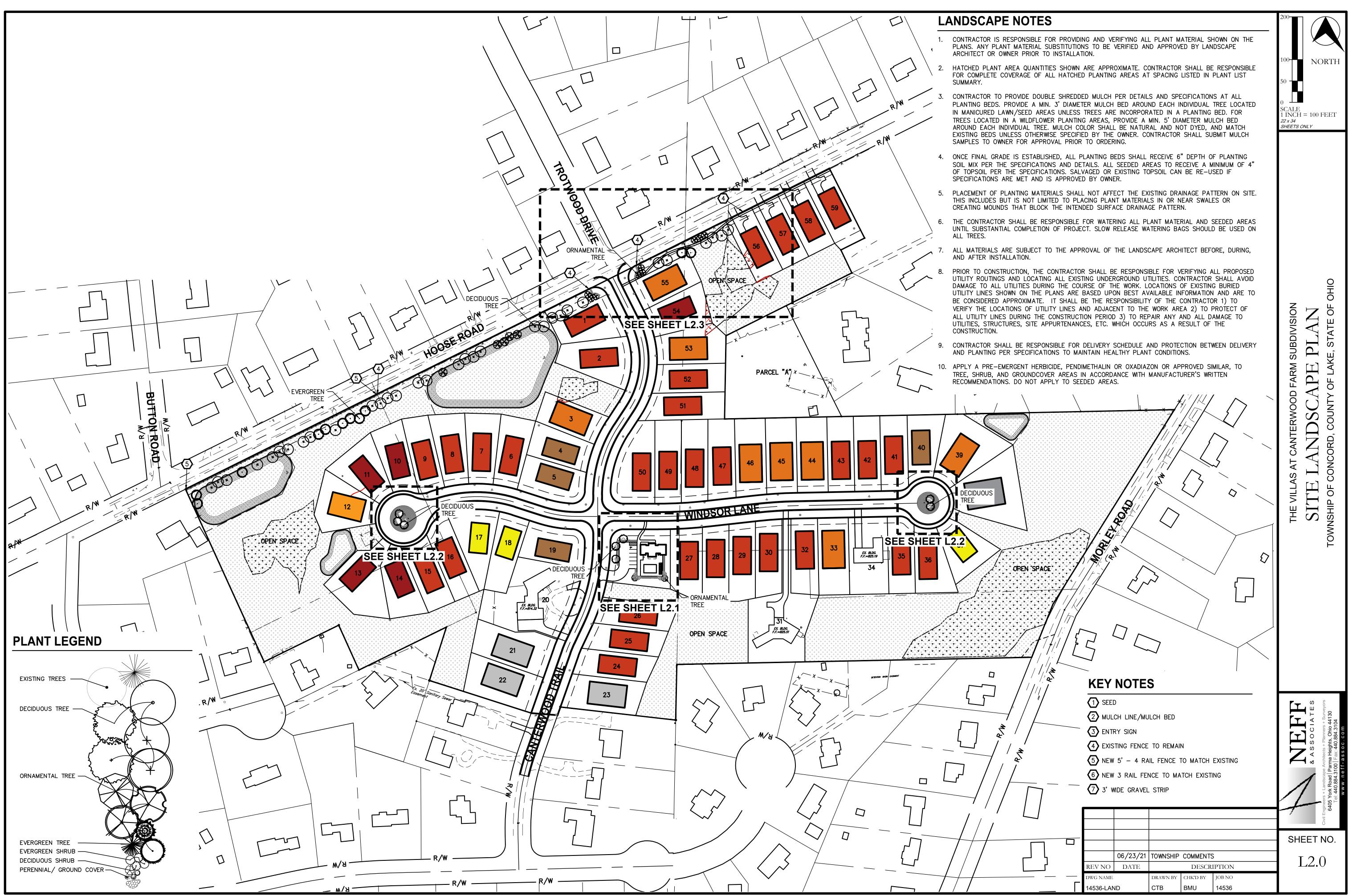
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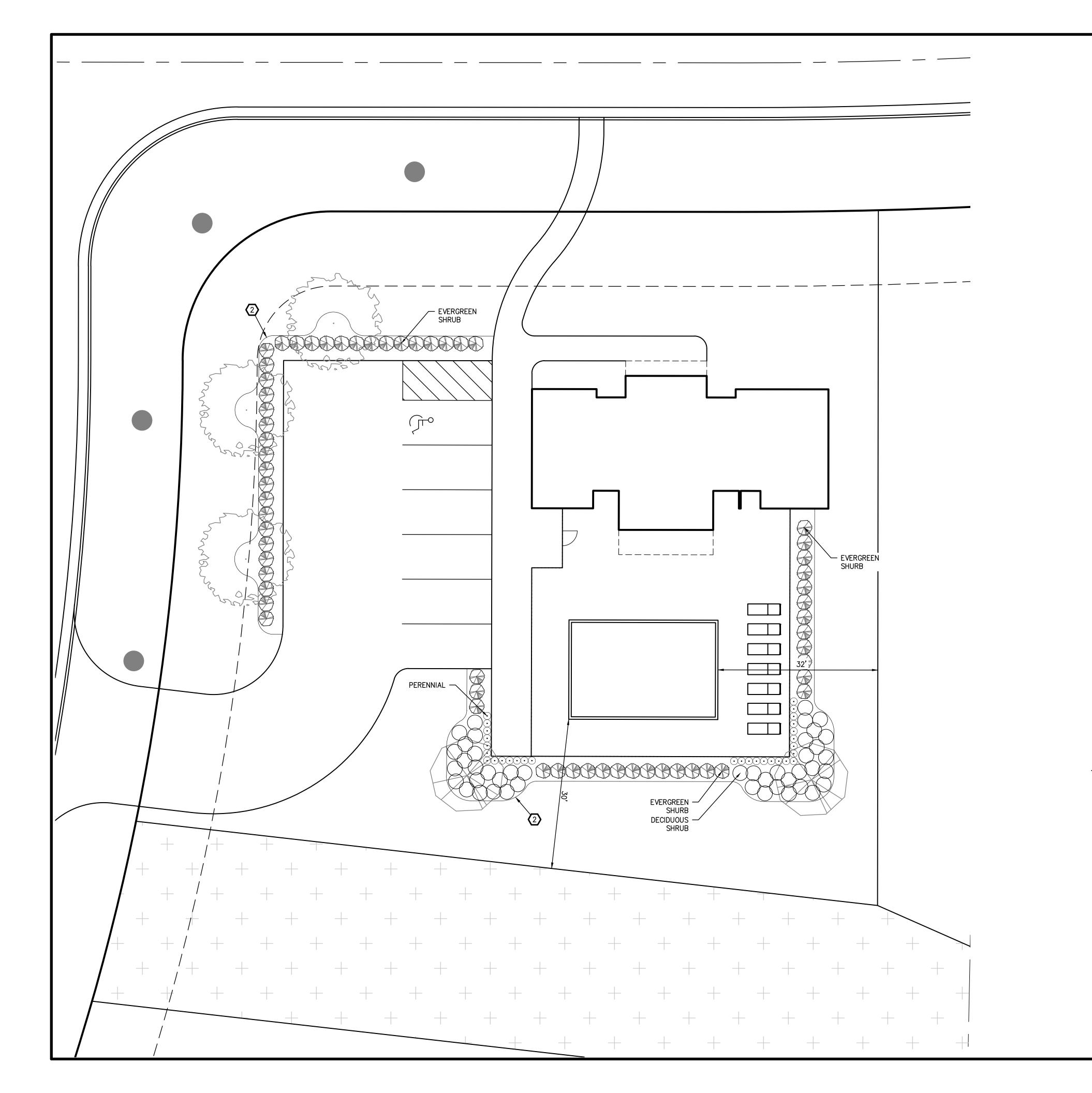
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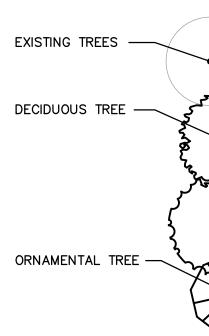
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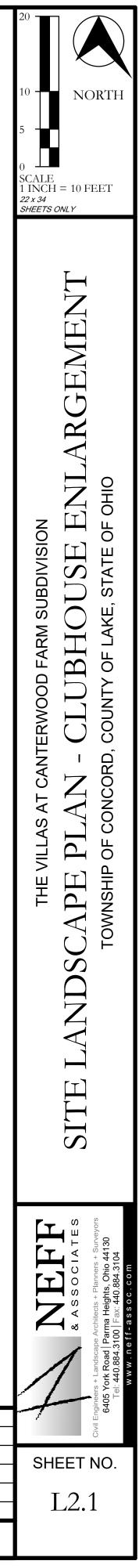




## PLANT LEGEND



EVERGREEN TREE \_\_\_\_\_\_ EVERGREEN SHRUB \_\_\_\_\_\_ DECIDUOUS SHRUB \_\_\_\_\_\_ PERENNIAL/ GROUND COVER \_\_

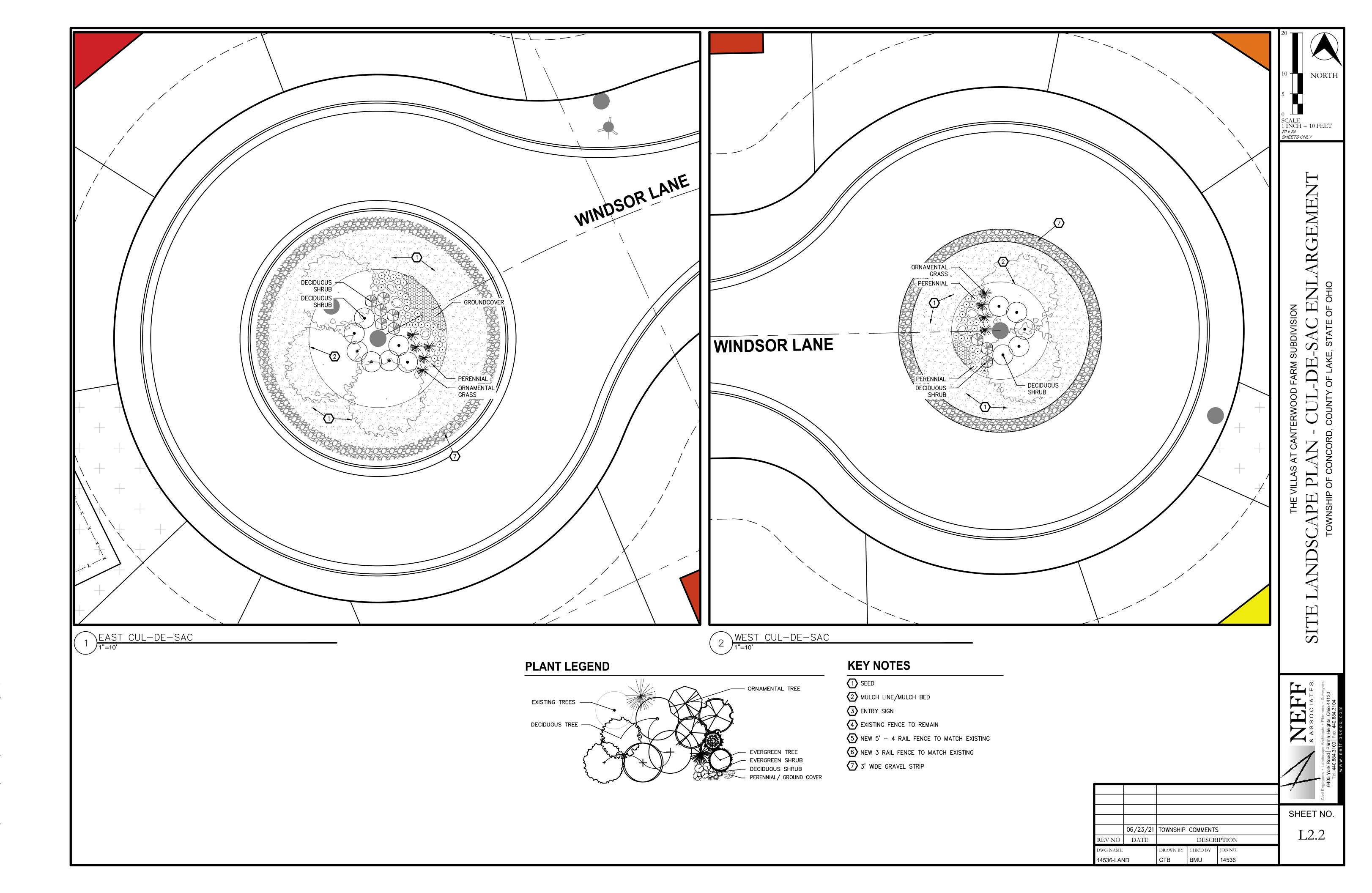


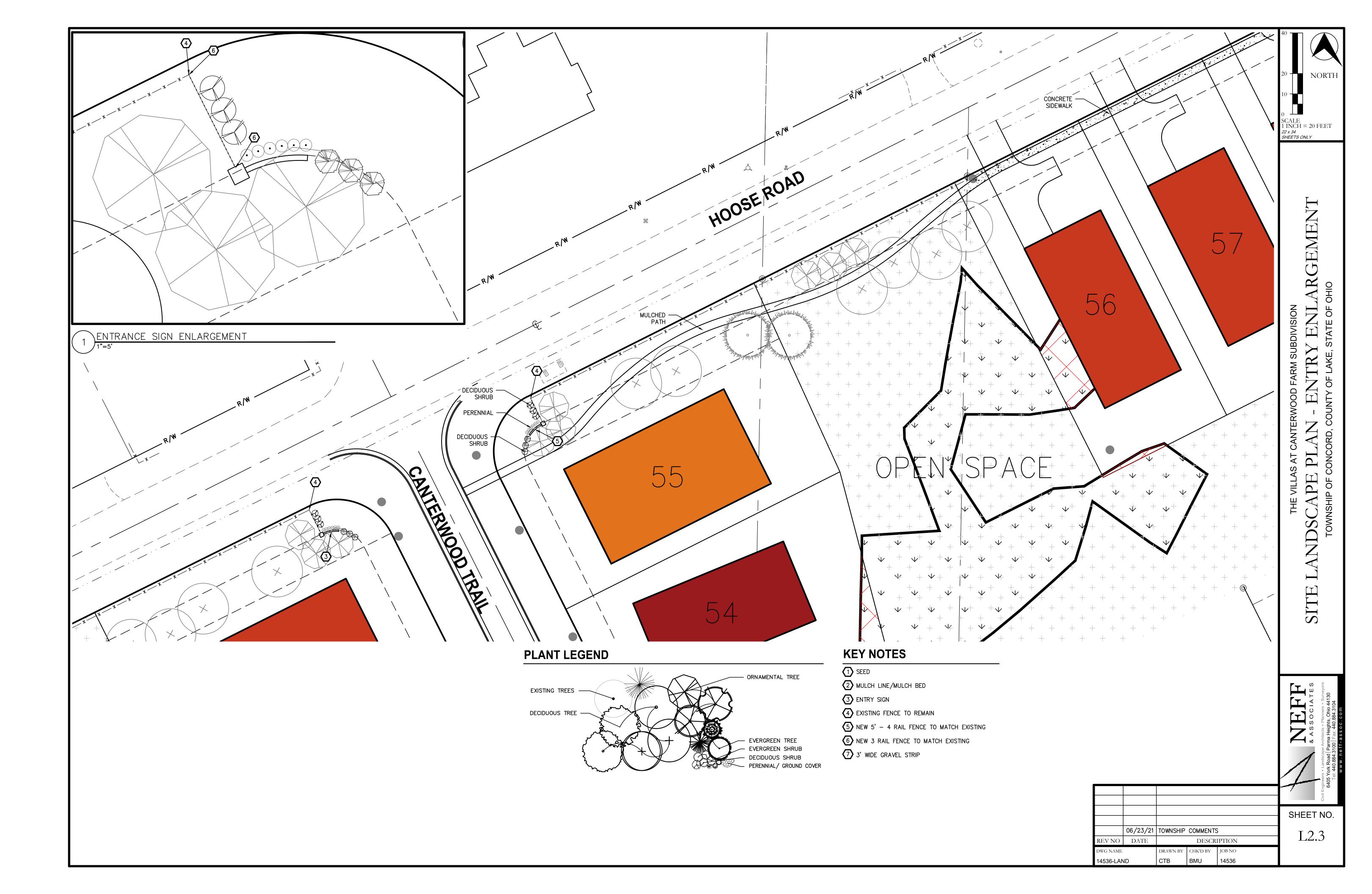
# **KEY NOTES**

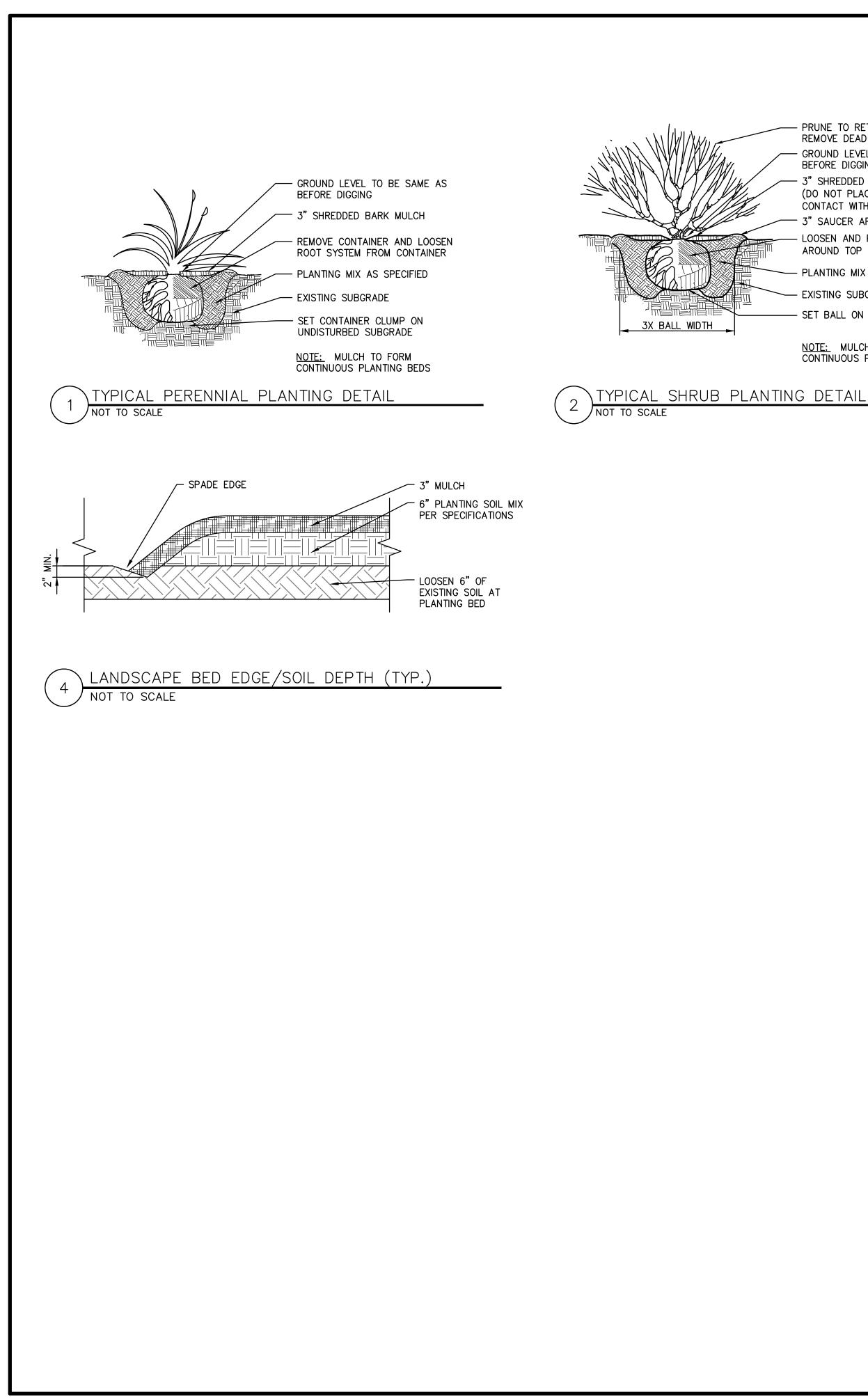
#### 1 SEED

- 2 MULCH LINE/MULCH BED
- 3 ENTRY SIGN
- 4 EXISTING FENCE TO REMAIN
- 5 NEW 5' 4 RAIL FENCE TO MATCH EXISTING
- 6 NEW 3 RAIL FENCE TO MATCH EXISTING
- ♂ 3' WIDE GRAVEL STRIP

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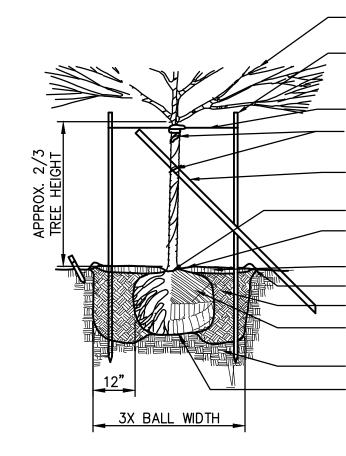


– PRUNE TO RETAIN CHARACTER & TO REMOVE DEAD OR DAMAGED BRANCHES - GROUND LEVEL TO BE SAME AS BEFORE DIGGING - 3" SHREDDED BARK MULCH (DO NOT PLACE MULCH IN CONTACT WITH ROOT FLARE) - 3" SAUCER AROUND SHRUB - LOOSEN AND REMOVE BURLAP AROUND TOP 1/2 OF BALL

#### - PLANTING MIX AS SPECIFIED - EXISTING SUBGRADE

- SET BALL ON UNDISTURBED SUBGRADE

NOTE: MULCH TO FORM CONTINUOUS PLANTING BEDS



- PRUNE TO RETAIN CHARACTER & REMOVE DEAD OR DAMAGED BRANCHES - 2 1/2" CALIPER TREE (10' OR LARGER) 2"X2" STÁKES, 2 STAKES PÈR TREE PARALLÉL TO PREVAILING WIND DO NOT OVER TIGHTEN - #12 GA. WIRE - 1/2" FABRIC BEARING RUBBER HOSE OVER ∯12 GALV. WIRE - 2"X2"X8' WOOD STAKE 1 1/2"-2" CALIPER TREE(6'-10') ONE PER TREE - DO NOT PLACE MULCH IN CONTACT WITH ROOT FLARE - ROOTBALL TO BE SLIGHTLY HIGHER THAN GROUND LEVEL PRIOR TO DIGGING (NO MORE THAN 2-3")

— 3" SHREDDED BARK MULCH

- LOOSEN AND REMOVE BURLAP AND WIRE

BASKETS AROUND TOP 1/2 OF BALL - EXISTING SUBGRADE

- SET BALL ON UNDISTURBED SUBGRADE

NOTE: EVERGREEN TREE PLANTING SIMILAR GUYING NOT REQUIRED FOR TREES UNDER 1 1/2" CALIPER (6' HEIGHT) REMOVE GUYING, TREE WRAP, ETC. AFTER ONE GROWING SEASON

TYPICAL TREE PLANTING DETAIL 3 NOT TO SCALE

					THE VILLAS AT CANTERWOOD FARM SUBDIVISION LANDSCAPE DETAILS TOWNSHIP OF CONCORD, COUNTY OF LAKE, STATE OF OHIO
					Civil Engineers + Landscape Architects + Planners + So C L A T E SO C
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