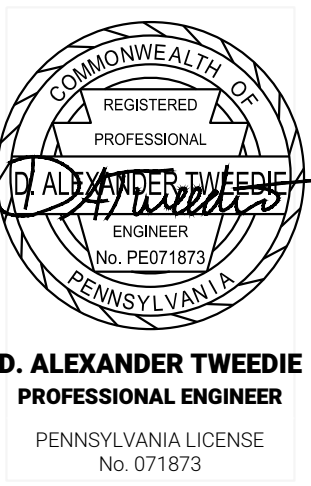
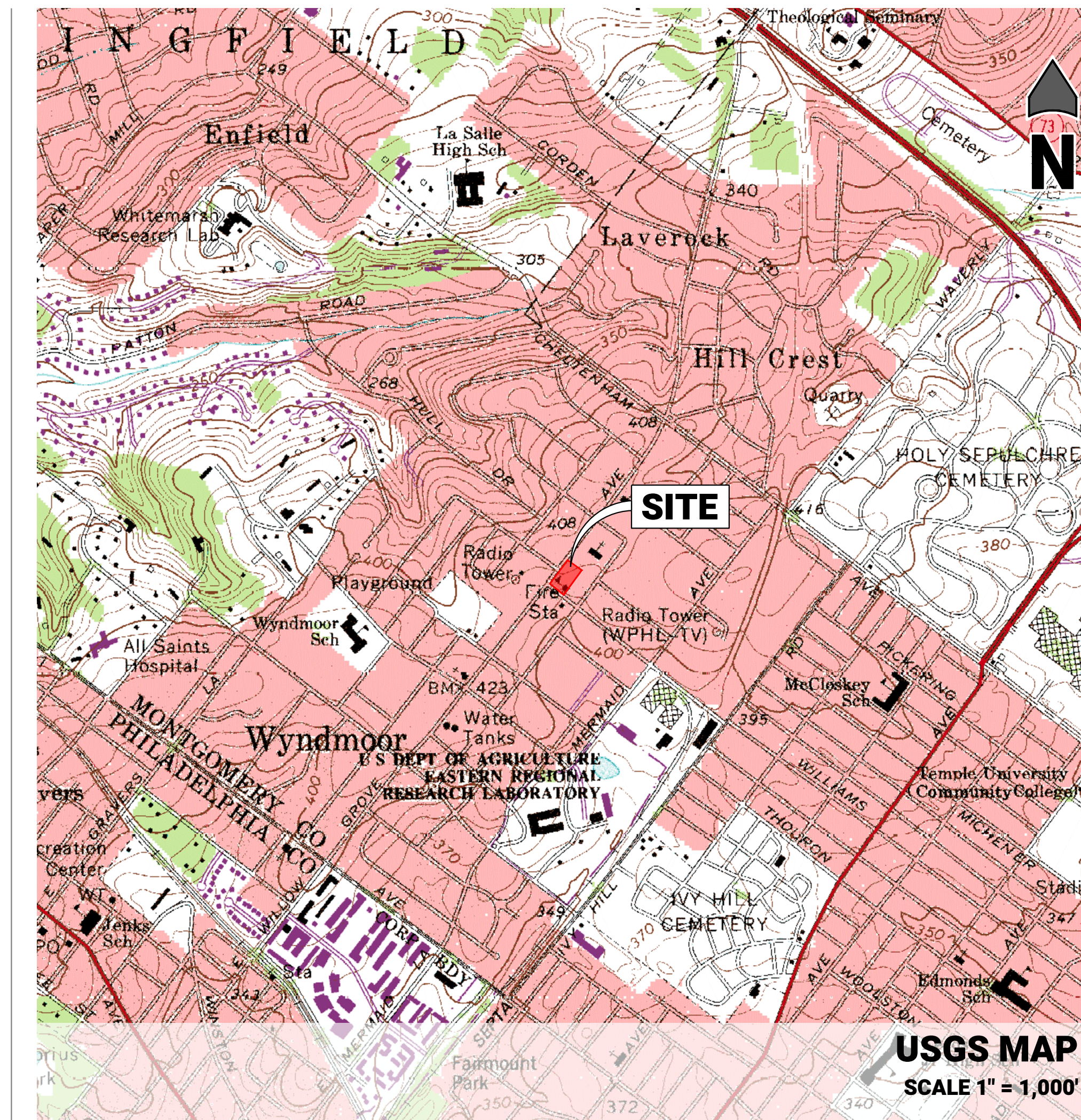




# PRELIMINARY / FINAL LAND DEVELOPMENT PLAN FOR

# PROPOSED RESIDENTIAL SITE REDEVELOPMENT

## 1110 WILLOW GROVE AVE SPRINGFIELD TOWNSHIP MONTGOMERY COUNTY, PA



REV.	DATE	REVISED PER	BY

PROJECT No. **210084**  
FILE **COVER**  
DRAWN BY **B.NAGENGAST**  
CHECKED BY **D.A.TWEEDIE**

PROJECT	APPLICANT	TITLE
PROPOSED RESIDENTIAL SITE REDEVELOPMENT 1110 WILLOW GROVE AVENUE SPRINGFIELD TOWNSHIP, MONTGOMERY COUNTY COMMONWEALTH OF PENNSYLVANIA	1110 WILLOW GROVE AVENUE, LLC	<b>COVER SHEET</b>

DATE **2023 - 01 - 23**

**CL 0**

SHEET **1 OF 13** REV. No.

### OWNER / APPLICANT

**1110 WILLOW GROVE AVE, LLC**  
910 EAST WILLOW GROVE AVE  
WYNDMOOR, PENNSYLVANIA 19038

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**ADA ACCESSIBILITY NOTES**

- AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE SITE FROM ACCESSIBLE PARKING SPACES AND ACCESSIBLE LOADING ZONES, PUBLIC STREETS OR SIDEWALKS, AND PUBLIC TRANSPORTATION STOPS TO THE ACCESSIBLE BUILDING OR FACILITY THEY SERVE.
- AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, ACCESSIBLE FACILITIES, ACCESSIBLE ELEMENTS, AND ACCESSIBLE SPACES THAT ARE ON THE SAME SITE.
- WALKING SURFACES SHALL HAVE A MAXIMUM RUNNING SLOPE OF 5.0% AND A MAXIMUM CROSS SLOPE OF 2.0%. ANY WALKING SURFACE WITH A RUNNING SLOPE GREATER THAN 5.0% IS A RAMP AND SHALL COMPLY WITH THE GUIDELINES FOR RAMPS OR CURB RAMPS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND ALL ADA REQUIREMENTS. REFER TO ADA ACCESSIBILITY NOTES ON WITHIN THIS PLAN SET FOR FURTHER INFORMATION.
- PRIOR TO PLACEMENT OF CONCRETE FORMS, CONTRACTOR SHALL EVALUATE PROPOSED GRADING AND NOTIFY THE DESIGN ENGINEER OF ANY POTENTIAL DESIGN MODIFICATIONS NEEDED IN ORDER TO ENSURE ADA CONFORMANCE.
- FOLLOWING THE ISSUANCE OF AN AS-BUILT SURVEY OR UPON DETERMINATION OF NON-COMPLIANT FACILITIES, THE CONTRACTOR SHALL, AT THEIR OWN COST BE RESPONSIBLE TO RECTIFY, RECONSTRUCT AND/OR AMEND SAID FACILITIES WHICH ARE OUT OF COMPLIANCE WITH ADA REGULATIONS. THIS PERTAINS TO ALL FACILITIES WHICH HAVE BEEN CONSTRUCTED AS PART OF THE SCOPE OF CONSTRUCTION WHICH ARE OUT OF COMPLIANCE WITH ADA COMPLIANCE.



**GRADING & DRAINAGE NOTES**

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK. CONTRACTOR TO ENSURE THE FOLLOWING MINIMUM GRADING STANDARDS TO ENSURE PROPER DRAINAGE AND PREVENTION OF PONDS:
- 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS RECEIVING DRAINAGE
- 1.0% ON ALL CONCRETE AND ASPHALT AND 2% MINIMUM ON ALL PAVEMENT SURFACES
- SPOT GRADE ELEVATIONS (GR) INDICATED ON THE PLANS SIGNIFY FINISHED GRADE ELEVATION OR FINISHED GRADE AT FACE OF CURB. TOP OF CURB (TC) ELEVATION ARE GENERALLY 1' ABOVE ASPHALT UNLESS NOTED OTHERWISE. SPOT ELEVATIONS SHOWN AT DRAINAGE STRUCTURES REPRESENT THE TOP OF UNIT ELEVATION AT THE CENTER OF THE STRUCTURE.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS. GRADE ADJUSTMENTS SHALL BE MADE PRIOR TO THE INSTALLATION OF PAVEMENT WEARING COURSE OR PLACEMENT OF TOPSOIL IN UNPAVED AREAS.
- ALL STORMWATER PIPING INSTALLED WITHIN THE REINFORCING ZONE OF ANY PROPOSED RETAINING WALLS MUST BE INSTALLED WITH A WATER TIGHT SEAL.
- HIGH DENSITY POLYETHYLENE (HDPE) PIPES SHALL BE N=12 DUAL WALL, SMOOTH LINED OR EQUIVALENT IN ACCORDANCE WITH ASTM STANDARDS, UNLESS OTHERWISE SPECIFIED.
- REINFORCED CONCRETE PIPES (RCP) SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL ENLIST THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO CERTIFY THAT ON-SITE SOIL CONDITIONS AND CONSTRUCTION PRACTICES ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE/LOCAL CODES AND ACCEPTED INDUSTRY STANDARDS. CONTRACTOR SHALL ENSURE:
  - ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS DIRECTED BY THE QUALIFIED GEOTECHNICAL ENGINEER.
  - MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE DOCUMENTED IN A COMPACTION REPORT VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AND AREAS TO BE PAVED, HAVE BEEN COMPACTED AS DIRECTED BY THE QUALIFIED GEOTECHNICAL ENGINEER.
  - SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED AS DIRECTED BY THE QUALIFIED GEOTECHNICAL ENGINEER.

**STORMWATER MANAGEMENT SUMMARY**

TOTAL EXISTING IMPERVIOUS: 1.01 ACRES  
 TOTAL PROPOSED IMPERVIOUS: 0.79 ACRES

NO STORMWATER MANAGEMENT FACILITIES ARE PROPOSED DUE TO THE 0.22 ACRE REDUCTION OF IMPERVIOUS COVERAGE. A STORMWATER CONVEYANCE SYSTEM IS PROPOSED TO CONVEY THE 100-YEAR DESIGN STORM SAFELY AWAY FROM THE PROPOSED STRUCTURES. SIGNIFICANT NEGATIVE IMPACTS ARE NOT ANTICIPATED DOWNSTREAM OF THE SITE.

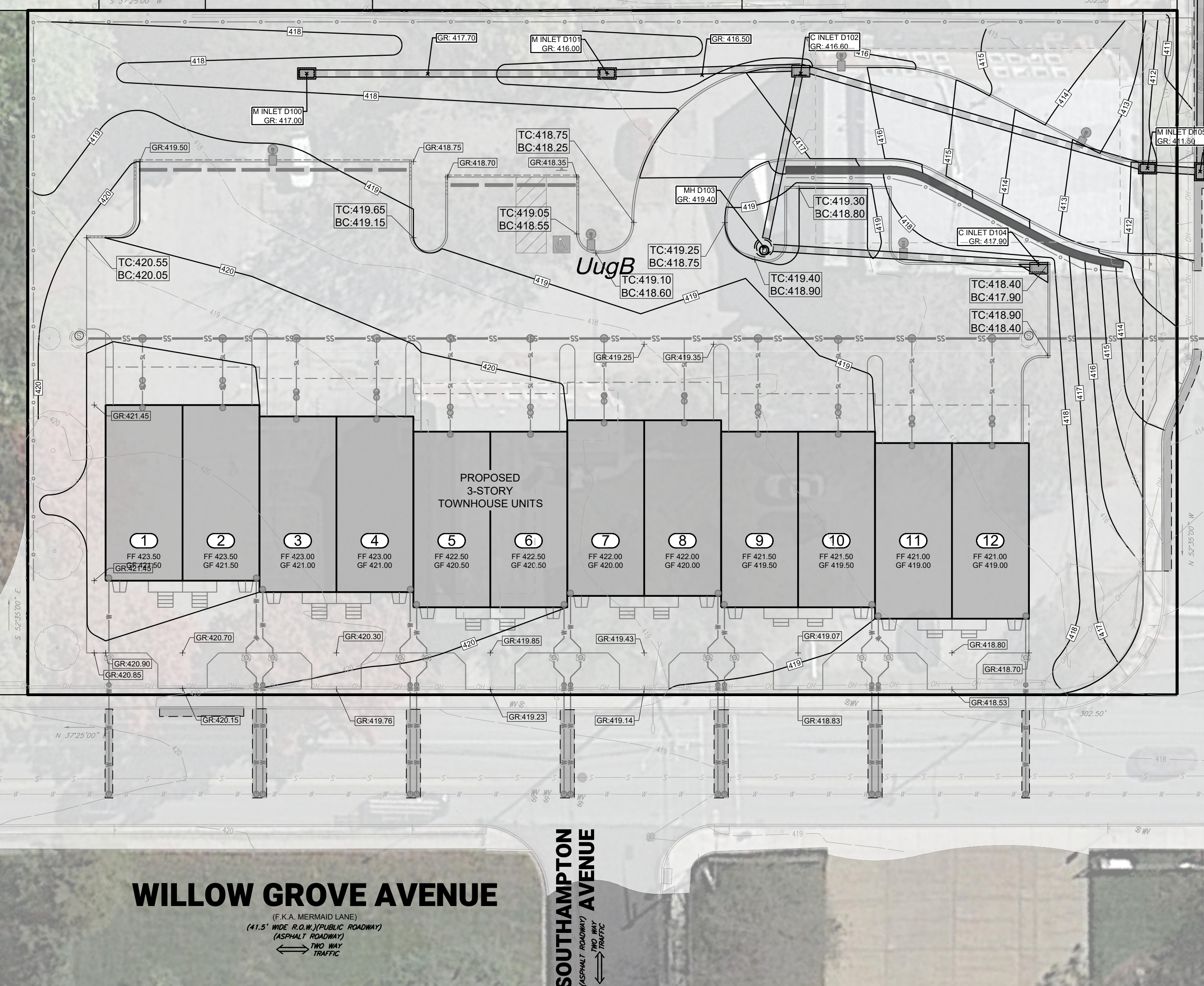
THE PROJECT PROPOSES OVER AN ACRE OF DISTURBANCE AND SHALL COMPLY WITH ALL REGULATIONS SET FORTH BY PADEP CHAPTER 102.

STRUCTURE TABLE			PIPE TABLE			
STRUCTURE	RIM/GRATE ELEV.	INVERT ELEVATION	STRUCTURES	SIZE & MATERIAL	LENGTH (FEET)	SLOPE (FT/FT)
D100	417.00	INV IN = 412.50 (D101)	D101 - D100	18" HDPE	80	0.0126
D101	416.00	INV IN = 412.00 (D102) INV OUT = 413.50 (D100)	D102 - D101	18" HDPE	51	0.0059
D102	416.60	INV IN = 412.00 (D103) INV OUT = 411.80 (D105) INV OUT = 412.30 (D101)	D103 - D102	18" HDPE	49	0.0373
D103	419.40	INV IN = 414.00 (D104) INV OUT = 413.90 (D102)	D104 - D103	18" HDPE	73	0.0055
D104	417.90	INV IN = 414.40 (D103)	D105 - D106	18" HDPE	14	0.0144
D105	411.50	INV IN = 408.00 (D102) INV OUT = 407.80 (D106)	D106 - D107	18" HDPE	212	0.0165
D106	411.15	INV IN = 407.80 (D105) INV OUT = 402.00 ( )				

**GRADING and DRAINAGE PLAN LEGEND**

	SOILS TYPE BOUNDARY LINE
	MAJOR CONTOUR
	MINOR CONTOUR
	STORM SEWER MAIN
	PROP. MAJOR CONTOUR
	PROP. MINOR CONTOUR
	PROP. STORM SEWER MAIN
	ELECTRIC SERVICE
	OVERHEAD WIRES
	SANITARY MAIN / LATERAL
	PROP. SANITARY MAIN / LATERAL
	WATER MAIN / LATERAL
	PROP. WATER MAIN / LATERAL
	SAWCUT LIMITS
	PROPERTY LINE (PO)
	PROPERTY LINE (INTERIOR)
	PROPERTY LINE (ADJOINER)
	PROPERTY LINE (ROW)
	ROADWAY CENTERLINE
	LEASE LINE

**EAST PLEASANT AVENUE**



**LANDCORE**  
 PHILADELPHIA, PENNSYLVANIA 19101-0635  
 PHONE 215-836-2510  
 LANDCORECONSULTING.COM

**NOT FOR CONSTRUCTION**

REGISTERED PROFESSIONAL ENGINEER  
 D. ALEXANDER TWEEDIE  
 PENNSYLVANIA LICENSE No. 071873

REV.	DATE	REVISED PER	BY

PROJECT No. **210084**  
 FILE **GRADING**  
 DRAWN BY **B.NAGENGAST**  
 CHECKED BY **D.A.TWEEDIE**

**PROPOSED RESIDENTIAL SITE REDEVELOPMENT**  
 1110 WILLOW GROVE AVENUE  
 SPRINGFIELD TOWNSHIP, MONTGOMERY COUNTY  
 COMMONWEALTH OF PENNSYLVANIA  
 APPLICANT **1110 WILLOW GROVE AVENUE, LLC**

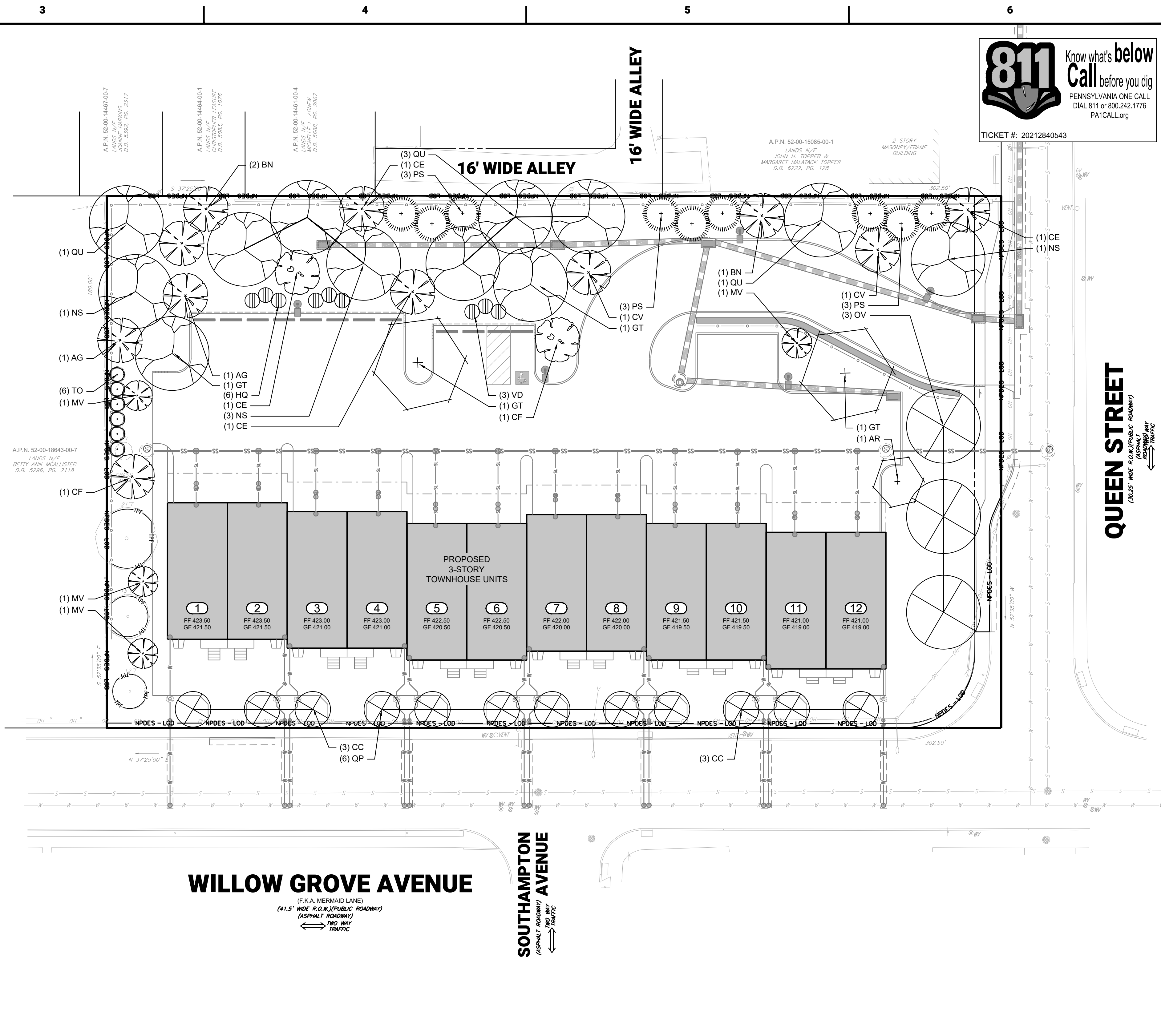
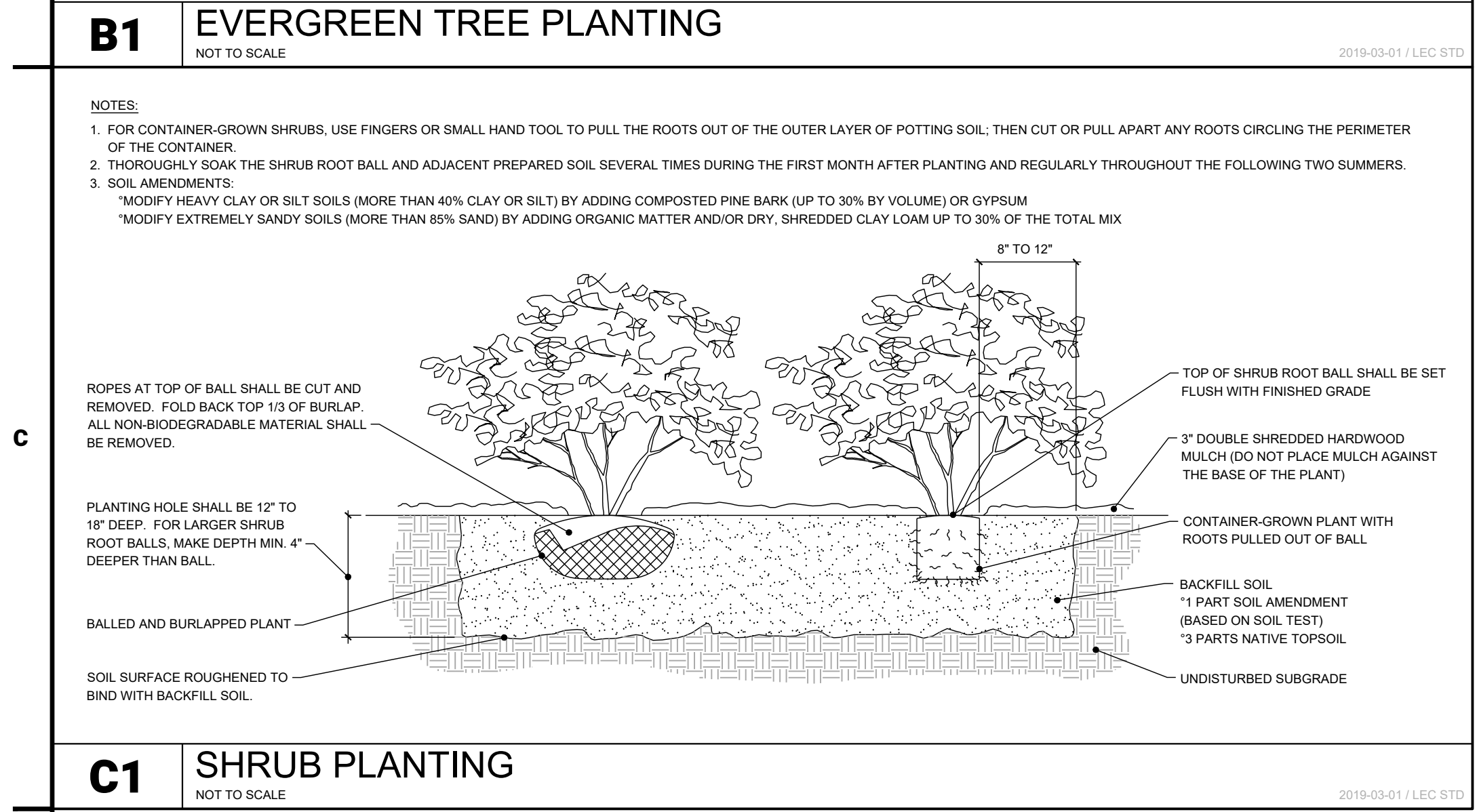
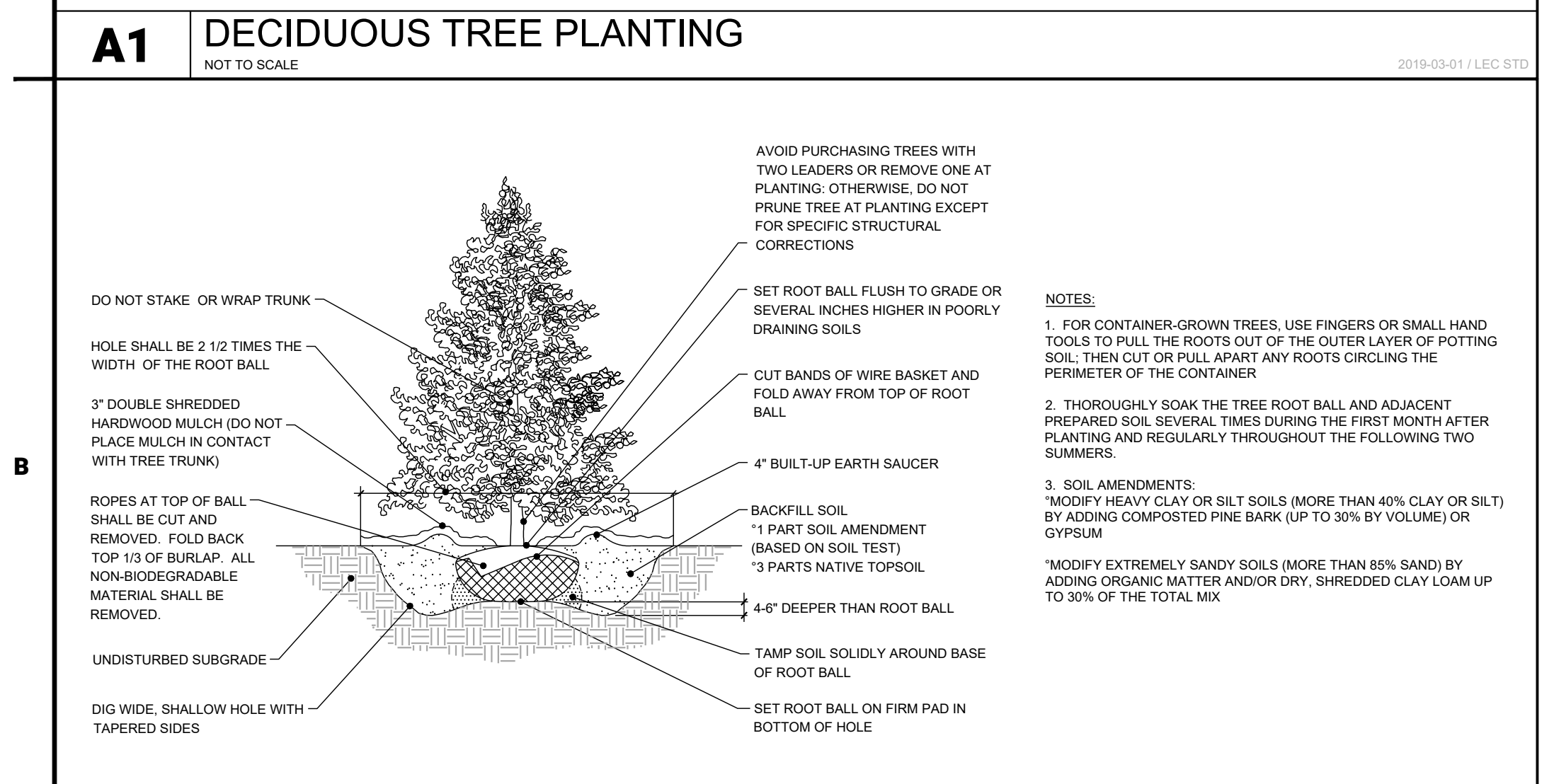
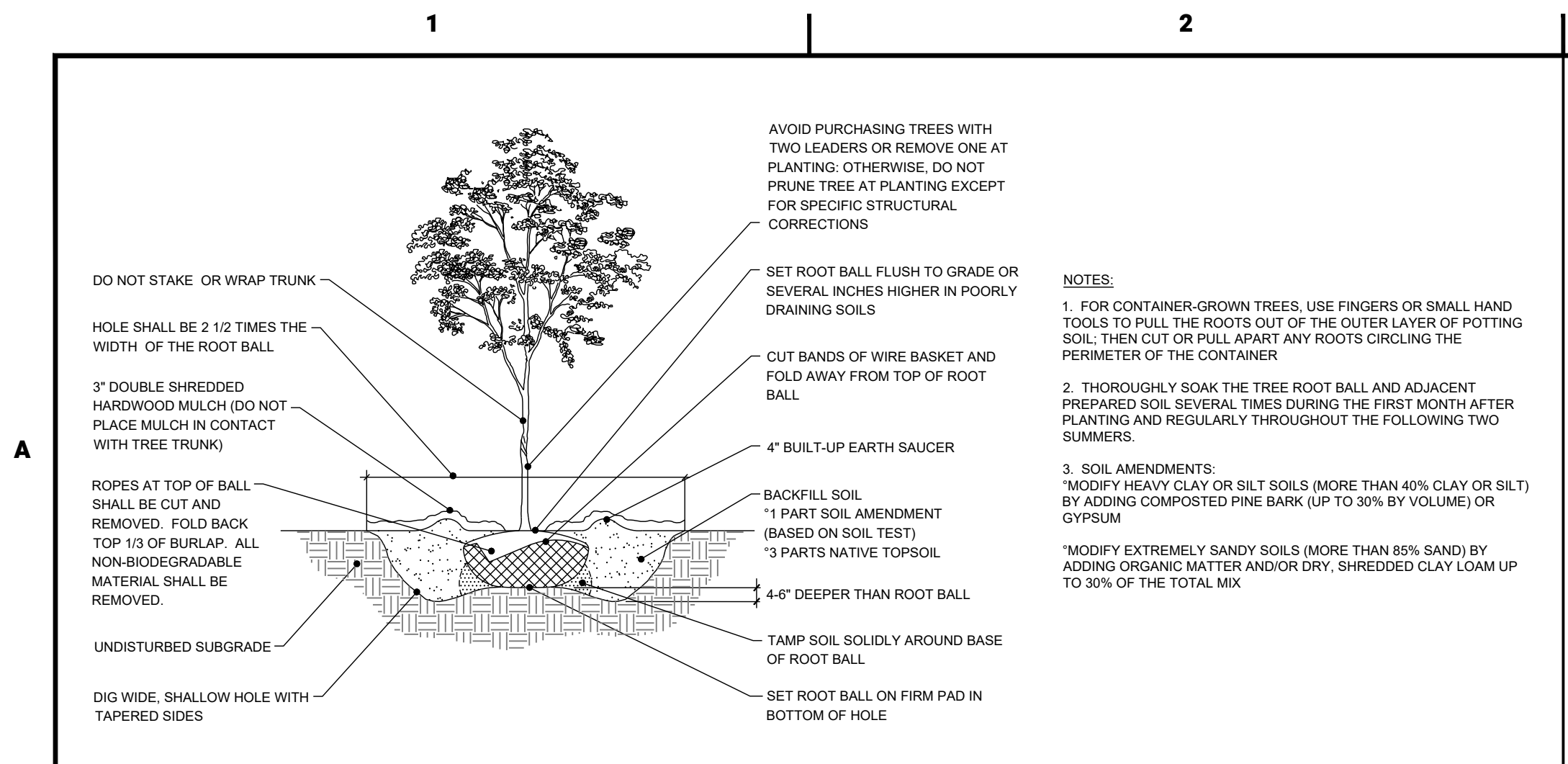
**GRADING and DRAINAGE PLAN**

DATE **2023 - 01 - 23**

**GP 0**

SHEET **3 OF 13** REV. No.





**LANDSCAPE COMPLIANCE CHART**

REQUIREMENT	REQUIRED	PROPOSED	COMMENT	ORDINANCE
BUFFERS: SUBDIVISIONS AND LAND DEVELOPMENTS SHALL BE REQUIRED TO PROVIDE LANDSCAPE BUFFERING ALONG SIDE AND REAR BOUNDARIES OF THE TRACT TO BE SUBDIVIDED OR DEVELOPED EXCEPT IN THE DEVELOPMENT OF SINGLE-FAMILY DETACHED RESIDENCES.				
SOFTENING BUFFER SHALL HAVE A MINIMUM WIDTH OF AT LEAST 15'. REQUIRES 1 CANOPY TREE, 1 UNDERSTORY TREE AND 1 EVERGREEN TREE PER 35'				
NORTHEASTERN PROPERTY LINE: 180'	6 CANOPY TREES 3 UNDERSTORY TREES 6 EVERGREEN TREES	3 EXISTING TREES 3 CANOPY TREES 6 UNDERSTORY TREES 6 EVERGREEN TREES	(1)	§ 95-11.4(1)(A)(i)
SOUTHEASTERN PROPERTY LINE: 303'	6 CANOPY TREES 3 UNDERSTORY TREES 6 EVERGREEN TREES	3 CANOPY TREES 3 UNDERSTORY TREES 6 EVERGREEN TREES		
STREET TREES: STREET TREES SHALL BE PLANTED WITHIN ALL FRONT YARD SETBACKS BETWEEN 15 AND 25 FEET FROM THE CURB OR EDGE OF PAVEMENT. SHALL NOT BE PLANTED IN THE ROW. TREES SHALL BE LOCATED NO CLOSER THAN 25 FEET FROM THE RADIUS OF THE CURB. NO LESS THAN ONE TREE SHALL BE PROVIDED FOR EACH 35 FEET OF STREET LENGTH.				
QUEEN STREET: 180'	6 CANOPY TREES	3 CANOPY TREES	(2)	§ 95-11.4(2)
WILLOW GROVE AVE: 303'	9 CANOPY TREES	12 CANOPY TREES		
PARKING AREA LANDSCAPING: EXCEPT IN SINGLE-FAMILY DETACHED RESIDENCES, ALL OFF-STREET PARKING AREAS AND ALL LOADING AREAS SHALL BE LANDSCAPED.				
PERIMETER LANDSCAPING: ALL PARKING AND LOADING AREAS SHALL BE LANDSCAPED WITH BUFFERS ALONG THE FRONT YARD, AS WELL AS SIDE AND REAR BOUNDARIES.				
INTERNAL LANDSCAPING: FOR EACH 10 PARKING SPACES, 500 SF OF PLANTING AREA CONTAINING AT LEAST 2 CANOPY TREES, 1 UNDERSTORY TREE, 6 SHRUBS AND GROUND COVER OR MULCH SHALL BE PROVIDED.	700 SF 3 CANOPY TREES 2 UNDERSTORY TREES 9 SHRUBS	>700 SF 3 CANOPY TREES 2 UNDERSTORY TREES 9 SHRUBS		§ 95-11.4(3)(b)
REPLACEMENT OF TREES: TREES OVER 3" IN CALIPER THAT ARE REMOVED SHALL BE REPLACED WITH APPROVED TREES OF 2-2" CALIPER AT A RATE OF 2 NEW TREES TO EACH TREE REMOVED.				
16 VISIBLE TREES GREATER THAN 3" IN CALIPER ARE PROPOSED TO BE REMOVED	32 CANOPY TREES	0 CANOPY TREES	(W)	§ 95-11.4(1)(c)
(1) VARIANCE REQUESTED   (EN) EXISTING NON-COMFORMANCE   (W) WAIVER REQUESTED   (TR) TO BE DETERMINED   (NA) NOT APPLICABLE   (NS) NOT SPECIFIED				
(2) ADDITIONAL TREES ALONG WILLOW GROVE AVENUE TO OFFSET DEFICIENCY ALONG QUEEN STREET				

**PLANT SCHEDULE**

Plan Symbol	Quantity	Botanical Name	Common Name	Min. Planting Caliper	Min. Planting Spread	Min. Planting Height	Remarks	Comments
Shade Trees **								
AR	1	Aster rubrum 'Snowfall'	'Snowfall' Red Aster	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
CC	6	Carpinus canadensis 'Fastigiat'	Common American Hornbeam	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
GT	4	Gleditsia triacanthos var. inermis	Thornless Honeylocust	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
NS	4	Nyssa sylvatica	Blackgum	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
OV	3	Osage virginiana	American Hophornbeam	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
QP	6	Quercus palustris 'Pinegreen'	Green Pillar Pin Oak	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
QU	5	Quercus palustris	Pin Oak	2 1/2" cal.	-	12-14'	8&B	Full, straight leader
Ornamental Trees								
AG	2	Ameihera x grandiflora 'Autumn Brilliance'	'Autumn Brilliance' Serviceberry	-	-	8'	8&B	Multi-stem, min 5 stems
BN	3	Betula nigra	River Birch	-	-	8'	8&B	Multi-stem, min 3 stems
CE	4	Cercis canadensis	Redbud	-	-	8'	8&B	Full specimen
CF	2	Cornus florida	Flowering Dogwood	-	-	8'	8&B	Full specimen
CV	2	Chionodoxa virginica	Fringsree	-	-	8'	8&B	Full specimen
MV	4	Magnolia virginiana	Sweetbay Magnolia	-	-	8'	8&B	Multi-stem, min 3 stems
Evergreen Trees								
PS	9	Thuja occidentalis 'Smaragd'	Emerald Green Arborvitae	-	-	8'	8&B	Branched fully to ground
TO	6	Pinus strobus	Eastern White Pine	-	-	8'	8&B	Branched fully to ground
Shrubs**								
HD	6	Hydrangea quercifolia	Oakleaf Hydrangea	-	-	30"	CONT	Heavy, full specimen
VD	3	Viburnum dentatum	Arrowwood Viburnum	-	-	30"	CONT	Heavy, full specimen
** When utilized as a street tree the tree shall have a single trunk to seven (7') and the lower five (5') shall be clear to the ground. ** Plant in continuous mulch bed (2-3" depth) until fully established.								

**LANDCORE**  
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FILE **LANDSCAPE\_INFOCUS**  
DRAWN BY **B.NAGENGAST**  
CHECKED BY **D.A.TWEEDIE**

**PROPOSED RESIDENTIAL SITE REDEVELOPMENT**  
1110 WILLOW GROVE AVENUE  
SPRINGFIELD TOWNSHIP, MONTGOMERY COUNTY  
COMMONWEALTH OF PENNSYLVANIA  
APPLICANT **1110 WILLOW GROVE AVENUE, LLC**

**LANDSCAPE PLAN**  
TITLE

DATE **2023-01-23**

**LA 0**

SHEET **13 OF 13** REV. No.