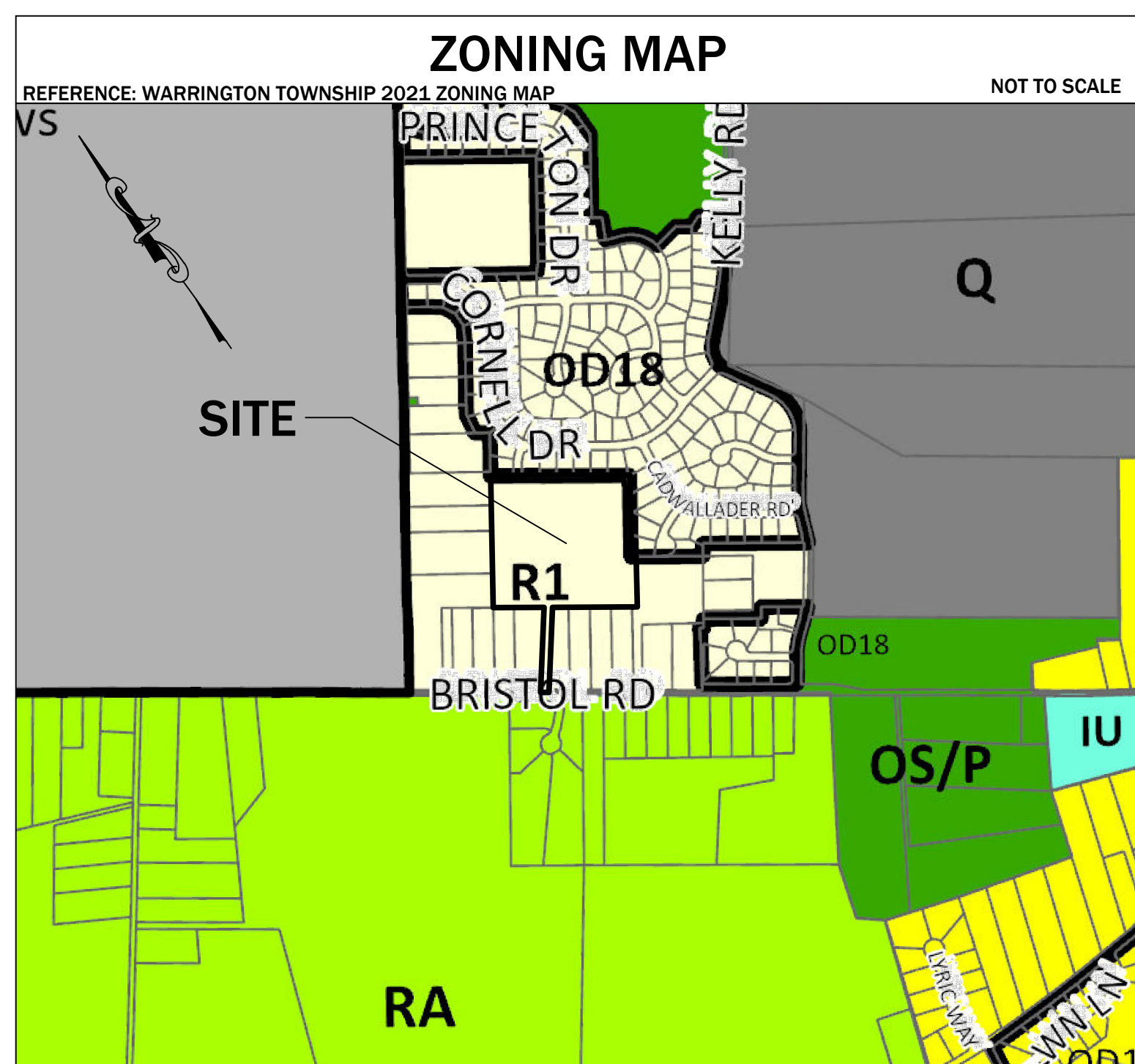
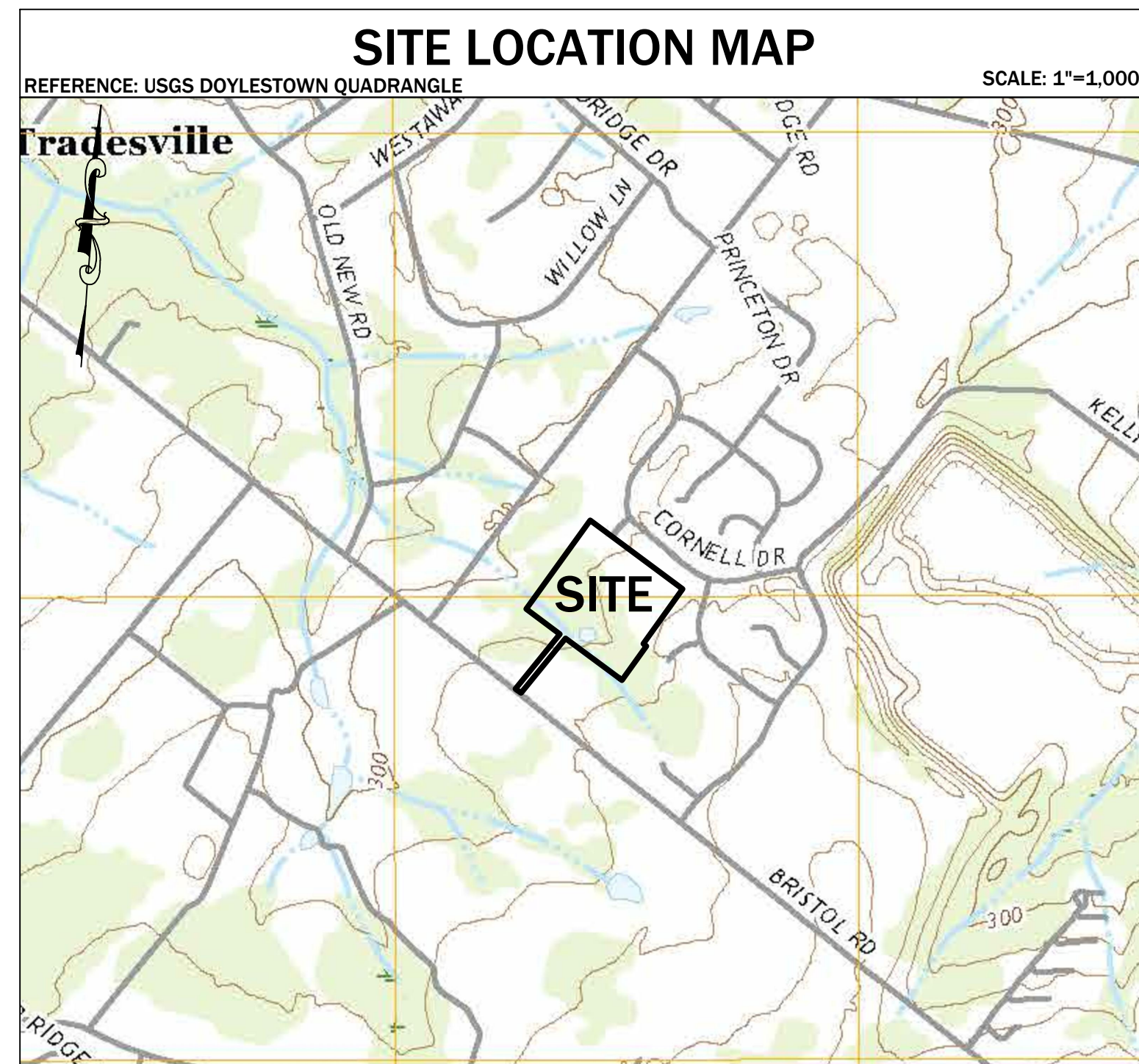


PRELIMINARY & FINAL SUBDIVISION & LAND DEVELOPMENT PLANS

FOR

2931 BRISTOL ROAD SUBDIVISION

TMP # 50-026-072
Warrington Township, Bucks County, PA



| DRAWING LIST | | | |
|--------------|----------------|---|-------------------|
| SHEET NUMBER | DRAWING NUMBER | DRAWING TITLE | LAST REVISED DATE |
| 1 | C0.0 | COVER SHEET | 1/12/2024 |
| 2 | C0.1 | EXISTING CONDITIONS AND NATURAL RESOURCES PLAN | 1/12/2024 |
| 3 | C0.2 | TREE SURVEY PLAN | 1/12/2024 |
| 4 | C0.3 | AERIAL MAP | 1/12/2024 |
| 5* | C1.0 | RECORD SUBDIVISION PLAN | 1/12/2024 |
| 6* | C1.1 | RECORD SITE PLAN | 1/12/2024 |
| 7 | C1.2 | SITE DETAILS | 1/12/2024 |
| 8 | C2.0 | GRADING PLAN | 1/12/2024 |
| 9 | C3.0 | DRAINAGE PLAN | 1/12/2024 |
| 10 | C3.1 | DRAINAGE DETAILS | 1/12/2024 |
| 11 | C4.0 | UTILITY PLAN | 1/12/2024 |
| 12 | C4.1 | SANITARY SEWER DETAILS | 1/12/2024 |
| 13 | C4.2 | WATER DETAILS | 1/12/2024 |
| 14 | C4.3 | WATER DETAILS | 1/12/2024 |
| 15 | C5.0 | ROADWAY & UTILITY PLAN & PROFILE | 1/12/2024 |
| 16 | C6.0 | EROSION AND SEDIMENT CONTROL PLAN | 1/12/2024 |
| 17 | C6.1 | EROSION AND SEDIMENT CONTROL DETAILS | 1/12/2024 |
| 18 | C6.2 | EROSION AND SEDIMENT CONTROL DETAILS | 1/12/2024 |
| 19* | C7.0 | POST CONSTRUCTION STORMWATER MANAGEMENT PLAN | 1/12/2024 |
| 20 | C7.1 | POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS | 1/12/2024 |
| 21 | C8.0 | LANDSCAPING PLAN | 1/12/2024 |
| 22 | C8.1 | LANDSCAPING DETAILS | 1/12/2024 |
| 23 | C9.0 | TRUCK TURNING PLAN | 1/12/2024 |

* DENOTES PLAN TO BE RECORDED

APPLICANT & OWNER:

ESTATE OF CHARLOTTE MILLER KANE,
C/O CHARLIE PUGHE
612 PRINDLE RD.
CHARLOTTE, VT 05445

CONTACTS

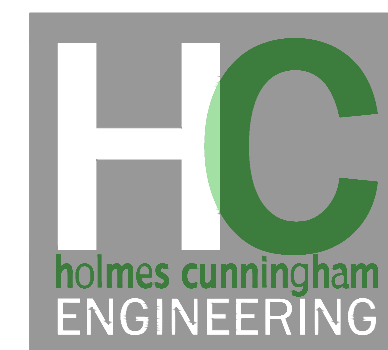
WARRINGTON TOWNSHIP
852 EASTON ROAD
WARRINGTON, PA 18976
PHONE: (215) 343-5944

BUCKS COUNTY CONSERVATION DISTRICT
1456 FERRY ROAD, SUITE 704
DOYLESTOWN, PA 18901
PHONE: 215-345-7577

TOWNSHIP ENGINEER
CARROLL ENGINEERING CORPORATION
949 EASTON ROAD
WARRINGTON, PA 18976
PHONE: 215-343-5700

NORTH WALES WATER AUTHORITY
200 WEST WALNUT STREET
P.O. BOX 1339
PHONE: (215) 699-8436

PREPARED BY:



HOLMES CUNNINGHAM LLC
409 EAST BUTLER AVENUE
UNIT 5
DOYLESTOWN, PA 18901
(215) 586-3330

BUCKS COUNTY PLANNING COMMISSION
THE ALMSHOUSE NESHAMINY MANOR CENTER
1260 ALMSHOUSE ROAD
DOYLESTOWN, PA 18901
215-345-3400

BUCKS COUNTY WATER AND SEWER AUTHORITY
1275 ALMSHOUSE ROAD
WARRINGTON, PA 18976
PHONE: (215) 343-2538

| | |
|-----------|------------|
| REVISED: | 1/12/2024 |
| DATE: | 03/29/2023 |
| PROJECT # | 1518A |
| DRAWING # | C0.0 |
| SHEET | 1 OF 23 |

| REVISIONS | Date | Description |
|-----------|-----------|------------------------------------|
| | 8/11/2023 | REVISED PER TOWNSHIP COMMENTS |
| | 11/9/2023 | REVISED PER BCCD COMMENTS |
| | 1/12/2024 | REVISED PER TWP & UTILITY COMMENTS |

CALL BEFORE YOU DIG IN
 3 WORKING DAYS NOTICE FOR
 10 WORKING DAYS NOTICE FOR
 10 WORKING DAYS NOTICE FOR
 - STOP & CALL

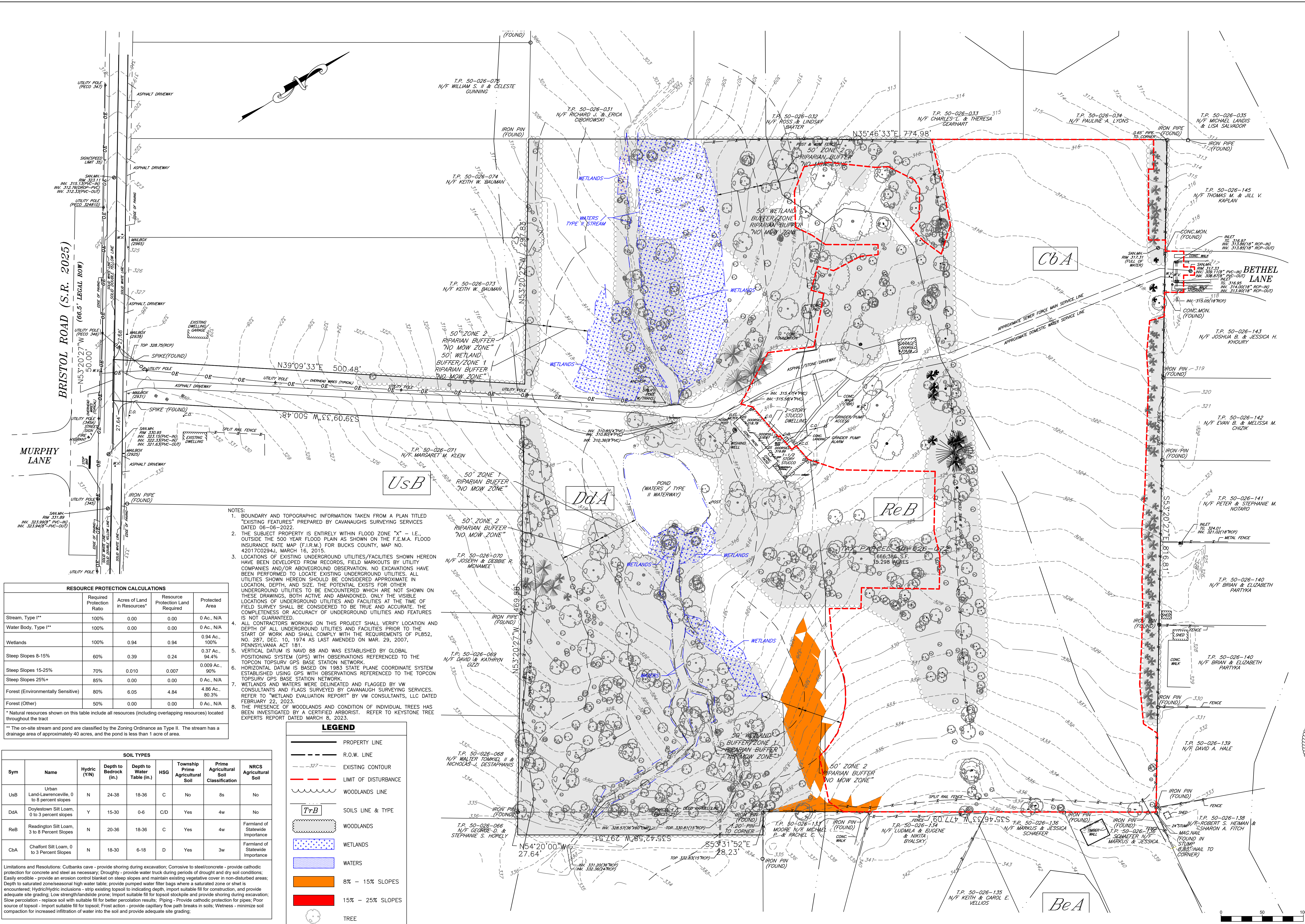
2931 BRISTOL ROAD SUBDIVISION
 TWP# 50-026-072
 WARRINGTON TOWNSHIP, BUCKS COUNTY, PA
EXISTING CONDITIONS & NATURAL RESOURCES PLAN

KRISTIN R. HOLMES, P.E.
 PA PE073604

File No.
1518A_C0.1 EXTG.DWG

HCE Job
 Date
 Scale
 Designed
 Sheet

Drawing No.
C0.1



- NOTES:
- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A PLAN TITLED "EXISTING FEATURES" PREPARED BY CAVANAUGH SURVEYING SERVICES DATED 06-06-2022.
 - THE SUBJECT PROPERTY IS ENTIRELY WITHIN FLOOD ZONE "X" - I.E., OUTSIDE THE 500 YEAR FLOOD PLAIN AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR BUCKS COUNTY, MAP NO. 42017C0294J, MARCH 16, 2015.
 - LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKINGS BY UTILITY COMPANIES AND/OR ABOVEGROUND OBSERVATION. NO EXCAVATIONS HAVE BEEN PERFORMED TO LOCATE EXISTING UNDERGROUND UTILITIES. ALL UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES TO BE ENCOUNTERED WHICH ARE NOT SHOWN ON THESE DRAWINGS, BOTH ACTIVE AND ABANDONED. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES AND FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TO BE TRUE AND ACCURATE. THE COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES AND FEATURES IS NOT GUARANTEED.
 - ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF PL852, NO. 287, DEC. 10, 1974 AS LAST AMENDED ON MAR. 29, 2007, PENNSYLVANIA ACT 181.
 - VERTICAL DATUM IS NAVD 88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
 - HORIZONTAL DATUM IS BASED ON 1983 STATE PLANE COORDINATE SYSTEM ESTABLISHED USING GPS WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
 - WETLANDS AND WATERS WERE DELINEATED AND FLAGGED BY VW CONSULTANTS AND FLAGS SURVEYED BY CAVANAUGH SURVEYING SERVICES. REFER TO "WETLAND EVALUATION REPORT" BY VW CONSULTANTS, LLC DATED FEBRUARY 22, 2023.
 - THE PRESENCE OF WOODLANDS AND CONDITION OF INDIVIDUAL TREES HAS BEEN INVESTIGATED BY A CERTIFIED ARBORIST. REFER TO KEYSTONE TREE EXPERTS REPORT DATED MARCH 8, 2023.

RESOURCE PROTECTION CALCULATIONS

| Resource | Required Protection Ratio | Acres of Land in Resources* | Resources Protection Land Required | Protected Area |
|------------------------------------|---------------------------|-----------------------------|------------------------------------|-----------------|
| Stream, Type I** | 100% | 0.00 | 0.00 | 0 Ac., N/A |
| Water Body, Type I** | 100% | 0.00 | 0.00 | 0 Ac., N/A |
| Wetlands | 100% | 0.94 | 0.94 | 0.94 Ac., 100% |
| Steep Slopes 8-15% | 60% | 0.39 | 0.24 | 0.37 Ac., 94.4% |
| Steep Slopes 15-25% | 70% | 0.010 | 0.007 | 0.009 Ac., 90% |
| Steep Slopes 25%+ | 85% | 0.00 | 0.00 | 0 Ac., N/A |
| Forest (Environmentally Sensitive) | 80% | 6.05 | 4.84 | 4.86 Ac., 80.3% |
| Forest (Other) | 50% | 0.00 | 0.00 | 0 Ac., N/A |

* Natural resources shown on this table include all resources (including overlapping resources) located throughout the tract.

** The on-site stream and pond are classified by the Zoning Ordinance as Type II. The stream has a drainage area of approximately 40 acres, and the pond is less than 1 acre of area.

SOIL TYPES

| Sym | Name | Hydric (Y/N) | Depth to Bedrock (in.) | Depth to Water Table (in.) | HSG | Township Prime Agricultural Soil | Prime Agricultural Soil Classification | NRCS Agricultural Soil |
|-----|---|--------------|------------------------|----------------------------|-----|----------------------------------|--|----------------------------------|
| UsB | Urban Land-Lawrenceville, 0 to 8 percent slopes | N | 24-38 | 18-36 | C | No | 8s | No |
| DdA | Doylestown Silt Loam, 0 to 3 percent slopes | Y | 15-30 | 0-6 | C/D | Yes | 4w | No |
| ReB | Readington Silt Loam, 3 to 8 Percent Slopes | N | 20-36 | 18-36 | C | Yes | 4w | Farmland of Statewide Importance |
| CbA | Chalfont Silt Loam, 0 to 3 Percent Slopes | N | 18-30 | 6-18 | D | Yes | 3w | Farmland of Statewide Importance |

LEGEND

- PROPERTY LINE
- R.O.W. LINE
- EXISTING CONTOUR
- LIMIT OF DISTURBANCE
- WOODLANDS LINE
- SOILS LINE & TYPE
- WOODLANDS
- WETLANDS
- WATERS
- 8% - 15% SLOPES
- 15% - 25% SLOPES
- TREE

PROFESSIONAL ENGINEER CERTIFICATION

I, KRISTIN R. HOLMES, a REGISTERED PROFESSIONAL ENGINEER OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS THE METES AND BOUNDS, AS SHOWN, AND THE LOTS, LAND, STREETS, HIGHWAYS, EASEMENTS AND UTILITIES AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

I FURTHER CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS OF ALL ORDINANCES AFFECTING THIS SUBDIVISION AND LAND DEVELOPMENT, INCLUDING THE AMENDED ZONING ORDINANCE OF THE TOWNSHIP OF WARRINGTON IN WHICH THIS SUBDIVISION AND LAND DEVELOPMENT IS LOCATED.

KRISTIN R. HOLMES, P.E., PA LIC. NO. PE073604

REGISTERED SURVEYOR CERTIFICATION

I, PATRICK A. CAVANAUGH, a REGISTERED SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS THE METES AND BOUNDS, AS SHOWN, AND THE LOTS, LAND, STREETS, HIGHWAYS, EASEMENTS AND UTILITIES AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

I FURTHER CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS OF ALL ORDINANCES AFFECTING THIS SUBDIVISION AND LAND DEVELOPMENT, INCLUDING THE AMENDED ZONING ORDINANCE OF THE TOWNSHIP OF WARRINGTON IN WHICH THIS SUBDIVISION AND LAND DEVELOPMENT IS LOCATED.

PATRICK A. CAVANAUGH, PA PLS NO. SU-051056-E

OWNER'S CERTIFICATION OF INTENT

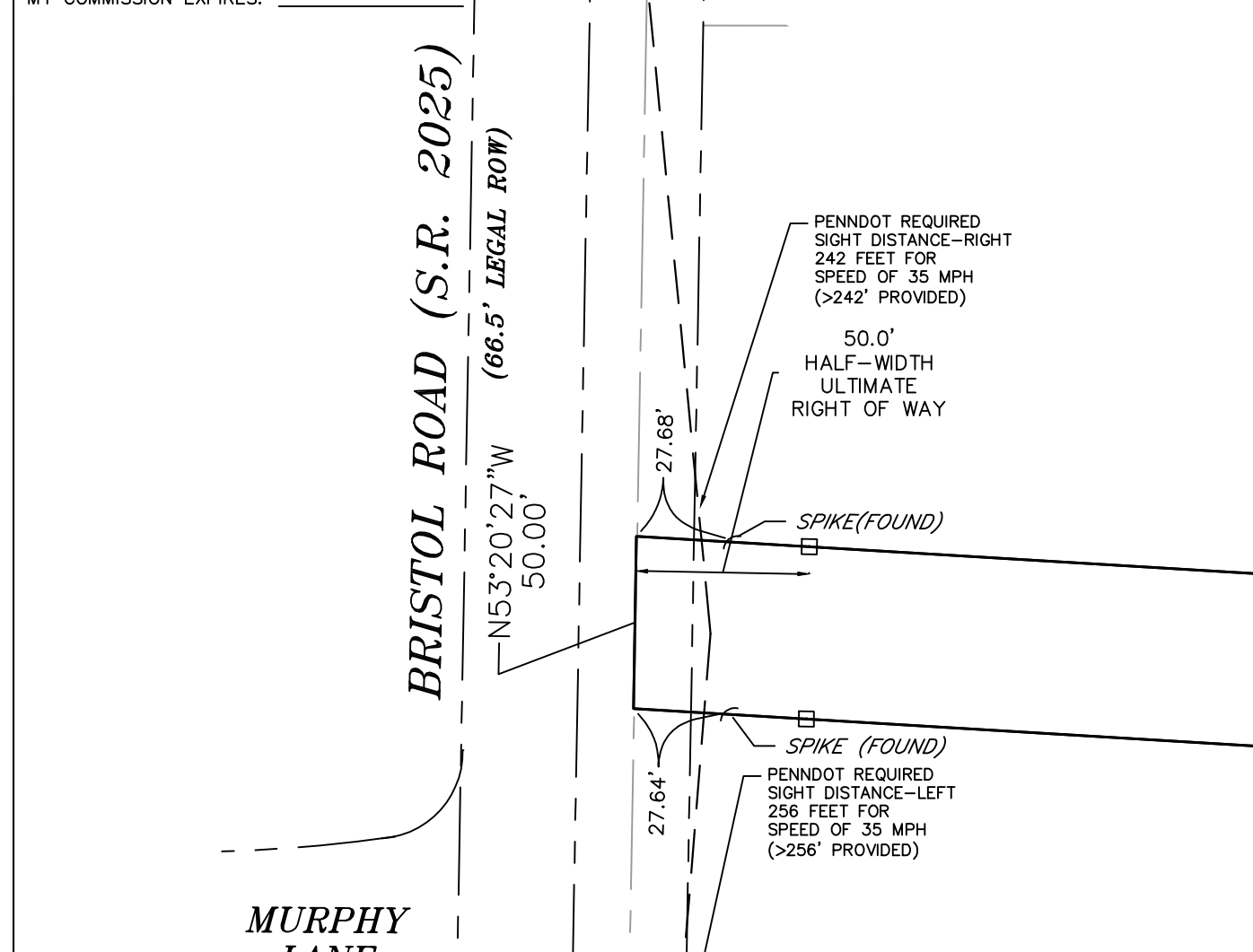
KNOW ALL MEN BY THESE PRESENTS, THAT I CHARLIE PUGHE BEING OWNER OF 2931 BRISTOL ROAD, COMMONWEALTH OF PENNSYLVANIA, FOR MYSELF, MY SUCCESSORS AND ASSIGNS, DO HEREBY ADOPT THIS AS MY PLAN OF LOTS AND LAND DEVELOPMENT PLAN OF MY PROPERTY, SITUATE IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA AND FOR DIVERS ADVANTAGES ACCORDING TO ME, DO HEREBY DEDICATE FOREVER FOR PUBLIC USE FOR HIGHWAY PURPOSES, ALL DRIVES, ROADS, STREETS, LANES AND WAYS AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN BY THE TOWNSHIP OF WARRINGTON AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS BY TOWNSHIP OF WARRINGTON I HEREBY COVENANT AND AGREE TO AND BY THESE PRESENTS DO HEREBY RELEASE AND FOREVER DISCHARGE THE TOWNSHIP OF WARRINGTON, THEIR SUCCESSORS, AND ASSIGNS, FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED AND ANY SLOPES REQUIRED FOR THE SUPPORT AND MAINTENANCE THEREOF ACCORDING TO SUCH ESTABLISHED GRADES. THE DEDICATION AND RELEASE SHALL BE BINDING UPON MADELINE EGENOLE, MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASES OF LOTS IN THIS PLAN.

CHARLIE PUGHE, OWNER
COMMONWEALTH OF PENNSYLVANIA:
COUNTY OF _____

ON THE _____ DAY OF _____, 20____, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF LOTS AND PROPERTY SHOWN THERETO SITUATED IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____.

NOTARY PUBLIC (SEAL)
MY COMMISSION EXPIRES: _____



APPROVAL OF THE WARRINGTON TOWNSHIP PLANNING COMMISSION

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY THE WARRINGTON TOWNSHIP PLANNING COMMISSION ON THIS _____ DAY OF _____, 20____.

ATTEST: _____

SECRETARY _____ CHAIRMAN _____

APPROVAL OF THE BOARD OF SUPERVISORS OF WARRINGTON TOWNSHIP

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY RESOLUTION OF THE BOARD OF TOWNSHIP SUPERVISORS OF WARRINGTON TOWNSHIP THIS _____ DAY OF _____, 20____.

ATTEST: _____

TOWNSHIP SECRETARY _____

APPROVAL OF THE TOWNSHIP ENGINEER, WARRINGTON TOWNSHIP

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY THOMAS ZARKO, P.E., THE APPOINTED TOWNSHIP ENGINEER FOR WARRINGTON TOWNSHIP ON THIS _____ DAY OF _____, 20____.

THOMAS ZARKO, P.E.

REVIEW BY THE BUCKS COUNTY PLANNING COMMISSION

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS REVIEWED BY THE BUCKS COUNTY PLANNING COMMISSION ON THE _____ DAY OF _____, 20____.

CHAIRMAN _____ DIRECTOR _____

CERTIFICATION FOR RECORDING

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS RECORDED IN THE OFFICE OF RECORDER OF DEEDS FOR BUCKS COUNTY, AT DOYLESTOWN, PENNSYLVANIA, THIS _____ DAY OF _____, 20____.

BY: _____ RECORDER OF DEEDS

CERTIFICATION OF MORTGAGE STATUS

I, CHARLIE PUGHE, OWNER OF THE SUBDIVISION AND LAND DEVELOPMENT PLAN SHOWN HEREON, DO HEREBY CERTIFY THERE IS NO MORTGAGE, LIEN, OR ENCUMBRANCE ON THE PROPERTY.

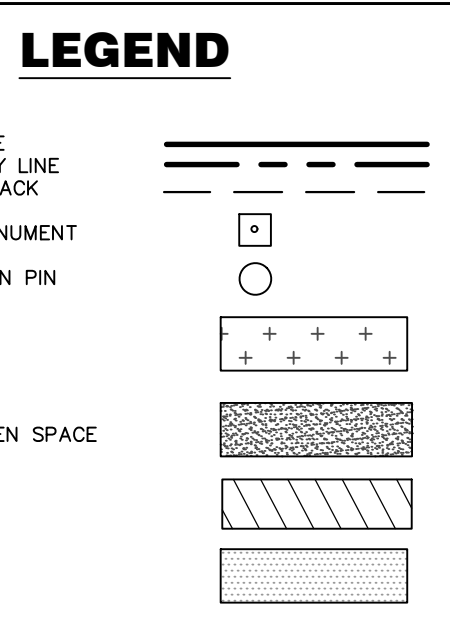
OWNER _____

CERTIFICATION OF TRUE OWNERSHIP

I, CHARLIE PUGHE, OWNER OF THE PROPERTY DEPICTED ON THIS SUBDIVISION / LAND DEVELOPMENT PLAN DO HEREBY CERTIFY THAT THE TITLE OF THE PROPERTY IS IN THE NAME OF ESTATE OF CHARLOTTE MILLER KANE C/O CHARLIE PUGHE, AS RECORDED IN DEED BOOK VOL. 6913 PAGE 223, RECORDER OF DEEDS OFFICE.

WITNESS _____ OWNER _____

WITNESS _____ OWNER _____



TOWNSHIP WAIVER OF RESPONSIBILITY

THE TOWNSHIP OF WARRINGTON HEREBY GIVES NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESS OR IMPLIED, EITHER TO ACCEPT SAID PLAN OF LOTS AND PROPERTY SHOWN THERETO SITUATED IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____.

CHAIRMAN, BOARD OF SUPERVISORS _____

SECRETARY _____

COMMONWEALTH OF PENNSYLVANIA:
COUNTY OF _____

ON THE _____ DAY OF _____, 20____, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF LOTS AND PROPERTY SHOWN THERETO SITUATED IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____.

PUBLIC _____ NOTARY (SEAL) _____

MY COMMISSION EXPIRES: _____

WARRINGTON TOWNSHIP GROSS BUILDABLE SITE AREA FORM 307

Calculation for Gross & Net Buildable Site Area

| | | |
|---|---------------|--------------------------|
| Gross Site Area (GSA) | 15.298 | acres |
| Reserve Land Areas (RL) | | |
| Land within Existing road and utility right-of-ways | 0.019 | acres |
| Land within Ultimate right-of-way of existing streets | 0.038 | acres |
| Land without development opportunities due to restrictions or covenants | 0.000 | acres |
| Total Section A | 0.057 | acres |
| Totally Unusable Land Area (TUL) | | |
| Stream, Type I | 0.00 | acres |
| Water Bodies, Type I | 0.00 | acres |
| Wetlands | 0.94 | acres |
| Total Section B | 0.94 | acres |
| Total Combined Section A and B | 1.00 | acres |
| Calculate Gross Buildable Site Area (GBSA) | | |
| Gross Site Area (GSA) | 15.30 | acres |
| Subtract Total Combined Section A and B | 1.00 | acres |
| Gross Buildable Site Area (GBSA) | 14.30 | acres |
| Total Dwelling Unit Permitted (Where Applicable) | | |
| Gross Buildable Site Area (GBSA) | 14.30 | acres |
| Multiplied by Applicable Density | 0 | |
| Maximum Allowable Dwelling Units | N/A | |
| Partly Usable Land Areas (PUL) | | |
| Resource | Resource area | Restricted Resource area |
| 25% or Greater Slopes | 0.00 | 0.00 acres |
| 15-25% Slopes | 0.01 | 0.01 acres |
| 8-15% Slopes | 0.39 | 0.24 acres |
| Forested Areas (Other) | 0.00 | 0.00 acres |
| Forested Areas (Environmentally Sensitive Resources) | 5.45 | 4.36 acres |
| Total Section E (Partly Unusable Land) | 5.85 | 4.60 acres |
| Net Gross Buildable Site Area (NGBSA) | | |
| Gross Buildable Site Area (GBSA) (Section C) | 14.30 | acres |
| Subtract Partly Unusable Land (Section E) | 4.60 | acres |
| Equals Net Gross Buildable Site Area (NGBSA) | 9.70 | acres |
| Open Space Requirement | | |
| Net Gross Buildable Site Area (NGBSA) (Section F) | 9.70 | acres |
| Multiply by Open Space Ratio | 0.20 | |
| Equals Common Open Space Requirement (COS) | 1.94 | acres |
| Active Open Space (AOS) | | |
| Total Proposed Dwellings | 8 | Units |
| Amount of Active Open Space Required (DU/100)*3.0 Acres) (AOS) | 0.24 | acres |

- NOTES:**
- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A PLAN TITLED "EXISTING FEATURES" PREPARED BY CAVANAUGH SURVEYING SERVICES DATED 06-06-2022.
 - THE SUBJECT PROPERTY IS ENTIRELY WITHIN FLOOD ZONE "X" - I.E., OUTSIDE THE 500 YEAR FLOOD PLAN AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR BUCKS COUNTY, MAP NO. 420170294J, MARCH 16, 2015.
 - LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY COMPANIES AND/OR ABOVEGROUND OBSERVATION. NO EXCAVATIONS HAVE BEEN PERFORMED TO LOCATE EXISTING UNDERGROUND UTILITIES. ALL UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES TO BE ENCOUNTERED WHICH ARE NOT SHOWN ON THESE DRAWINGS, BOTH ACTIVE AND ABANDONED. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES AND FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TO BE TRUE AND ACCURATE. THE COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES AND FEATURES IS NOT GUARANTEED.
 - ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF PL852, NO. 287, DEC. 10, 1974 AS LAST AMENDED ON MAR. 29, 2007, PENNSYLVANIA ACT 181.
 - VERTICAL DATUM IS NAVD 88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
 - HORIZONTAL DATUM IS BASED ON 1983 STATE PLANE COORDINATE SYSTEM ESTABLISHED USING GPS WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
 - WETLANDS AND WATERS WERE DELINEATED AND FLAGGED BY VW CONSULTANTS AND FLAGS SURVEYED BY CAVANAUGH SURVEYING SERVICES. REFER TO "WETLAND EVALUATION REPORT" BY VW CONSULTANTS, LLC DATED FEBRUARY 22, 2023.
 - THE PRESENCE OF WOODLANDS AND CONDITION OF INDIVIDUAL TREES HAS BEEN INVESTIGATED BY A CERTIFIED ARBORIST. REFER TO KEYSTONE TREE EXPERTS REPORT DATED MARCH 8, 2023.
 - THE PROPOSED RIGHT-OF-WAY FOR THE BETHEL LANE EXTENSION IS PROPOSED TO BE OFFERED FOR DEDICATION TO WARRINGTON TOWNSHIP.

RESOURCE PROTECTION CALCULATIONS

| Resource | Required Protection Ratio | Acres of Land in Resources* | Resource Protection Land Required | Protected Area |
|------------------------------------|---------------------------|-----------------------------|-----------------------------------|-----------------|
| Stream, Type I** | 100% | 0.00 | 0.00 | 0 Ac., N/A |
| Water Body, Type I** | 100% | 0.00 | 0.00 | 0 Ac., N/A |
| Wetlands | 100% | 0.94 | 0.94 | 0.94 Ac., 100% |
| Steep Slopes 8-15% | 60% | 0.39 | 0.24 | 0.37 Ac., 94.4% |
| Steep Slopes 15-25% | 70% | 0.010 | 0.007 | 0.009 Ac., 90% |
| Steep Slopes 25%+ | 85% | 0.00 | 0.00 | 0 Ac., N/A |
| Forest (Environmentally Sensitive) | 80% | 6.05 | 4.84 | 4.86 Ac., 80.3% |
| Forest (Other) | 50% | 0.00 | 0.00 | 0 Ac., N/A |

* Natural resources shown on this table include all resources (including overlapping resources) located throughout the tract

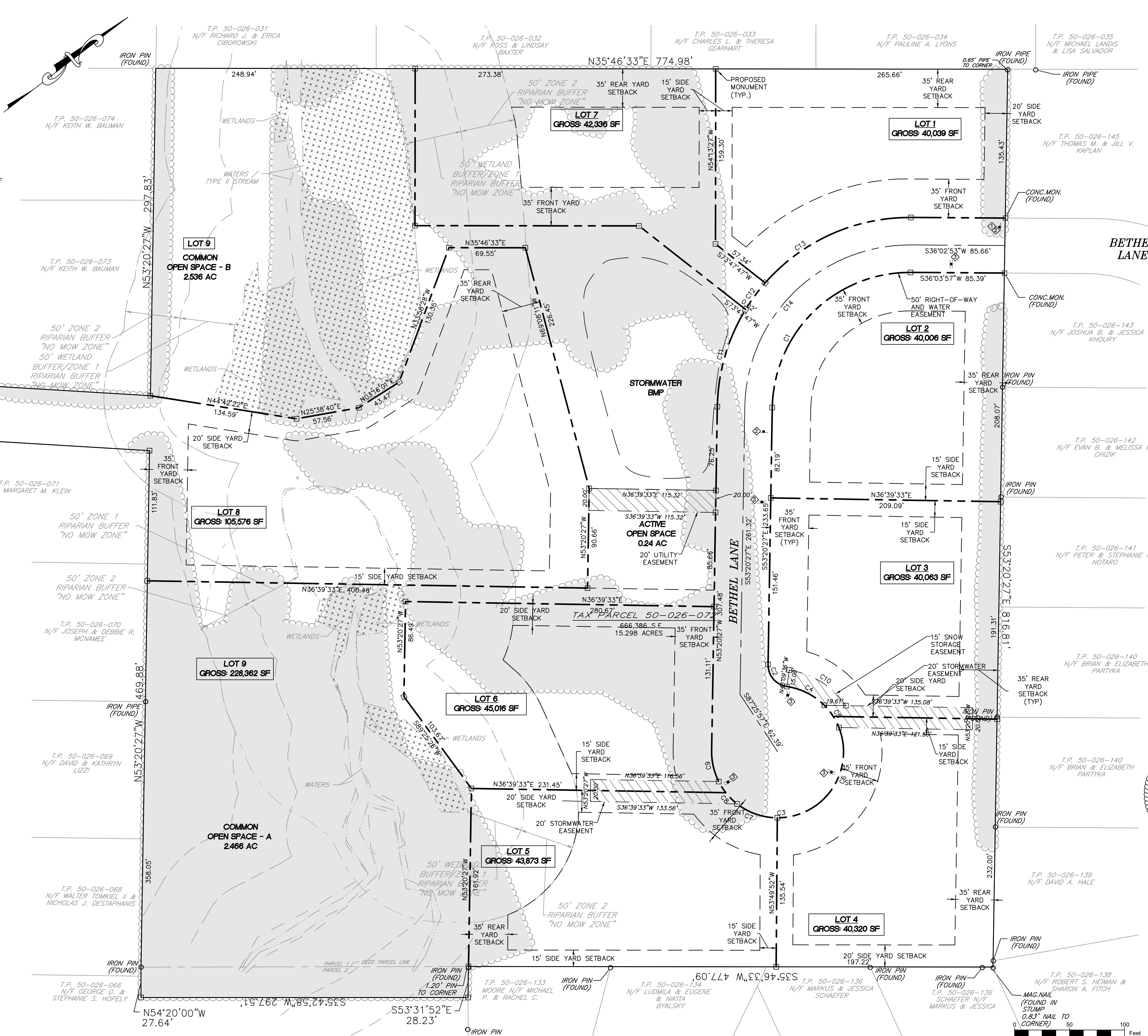
** The on-site stream and pond are classified by the Zoning Ordinance as Type II. The stream has a drainage area of approximately 40 acres, and the pond is less than 1 acre of area.

LOT AREA TABLE

| Lot | Gross Lot Area (SF) | Net Lot Area (SF) |
|---------------|---------------------|-------------------|
| # | 40,039 | 40,039 |
| 1 | 40,039 | 40,066 |
| 2 | 40,063 | 40,063 |
| 3 | 40,320 | 40,320 |
| 4 | 43,873 | 43,873 |
| 5 | 43,873 | 43,873 |
| 6 | 45,016 | 45,016 |
| 7 | 42,336 | 42,336 |
| 8 | 105,576 | 103,066 |
| 9 | 228,362 | 228,362 |
| Road ROW | 40,795 | - |
| Overall Tract | 666,386 | - |

Curve Table

| Curve # | Length | Radius | Delta | Chord Direction | Chord Length |
|---------|---------|---------|------------|-----------------|--------------|
| C1 | 195.06' | 125.00' | 089°24'24" | S08°38'15"E | 175.86' |
| C2 | 28.88' | 20.00' | 082°39'05" | N85°16'44"E | 28.44' |
| C3 | 275.22' | 60.00' | 282°49'09" | S04°45'02"E | 90.00' |
| C4 | 38.77' | 60.00' | 037°01'18" | N62°21'03"E | 38.10' |
| C5 | 24.34' | 60.00' | 023°14'38" | N87°30'59"W | 24.17' |
| C6 | 117.04' | 60.00' | 111°35'40" | N19°58'08"W | 99.40' |
| C7 | 39.47' | 60.00' | 037°41'38" | S54°48'13"W | 38.77' |
| C8 | 26.47' | 60.00' | 025°16'23" | S86°17'14"W | 26.25' |
| C9 | 29.04' | 60.00' | 027°44'08" | N67°12'31"W | 28.76' |
| C10 | 48.46' | 75.00' | 037°01'18" | N62°21'03"E | 47.62' |
| C11 | 93.20' | 175.00' | 030°30'47" | N38°05'04"W | 92.10' |
| C12 | 30.05' | 175.00' | 009°50'19" | N17°54'31"W | 30.01' |
| C13 | 149.83' | 175.00' | 049°03'19" | N11°32'18"E | 145.30' |
| C14 | 234.06' | 150.00' | 089°24'24" | S08°38'16"E | 211.03' |



Hoimes Cunningham LLC
409 E. Butler Ave.
Unit 5
Doylestown, PA 18901
(215) 586-3330
www.hcengineering.net

REVISIONS

| Date | Description |
|-----------|------------------------------------|
| 8/11/2023 | REVISED PER TWP COMMENTS |
| 11/8/2023 | REVISED PER BCDD COMMENTS |
| 1/12/2024 | REVISED PER TWP & UTILITY COMMENTS |

CALL BEFORE YOU DIG OR 811
3 WORKING DAYS NOTICE FOR
10 CONSTRUCTION PROJECTS PER
STATE REQUIREMENTS
- STOP & CALL
FORWARD ONE
1-800-421-3176

UTILITY LOCATIONS SHOWN ON THIS
DRAWING ARE THE PROPERTY OF THE CONTRACTOR.
RESPONSIBILITY OF THE CONTRACTOR
TO VERIFY THE LOCATION AND DEPTH OF
UTILITIES PRIOR TO ANY EXCAVATION
WORK. (SEE PL852(1974) 199)

2931 BRISTOL ROAD SUBDIVISION
TWP # 50-026-072
WARRINGTON TOWNSHIP, BUCKS COUNTY, PA

RECORD SUBDIVISION PLAN

FILED
KRISTIN R. HOLMES, P.E.
PA PE073604

File No. 1518A_C1.0.DWG

HCE Job 1518A
Date 3/29/2023
Scale 1"=50'
Designed KH
Sheet 5 of 23

Drawing No. **C1.0**

PROFESSIONAL ENGINEER CERTIFICATION

I, KRISTIN R. HOLMES, a REGISTERED PROFESSIONAL ENGINEER OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS THE METES AND BOUNDS, AS SHOWN, AND THE LOTS, LAND, STREETS, HIGHWAYS, EASEMENTS AND UTILITIES AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

I FURTHER CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS OF ALL ORDINANCES AFFECTING THIS SUBDIVISION AND LAND DEVELOPMENT, INCLUDING THE AMENDED ZONING ORDINANCE OF THE TOWNSHIP OF WARRINGTON IN WHICH THIS SUBDIVISION AND LAND DEVELOPMENT IS LOCATED.

KRISTIN R. HOLMES, P.E., PA LIC. NO. PE073604

REGISTERED SURVEYOR CERTIFICATION

I, PATRICK A. CAVANAUGH, a REGISTERED SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS THE METES AND BOUNDS, AS SHOWN, AND THE LOTS, LAND, STREETS, HIGHWAYS, EASEMENTS AND UTILITIES AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

I FURTHER CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS OF ALL ORDINANCES AFFECTING THIS SUBDIVISION AND LAND DEVELOPMENT, INCLUDING THE AMENDED ZONING ORDINANCE OF THE TOWNSHIP OF WARRINGTON IN WHICH THIS SUBDIVISION AND LAND DEVELOPMENT IS LOCATED.

PATRICK A. CAVANAUGH, PA PLS NO. SU-051056-E

OWNER'S CERTIFICATION OF INTENT

KNOW ALL MEN BY THESE PRESENTS, THAT I CHARLIE PUGH BEING OWNER OF 2931 BRISTOL ROAD, COMMONWEALTH OF PENNSYLVANIA, FOR MYSELF, MY SUCCESSORS AND ASSIGNS, DO HEREBY ADOPT THIS AS MY PLAN OF LOTS AND LAND DEVELOPMENT PLAN OF MY PROPERTY, SITUATE IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA AND FOR MY ADVANTAGE ACCORDING TO ME, DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY PURPOSES, ALL DRIVES, ROADS, STREETS, LANES AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN BY THE TOWNSHIP OF WARRINGTON AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS BY TOWNSHIP OF WARRINGTON I HEREBY COVENANT AND AGREE TO AND BY THESE PRESENTS DO HEREBY RELEASE AND FOREVER DISCHARGE THE TOWNSHIP OF WARRINGTON, THEIR SUCCESSORS, AND ASSIGNS, FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED AND ANY SLOPES REQUIRED FOR THE SUPPORT AND MAINTENANCE THEREOF ACCORDING TO SUCH ESTABLISHED GRADES. THE DEDICATION AND RELEASE SHALL BE BINDING UPON MADELINE EGENOLE, MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASES OF LOTS IN THIS PLAN.

CHARLIE PUGH, OWNER

COMMONWEALTH OF PENNSYLVANIA: COUNTY OF _____

ON THE _____ DAY OF _____, 20____, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF LOTS AND PROPERTY SITUATED IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____

NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES: _____

APPROVAL OF THE WARRINGTON TOWNSHIP PLANNING COMMISSION

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY THE WARRINGTON TOWNSHIP PLANNING COMMISSION ON THIS _____ DAY OF _____, 20____

ATTEST:

SECRETARY CHAIRMAN

APPROVAL OF THE BOARD OF SUPERVISORS OF WARRINGTON TOWNSHIP

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY RESOLUTION OF THE BOARD OF TOWNSHIP SUPERVISORS OF WARRINGTON TOWNSHIP THIS _____ DAY OF _____, 20____

ATTEST:

TOWNSHIP SECRETARY CHAIRMAN

APPROVAL OF THE TOWNSHIP ENGINEER, WARRINGTON TOWNSHIP

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY THOMAS ZARKO, P.E., THE APPOINTED TOWNSHIP ENGINEER FOR WARRINGTON TOWNSHIP ON THIS _____ DAY OF _____, 20____

REVIEW BY THE BUCKS COUNTY PLANNING COMMISSION

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS REVIEWED BY THE BUCKS COUNTY PLANNING COMMISSION ON THE _____ DAY OF _____, 20____

ATTEST:

CHAIRMAN

CERTIFICATION FOR RECORDING

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS RECORDED IN THE OFFICE OF RECORDER OF DEEDS FOR BUCKS COUNTY, AT DOYLESTOWN, PENNSYLVANIA, THIS _____ DAY OF _____, 20____

BY: RECORDER OF DEEDS

CERTIFICATION OF MORTGAGE STATUS

I, CHARLIE PUGH, OWNER OF THE SUBDIVISION AND LAND DEVELOPMENT PLAN SHOWN HEREON, DO HEREBY CERTIFY THERE IS NO MORTGAGE, LIEN, OR ENCUMBRANCE ON THE PROPERTY.

ATTEST:

OWNER

WITNESS

CERTIFICATION OF TRUE OWNERSHIP

I, CHARLIE PUGH, OWNER OF THE PROPERTY DEPICTED ON THIS SUBDIVISION / LAND DEVELOPMENT PLAN DO HEREBY CERTIFY THAT THE TITLE OF THE PROPERTY IS IN THE NAME OF ESTATE OF CHARLOTTE WILDER LANE C/O CHARLIE PUGH, AS RECORDED IN DEED BOOK VOL. 8913, PAGE 223, RECORDER OF DEEDS OFFICE.

WITNESS

OWNER

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

TOWNSHIP WAIVER OF RESPONSIBILITY

THE TOWNSHIP OF WARRINGTON HEREBY GIVES NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESS OR IMPLIED, EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS OR ROADS OR GRADE, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

SEAL

ATTEST:

SECRETARY

COMMONWEALTH OF PENNSYLVANIA: COUNTY OF _____ DAY OF _____, 20____, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED THIS PLAN TO BE THE OFFICIAL PLAN OF LOTS AND PROPERTY SITUATED IN THE TOWNSHIP OF WARRINGTON, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, AND DESIRED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____

NOTARY PUBLIC (SEAL)

MY COMMISSION EXPIRES: _____

PROPERTY LINE

R.O.W. LINE

BUILDING SETBACK LINE

EXISTING CONTOUR

TREE LINE

EXISTING ASPHALT TO REMAIN

PROPOSED ASPHALT

PROPOSED BUILDING

PROPOSED EASEMENT

SIGN LEGEND

SPEED LIMIT SIGN

NO OUTLET SIGN

NO PARKING THIS SIDE SIGN

(ALL SIGNS SHALL CONFORM WITH PENNDOT PUBLICATION 236)

NOTES:

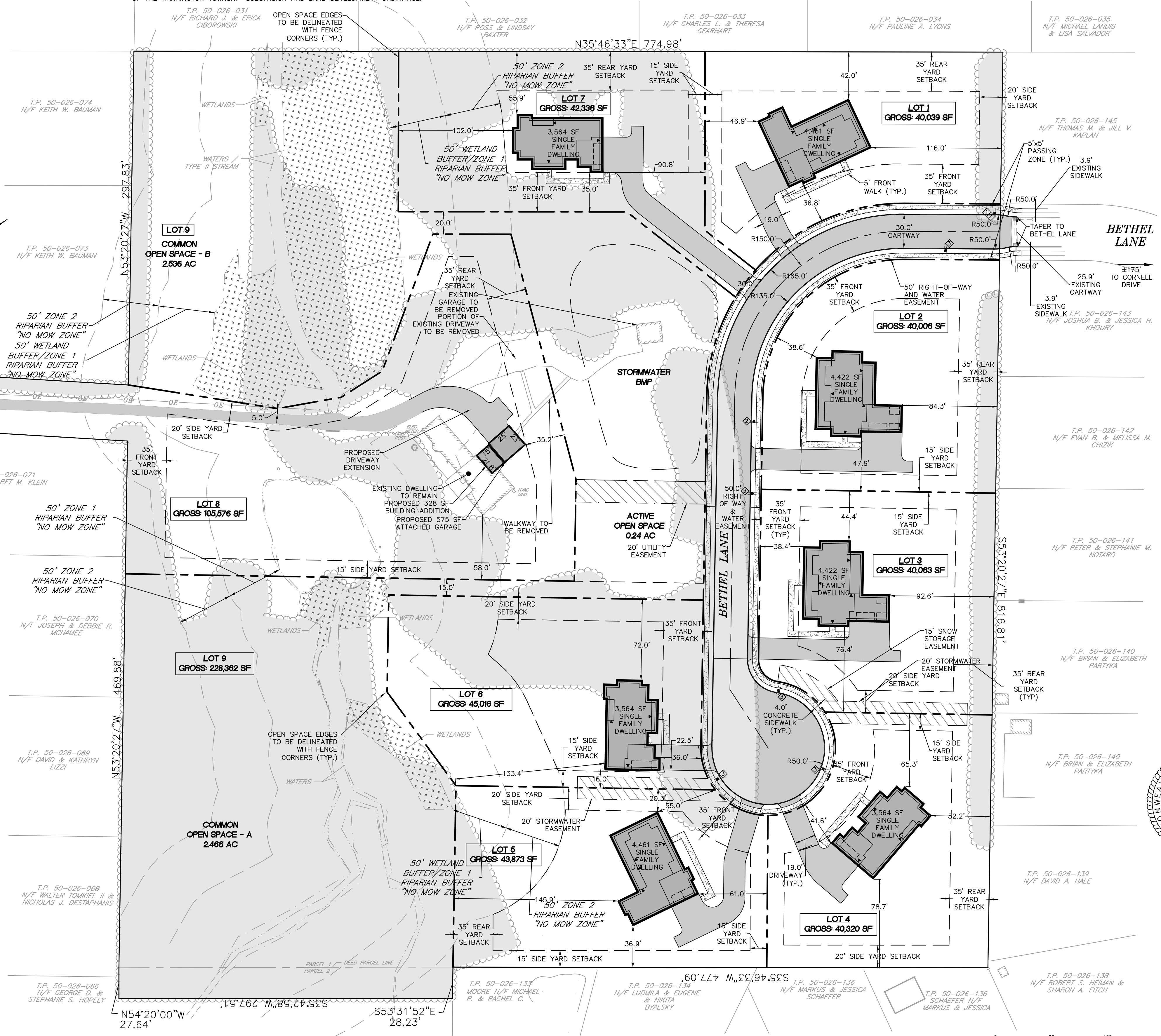
- 1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A PLAN TITLED "EXISTING FEATURES" PREPARED BY CAVANAUGHS SURVEYING SERVICES DATED MAY 17, 2022, LAST REVISED JUNE 6, 2022.
2. THE SUBJECT PROPERTY IS ENTIRELY WITHIN FLOOD ZONE "X" - I.E., OUTSIDE THE 500 YEAR FLOOD PLAIN AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR BUCKS COUNTY, MAP NO. 4201700294J, DATED MARCH 16, 2015.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY COMPANIES AND/OR ABOVEGROUND OBSERVATION. NO EXCAVATIONS HAVE BEEN PERFORMED TO LOCATE EXISTING UNDERGROUND UTILITIES. ALL UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES TO BE ENCOUNTERED WHICH ARE NOT SHOWN ON THESE DRAWINGS, BOTH ACTIVE AND ABANDONED. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES AND FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TO BE TRUE AND ACCURATE. THE COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES AND FEATURES IS NOT GUARANTEED.
4. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF PL852, NO. 287, DEC. 10, 1974 AS LAST AMENDED ON MAR. 29, 2007, PENNSYLVANIA ACT 181.
5. VERTICAL DATUM IS NAVD 88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
6. HORIZONTAL DATUM IS BASED ON 1983 STATE PLANE COORDINATE SYSTEM ESTABLISHED USING GPS WITH OBSERVATIONS REFERENCED TO THE TOPCON TOPSURV GPS BASE STATION NETWORK.
7. WETLANDS AND WATERS WERE DELINEATED AND FLAGGED BY VW CONSULTANTS AND FLAGS SURVEYED BY CAVANAUGH SURVEYING SERVICES.
8. THE PROPOSED LOT 8 DRIVEWAY RECONSTRUCTION AS PART OF THIS PROJECT WILL REMOVE 1,140 SF OF IMPERVIOUS AREA FROM THE RIPARIAN BUFFER AND INSTALL 755 SF. THIS IS A NET REDUCTION OF 385 SF OF IMPERVIOUS AREA.
9. ALL WATER FACILITIES WITHIN THIS DEVELOPMENT, INCLUDING THE WATER MAIN, FIRE HYDRANTS AND WATER SERVICE PIPING UP TO AND INCLUDING INDIVIDUAL CURB STOPS, SHALL BE OFFERED FOR DEDICATION TO THE NORTH WALES WATER AUTHORITY. ALL WATER PIPING AND ASSOCIATED APPURTENANCES DOWNSTREAM OF THESE FACILITIES TO THE INDIVIDUAL RESIDENCES SHALL BE PRIVATELY OWNED. ALL WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH WALES WATER AUTHORITY STANDARD SPECIFICATIONS AND DETAILS.
10. THERE SHALL BE NO REMOVAL OF VEGETATION IN AREAS WITHIN THE DESIGNATED "NO MOW ZONE" OTHER THAN TO ALLOW THE USES SPECIFIED IN THE WARRINGTON TOWNSHIP ORDINANCE.
11. THE PENNDOT-REQUIRED SIGHT DISTANCES SHALL BE MAINTAINED FOR THE INDIVIDUAL DRIVEWAYS OF LOTS 1 TO 7 AT ALL TIMES AS REQUIRED IN SECTION 305-311.0 OF THE WARRINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

LOT AREA AND COVERAGE TABLE with columns: Lot, Gross Lot Area, Right-of-Way Area, Net Lot Area, Easement Areas, Building Area, Building Ratio, On-lot Impervious Excluding Building Area, Future Impervious for Owner, Impervious Ratio.

BRISTOL ROAD (S.R. 2025) (66.5' LEGAL ROW)

MURPHY LANE

BETHEL LANE



WARRINGTON TOWNSHIP ZONING TABLE with columns: ITEM, REQUIRED/PERMITTED, PROPOSED, ORDINANCE SECTION. Includes sections for B1 - Single-Family Detached Dwelling, General Requirements, Open Space Requirements, and Active Open Space (AOS).

Hoimes Cunningham LLC logo and contact information: 409 E. Butler Ave., Unit 5, Doylestown, PA 18901, (215) 586-3330, www.hcengineering.net

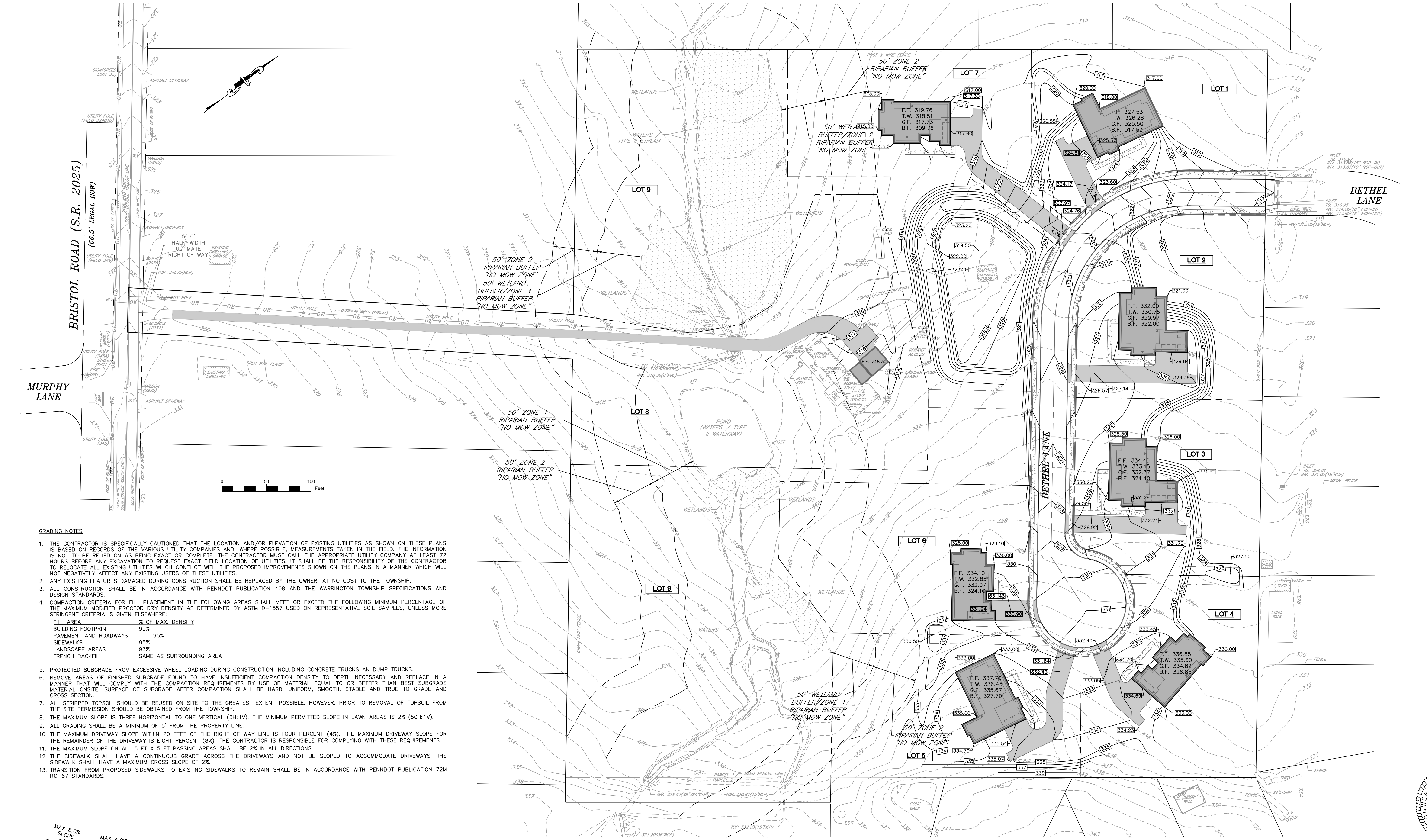
REVISIONS table with columns: Date, Description, Revised Per Township Comments, Revised Per BCCD Comments, Revised Per TWP & Utility Comments.

2931 BRISTOL ROAD SUBDIVISION TWP # 50-026-072 WARRINGTON TOWNSHIP, BUCKS COUNTY, PA RECORD SITE PLAN

Professional Engineer Seal for Kristin R. Holmes, P.E., PA PE073604

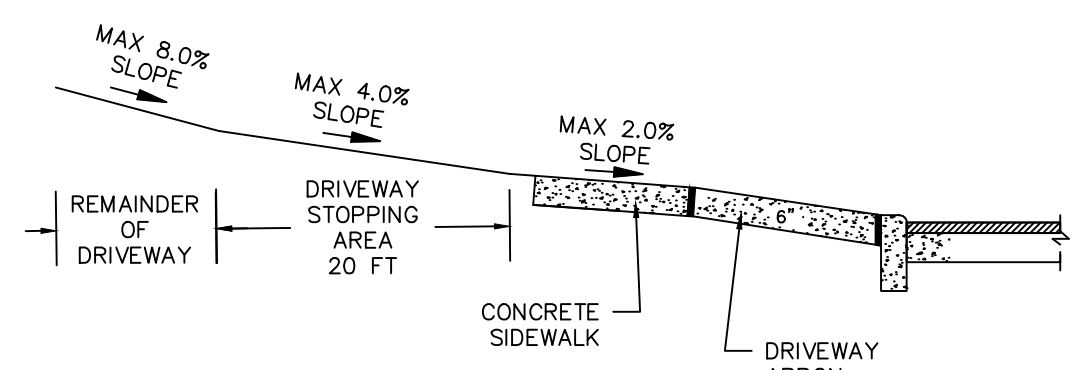
File No. 1518A_C1.0.DWG, HCE Job 1518A, Date 3/29/2023, Scale 1"=50', Designed KH, Sheet 6 of 23

Drawing No. C1.1



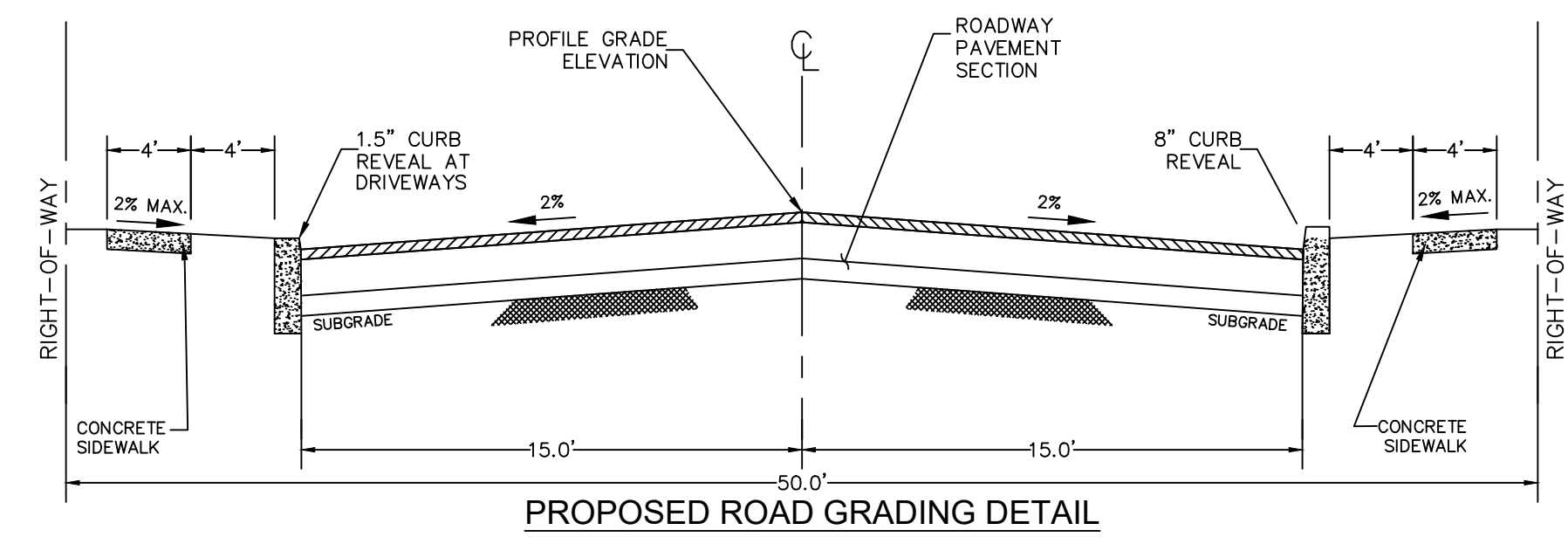
- GRADING NOTES**
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
 2. ANY EXISTING FEATURES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE OWNER, AT NO COST TO THE TOWNSHIP.
 3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE WARRINGTON TOWNSHIP SPECIFICATIONS AND DESIGN STANDARDS.
 4. COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA IS GIVEN ELSEWHERE:

| FILL AREA | % OF MAX. DENSITY |
|-----------------------|--------------------------|
| BUILDING FOOTPRINT | 95% |
| PAVEMENT AND ROADWAYS | 95% |
| SIDEWALKS | 95% |
| LANDSCAPE AREAS | 93% |
| TRENCH BACKFILL | SAME AS SURROUNDING AREA |
 5. PROTECTED SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
 6. REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH THE COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THAN BEST SUBGRADE MATERIAL ON SITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE AND TRUE TO GRADE AND CROSS SECTION.
 7. ALL STRIPPED TOPSOIL SHOULD BE REUSED ON SITE TO THE GREATEST EXTENT POSSIBLE. HOWEVER, PRIOR TO REMOVAL OF TOPSOIL FROM THE SITE PERMISSION SHOULD BE OBTAINED FROM THE TOWNSHIP.
 8. THE MAXIMUM SLOPE IS THREE HORIZONTAL TO ONE VERTICAL (3H:1V). THE MINIMUM PERMITTED SLOPE IN LAWN AREAS IS 2% (50H:1V).
 9. ALL GRADING SHALL BE A MINIMUM OF 5' FROM THE PROPERTY LINE.
 10. THE MAXIMUM DRIVEWAY SLOPE WITHIN 20 FEET OF THE RIGHT OF WAY LINE IS FOUR PERCENT (4%). THE MAXIMUM DRIVEWAY SLOPE FOR THE REMAINDER OF THE DRIVEWAY IS EIGHT PERCENT (8%). THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THESE REQUIREMENTS.
 11. THE MAXIMUM SLOPE ON ALL 5 FT X 5 FT PASSING AREAS SHALL BE 2% IN ALL DIRECTIONS.
 12. THE SIDEWALK SHALL HAVE A CONTINUOUS GRADE ACROSS THE DRIVEWAYS AND NOT BE SLOPED TO ACCOMMODATE DRIVEWAYS. THE SIDEWALK SHALL HAVE A MAXIMUM CROSS SLOPE OF 2%.
 13. TRANSITION FROM PROPOSED SIDEWALKS TO EXISTING SIDEWALKS TO REMAIN SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 72M RC-67 STANDARDS.



- NOTES:**
- 1) THE MAXIMUM SLOPE OF THE DRIVEWAY WITHIN 20 FEET OF THE RIGHT-OF-WAY IS 4.0%.
 - 2) THE MAXIMUM DRIVEWAY SLOPE IS 8.0%.
 - 3) THE MAXIMUM SLOPE FROM THE RIGHT-OF-WAY TO THE DRIVEWAY APRON IS 2.0%.
 - 3) THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH BOTH THE STOPPING AREA AND DRIVEWAY SLOPE REQUIREMENTS.

DWELLING DRIVEWAY DETAIL



PROPOSED ROAD GRADING DETAIL

GRADING LEGEND

- EXISTING CONTOUR — 185
- EXISTING SPOT ELEVATION 185.2 x
- EXISTING TOP/BOTTOM CURB x TC 154.75 BC 154.25
- PROPOSED CONTOUR — 185
- PROPOSED SPOT ELEVATION [185.2] x
- PROPOSED TOP/BOTTOM CURB x TC 154.75 BC 154.25

| 2931 BRISTOL ROAD | | | | | | | | |
|---------------------|--------------------|------------------------|---------------|-----------------------------|-----------------------|--------------------------|-----------------------|----------------------------|
| BUILDING ELEVATIONS | | | | | | | | |
| Lot Number | Driveway Elevation | Garage Floor Elevation | Basement Type | Top of Foundation Elevation | First Floor Elevation | Basement Floor Elevation | BLDG Tie-in Elevation | Rear Full Tie-in Elevation |
| | DE | GE = DE + 13 ft | STANDARD | TF = GE + 0.70 ft | FF = TF + 1.33 ft | BF = TF - 8.67 ft | FF - 2.0 ft | TF - 0.67 ft |
| | DE | GE = DE + 13 ft | WALKOUT | TF = GE + 0.70 ft | FF = TF + 1.33 ft | BF = TF - 8.67 ft | FF - 2.0 ft | TF - 0.67 ft |
| | DE | GE = DE + 13 ft | DAYLIGHT | TF = GE + 0.70 ft | FF = TF + 1.33 ft | BF = TF - 8.67 ft | FF - 2.0 ft | TF - 5.67 ft |
| 1 | 325.37 | 325.50 | Walkout | 326.20 | 327.53 | 317.53 | 325.53 | 317.20 |
| 2 | 329.84 | 329.97 | Walkout | 330.67 | 332.00 | 322.00 | 330.00 | 321.67 |
| 3 | 332.24 | 332.37 | Daylight | 333.07 | 334.40 | 324.40 | 332.40 | 327.40 |
| 4 | 334.69 | 334.82 | Standard | 335.52 | 336.85 | 326.85 | 334.85 | 334.85 |
| 5 | 335.54 | 335.67 | Standard | 336.37 | 337.70 | 327.70 | 335.70 | 335.70 |
| 6 | 331.94 | 332.07 | Standard | 332.77 | 334.10 | 324.10 | 332.10 | 332.10 |
| 7 | 317.60 | 317.73 | Standard | 318.43 | 319.76 | 309.76 | 317.76 | 317.76 |

H.C. ENGINEERING

 Holmes Cunningham LLC

 409 E. Butler Ave.

 Unit 5

 Doylestown, PA 18901

 (215) 586-3330

 www.hcengineering.net

| REVISIONS | Description | Date |
|-----------|-------------|------|
| | | |

CALL BEFORE YOU DIG OR

 3 WORKING DAYS NOTICE FOR

 10 WORKING DAYS NOTICE FOR

 15 WORKING DAYS NOTICE FOR

 STOP & CALL

 Permittee One

 1800-242-5176

FULLY PROFESSIONAL PHOTO IS THE

 RESPONSIBILITY OF THE CONTRACTOR.

 COMPANIES PRIOR TO ANY EXCAVATION.

 (SERIAL: P03813199)

2931 BRISTOL ROAD SUBDIVISION

 TMP# 50-026-072

 WARRINGTON TOWNSHIP, BUCKS COUNTY, PA

GRADING PLAN

KRISTIN R. HOLMES, P.E.

 PA PE073604

File No.

 1518A_C2.0.dwg

HCE Job 1518A

 Date 3/29/2023

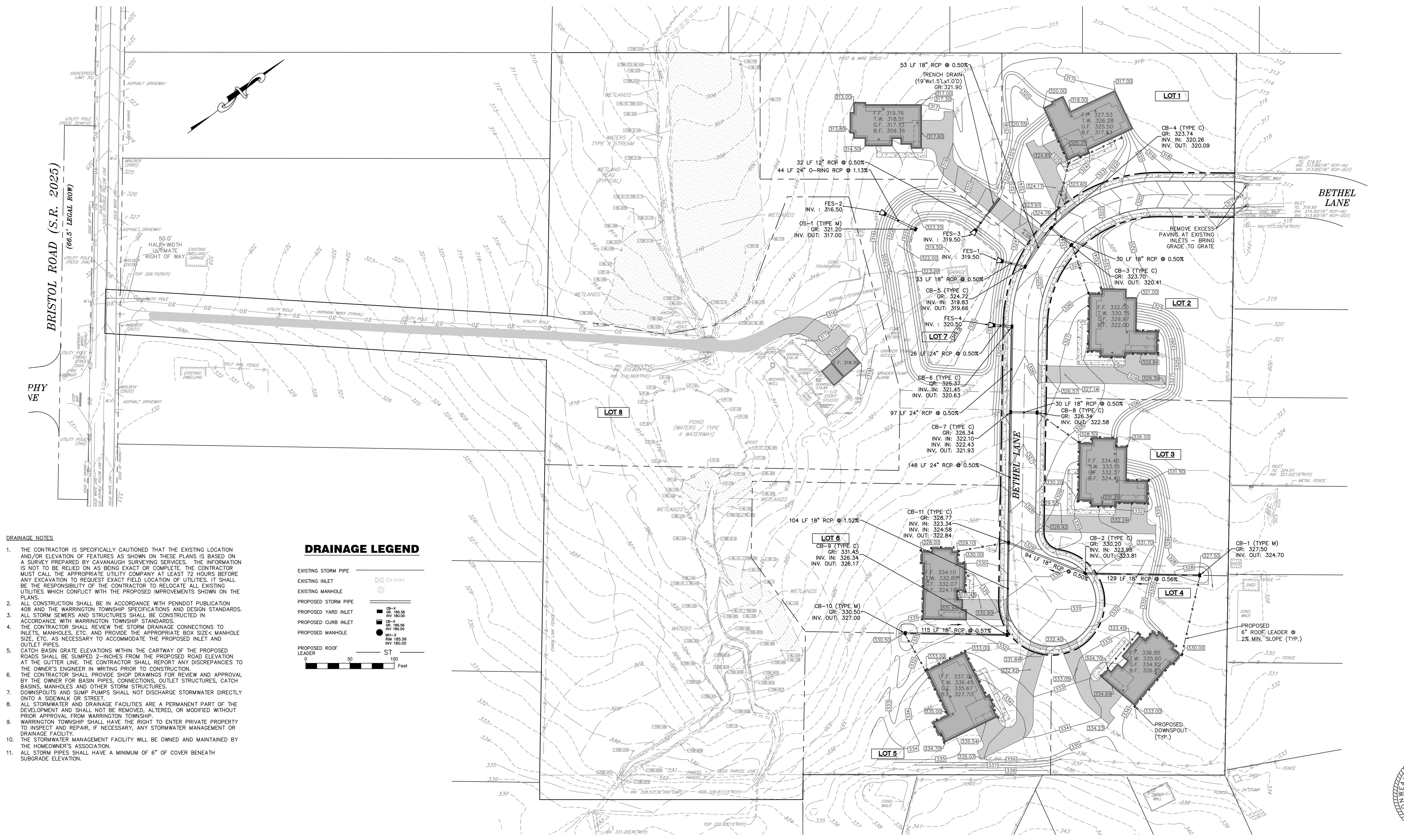
 Scale 1"=50'

 Designed KH

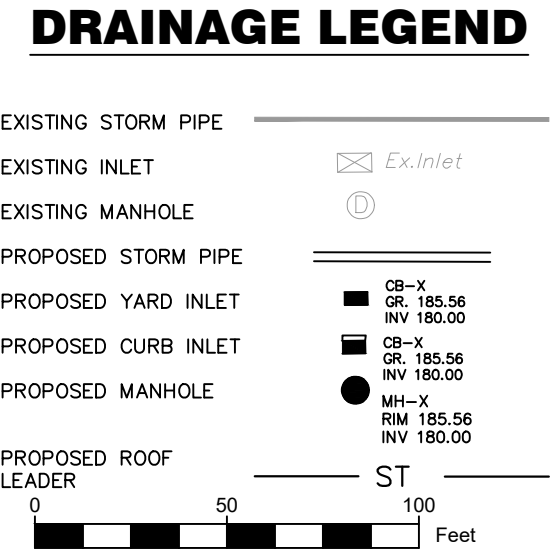
 Sheet 8 of 23

Drawing No.

C2.0



- DRAINAGE NOTES**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING LOCATION AND/OR ELEVATION OF FEATURES AS SHOWN ON THESE PLANS IS BASED ON A SURVEY PREPARED BY CAVALAUGH SURVEYING SERVICES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND THE WARRINGTON TOWNSHIP SPECIFICATIONS AND DESIGN STANDARDS.
 - ALL STORM SEWERS AND STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH WARRINGTON TOWNSHIP STANDARDS.
 - THE CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE < MANHOLE SIZE, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
 - CATCH BASIN GRATE ELEVATIONS WITHIN THE CARTWAY OF THE PROPOSED ROADS SHALL BE SUMPED 2-INCHES FROM THE PROPOSED ROAD ELEVATION AT THE GUTTER LINE. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S ENGINEER IN WRITING PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE OWNER FOR BASIN PIPES, CONNECTIONS, OUTLET STRUCTURES, CATCH BASINS, MANHOLES AND OTHER STORM STRUCTURES.
 - DOWNSPOUTS AND SUMP PUMPS SHALL NOT DISCHARGE STORMWATER DIRECTLY ONTO A SIDEWALK OR STREET.
 - ALL STORMWATER AND DRAINAGE FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED, OR MODIFIED WITHOUT PRIOR APPROVAL FROM WARRINGTON TOWNSHIP.
 - WARRINGTON TOWNSHIP SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT OR DRAINAGE FACILITY.
 - THE STORMWATER MANAGEMENT FACILITY WILL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
 - ALL STORM PIPES SHALL HAVE A MINIMUM OF 6" OF COVER BENEATH SUBGRADE ELEVATION.



Holmes Cunningham LLC
 409 E. Butler Ave.
 Unit 5
 Doylestown, PA 18901
 (215) 586-3330
 www.hcengineering.net

| REVISIONS | Description |
|-----------|------------------------------------|
| 8/11/2023 | REVISED PER TOWNSHIP COMMENTS |
| 11/8/2023 | REVISED PER BCDD COMMENTS |
| 1/12/2024 | REVISED PER TWP & UTILITY COMMENTS |

CALL BEFORE YOU DIG OR 1-800-4-A-DIG
 3 WORKING DAYS NOTICE FOR CONSTRUCTION OF UTILITY TRENCHES - STOP & CALL
 Formwork One
 1800-242-5176

ALL INFORMATION SHOWN IS THE RESPONSIBILITY OF THE CONTRACTOR. COMPANIES PRIOR TO ANY EXCAVATION (SERIAL P0381149)

2931 BRISTOL ROAD SUBDIVISION
 TWP# 50-026-072
 WARRINGTON TOWNSHIP, BUCKS COUNTY, PA

DRAINAGE PLAN

KRISTIN R. HOLMES, P.E.
 PA PE073604

| | |
|----------|----------------|
| File No. | 1518A_C3.0.dwg |
| HCE Job | 1518A |
| Date | 3/29/2023 |
| Scale | 1"=50' |
| Designed | NM |
| Sheet | 9 of 23 |

Drawing No.
C3.0

| REVISIONS | Date | Description |
|-----------|-----------|------------------------------------|
| | 8/11/2023 | REVISED PER TWP/SHAD COMMENTS |
| | 11/9/2023 | REVISED PER BCCD COMMENTS |
| | 1/12/2024 | REVISED PER TWP & UTILITY COMMENTS |

2931 BRISTOL ROAD SUBDIVISION
 TMP# 50-026-072
 WARRINGTON TOWNSHIP, BUCKS COUNTY, PA
LANDSCAPING PLAN

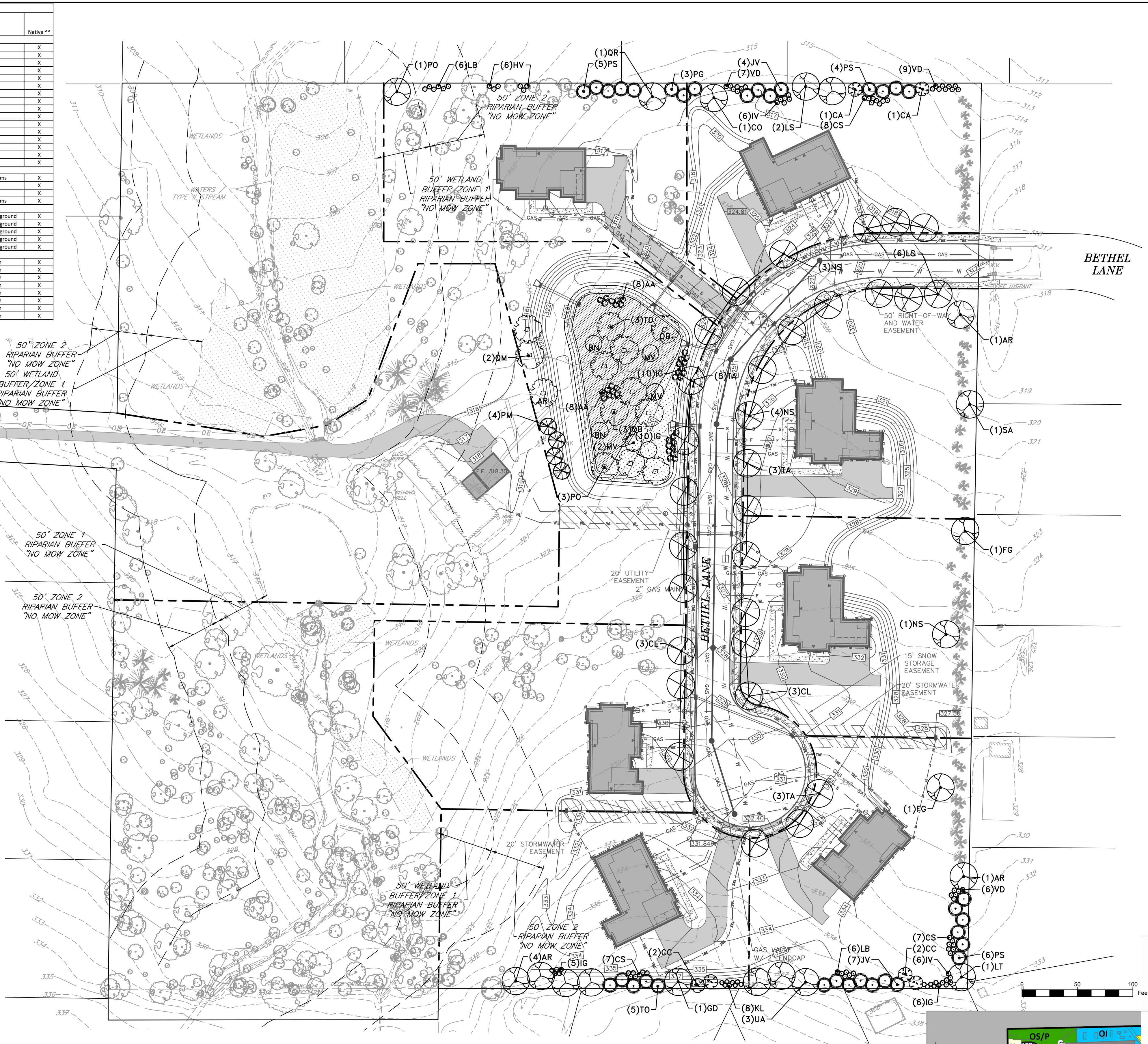
RACHEL S. VAHEY, RLA
 PA LIC. NO. LA001672

File No. 1518A_C8.0.dwg
 HCE Job 1518A
 Date 3/29/2023
 Scale 1" = 50'
 Designed RV
 Sheet 21 of 23
 Drawing No. **C8.0**

| PLANT SCHEDULE | | | | | | | | | |
|-------------------------|----------|---|--------------------------|-----------------------|----------------------|----------------------|---------|---------------------------------|-----------|
| Plan Symbol | Quantity | Botanical Name | Common Name | Min. Planting Caliper | Min. Planting Spread | Min. Planting Height | Remarks | Comments | Native ** |
| Shade Trees | | | | | | | | | |
| AR | 7 | <i>Acer rubrum</i> 'October Glory' | October Glory Red Maple | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| CL | 6 | <i>Celastrus lutea</i> | Yellowwood | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| CO | 1 | <i>Coryx ovata</i> | Shagbark Hickory | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| FG | 2 | <i>Fagus grandifolia</i> | American Beech | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| GD | 1 | <i>Gymnocladus dioica</i> | Kentucky Coffeetree | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| LS | 8 | <i>Liquidambar styraciflua</i> 'Rataundiba' | Fruticosa Sweetgum | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| LT | 1 | <i>Liriodendron tulipifera</i> | Tulip Poplar | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| NS | 8 | <i>Nyssa sylvatica</i> | Blackgum | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| PO | 4 | <i>Platanus occidentalis</i> | American Sycamore | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| QR | 1 | <i>Quercus alba</i> | Swamp White Oak | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| QM | 2 | <i>Quercus macrocarpa</i> | Bur Oak | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| QR | 1 | <i>Quercus rubra</i> | Northern Red Oak | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| SA | 1 | <i>Sassafras albidum</i> | Sassafras | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| TA | 11 | <i>Tilia americana</i> | American Linden | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| TD | 3 | <i>Taxodium distichum</i> | Bald Cypress | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| UA | 3 | <i>Ulmus americana</i> 'Princeton' | 'Princeton' American Elm | 2 1/2" cal. | - | 12-14' | B&B | Full, straight leader | X |
| Ornamental Trees | | | | | | | | | |
| BN | 2 | <i>Betula nigra</i> | River Birch | - | - | 6' | B&B | Multi-stem, min. 3 stems | X |
| CA | 2 | <i>Carpinus caroliniana</i> | American Hornbeam | 1 1/2" cal. | - | - | B&B | Full specimen | X |
| CC | 4 | <i>Cercis canadensis</i> | Eastern Redbud | 1 1/2" cal. | - | - | B&B | Full specimen | X |
| MV | 4 | <i>Magnolia virginiana</i> | Sweetgum Magnolia | - | - | 6' | B&B | Multi-stem, min. 5 stems | X |
| Evergreen Trees | | | | | | | | | |
| JV | 11 | <i>Juniperus virginiana</i> | Eastern Red Cedar | - | - | 8' | B&B | Symmetrical, branched to ground | X |
| PG | 3 | <i>Picea glauca</i> | White Spruce | - | - | 8' | B&B | Symmetrical, branched to ground | X |
| PM | 4 | <i>Pinus strobus</i> | Douglas Fir | - | - | 8' | B&B | Symmetrical, branched to ground | X |
| PS | 15 | <i>Pinus strobus</i> | Eastern White Pine | - | - | 8' | B&B | Symmetrical, branched to ground | X |
| TO | 5 | <i>Thuja occidentalis</i> 'Nigra' | Dark American Arborvitae | - | - | 8' | B&B | Symmetrical, branched to ground | X |
| Shrubs** | | | | | | | | | |
| AK | 16 | <i>Aronia arbutifolia</i> | Red Chokeberry | - | - | 18-24" | CONT | Heavy, full specimen | X |
| CS | 22 | <i>Cornus sericea</i> | Red Twig Dogwood | - | - | 18-24" | CONT | Heavy, full specimen | X |
| HV | 6 | <i>Hamamelis virginiana</i> | Witchhazel | - | - | 18-24" | CONT | Heavy, full specimen | X |
| IG | 37 | <i>Ilex glabra</i> | Inkberry | - | - | 18-24" | CONT | Heavy, full specimen | X |
| IV | 6 | <i>Ilex verticillata</i> | Winterberry | - | - | 18-24" | CONT | Heavy, full specimen | X |
| KL | 8 | <i>Kalmia latifolia</i> | Mountain Laurel | - | - | 18-24" | CONT | Heavy, full specimen | X |
| LB | 12 | <i>Lindera benzoin</i> | Spicebush | - | - | 18-24" | CONT | Heavy, full specimen | X |
| VD | 22 | <i>Viburnum dentatum</i> | Arrowwood Viburnum | - | - | 18-24" | CONT | Heavy, full specimen | X |

** Plant in continuous mesh bed (2'-3' depth) until fully established.
 ** North American native, hardy to Zone 6.

BRISTOL ROAD (S.R. 2025)
 MURPHY LANE



| Ordinance Item | Requirement | Plan Proposed |
|--|---|--|
| S.O. 305-329.D.(8) Replacement trees | If greater than the allowable percentage of trees are removed, they shall be replaced in accordance with Table 9. Permitted removal is 25% per Saldo 305-505.E.(8)(a)(7). There are a total of 790 viable trees (greater than 3" caliper). 790 x .25 = 198 trees are permitted to be removed without replacement. There are 176 trees proposed to be removed within the limit of disturbance. NO REPLACEMENT TREES ARE REQUIRED | N/A |
| S.O. 305-329.E.(5) Street Trees | Street trees shall be planted no closer than 40 feet on center nor further than 50 feet on center for each side of the street. Internal Road: 1490' along right-of-way 1490/50 = 30 trees | 30 Shade trees |
| S.O. 305-329.E.(6)(b) Softening buffer | Softening buffer is required along the sides and rear of property lines where existing vegetation is not sufficient. Per 100 linear feet: 4 shade trees + 8 shrubs Northwestern property line: 775' (775/100) x 4 = 31 shade trees ^ (775/100) x 8 = 62 shrubs ^^ Northeastern property line: 817' - 584' (existing vegetation) = 233' (233/100) x 4 = 10 shade trees ^ (233/100) x 8 = 19 shrubs Southeastern property line: 772' - 372' (existing vegetation) = 400' (400/100) x 4 = 16 shade trees ^ (400/100) x 8 = 32 shrubs Southwestern property line: 768' (not incl. flag stem) - 678' (existing vegetation) = 0' | 19 existing trees 5 Shade trees 2 Ornamental trees 16 Evergreen trees 42 Shrubs 7 Shade trees 6 Evergreen trees 19 Shrubs 8 Shade trees 4 Ornamental trees 12 Evergreen trees 32 Shrubs |
| S.O. 305-322.B.(3)(p) & 305-329.E.(8) Stormwater management & Drainage and detention basin landscaping | Basin floors shall be planted and landscaped with native plants Basin perimeter shall be planted with 1 shade tree + 2 shrubs for each 30 linear feet of perimeter ** Basin perimeter: 545' 540/30 = 18 shade trees ^ (540/30) x 2 = 36 shrubs | native seed mix 13 Shade trees 6 Ornamental trees 4 Evergreen trees 36 Shrubs |
| Total Landscape Proposed | | 63 Shade Trees 12 Ornamental Trees 38 Evergreen Trees 129 Shrubs |

^ 50% of shade trees can be substituted with evergreen or ornamental trees at a rate of 2:1 and shrubs at a rate of 10:1.
 ^^ Northwestern property line: 20 shrubs proposed as 2 shade trees; Southwestern property line: 10 shrubs proposed as 1 shade tree
 ** Partial waiver requested to allow some of the perimeter plantings to be placed within the basin footprint to promote increased infiltration, water quality improvement and the naturalization of the detention basin.

