APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 8/27/2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:
DISTRICT: Norfolk Regulatory WR-RW
FILE NAME: Pheasant Ridge Memory Care PROJECT NUMBER: NAO-2015-1227

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:VA County/parish/borough: Roanoke City: Roanoke
Center coordinates of site (lat/long in degree decimal format): Lat. 37.1329° **N**, Long. -79.5738° **W**.
Universal Transverse Mercator:
Street Address: 4414 Pheasant Ridge Road Roanoke VA 24014
Name of nearest waterbody: Ore Branch to the Roanoke River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Roanoke River
Name of watershed or Hydrologic Unit Code (HUC): HUC RU14
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 8/19/2015

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Not Applicable.**
      Elevation of established OHWM (if known):n/a.

2. **Non-regulated waters/wetlands (check if applicable):**[3]

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 100 **acres**
Drainage area: 100 **acres**
Average annual rainfall: 41.22 inches
Average annual snowfall: 20 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: NA.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]: Intermittant tributary to RPW Cook Creek, to RPW Glade Creek, to RPW TInker Creek to TNW (Roanoke River).
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) Chemical Characteristics:

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs[8] that flow directly or indirectly into TNWs.
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.[9]
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos*.

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:by Lumsden and Associates, as surveyed and shown on the map titled, "Wetlands Delineation and Comprehensive Development Plan, Pheasant Ridge Memory Care" dated May 20, 2015 and Corps date stamped as received August 4, 2014 .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☒ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: There are no waters of the US on the site at4414 Pheasant Ridge Road Roanoke VA 24014. There were areas of water scoured earth, there wasn't a continuous bed and bank or ordinary high water mark.At the upper end, there were braided channels in the leaf litter, but no real bed and bank or OHWM. Downgradient, there would be a bed, but little bank, for 20 or 30 feet, and then leaves, trash, woody debris for 50 feet. Then another short scoured area, then back to the leaves, trash, and debris. There were two runs with a bed and a bank, but they were separated by a 100 feet of trash and debris. At the end near the house, there was no channel at all for over 400 feet because people have dumping all kinds of trash, tires, and debris for years..

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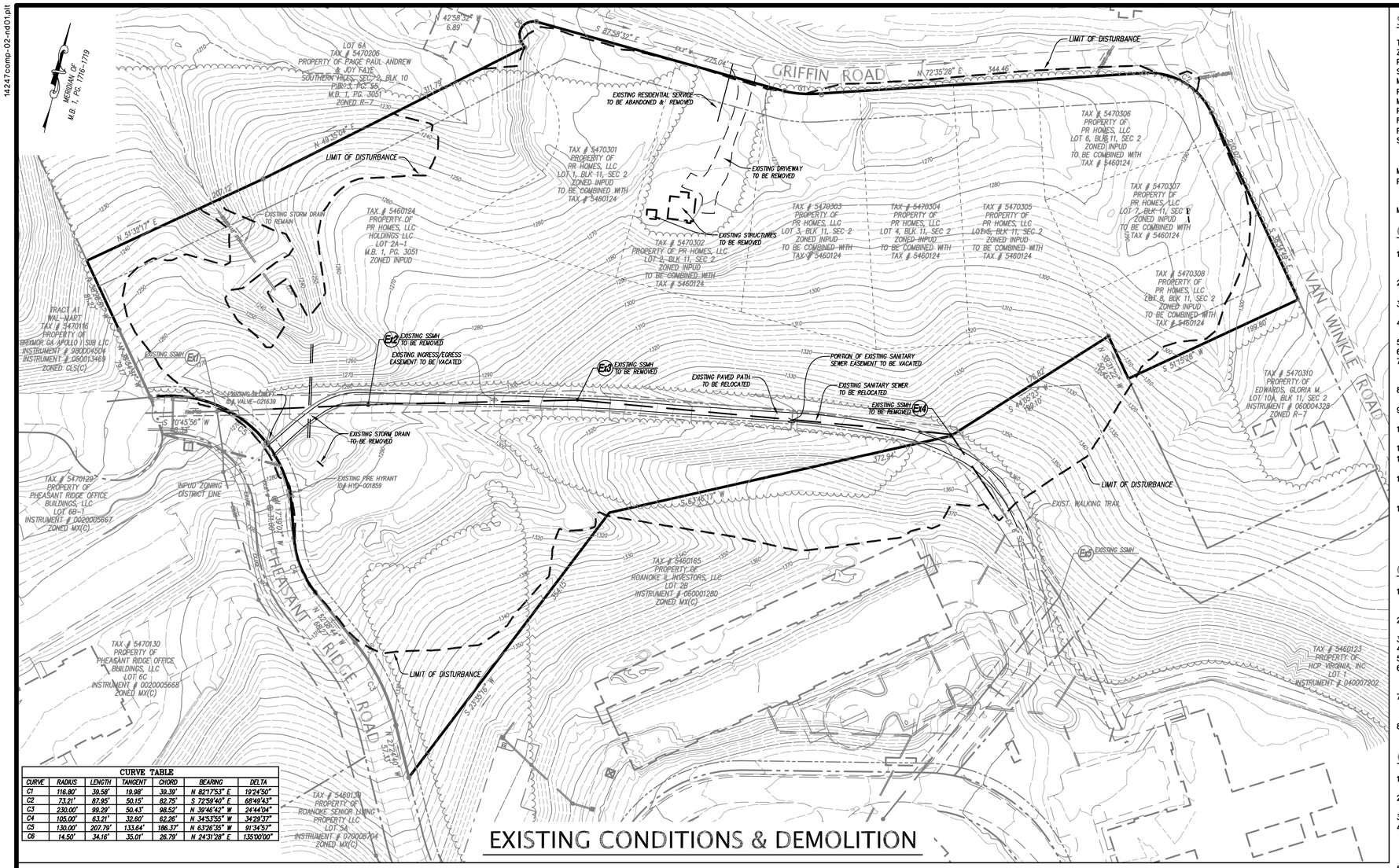
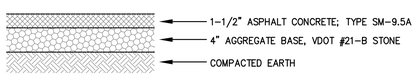


CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	116.80'	39.58'	19.98'	39.39'	N 82°17'53" E	19°24'50"
C2	73.21'	87.95'	50.15'	82.75'	S 72°59'40" E	68°49'43"
C3	230.00'	99.29'	50.43'	98.52'	N 39°46'42" W	24°44'04"
C4	105.00'	63.21'	32.80'	62.26'	N 34°53'55" W	34°29'37"
C5	130.00'	207.79'	133.64'	186.37'	N 63°26'35" W	91°34'57"
C6	14.50'	34.16'	35.01'	26.79'	N 24°31'28" E	135°00'00"

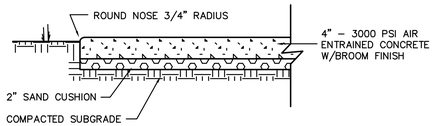
EXISTING CONDITIONS & DEMOLITION

60' 0 60'
SCALE: 1" = 60'

NOTE: CONTRACTION JOINTS @ 4' O.C.
EXPANSION JOINTS MAX. 30' APART.
CURB & SIDEWALK MAY BE POURED MONOLITHICALLY.

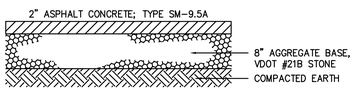


WALKING PATH PAVEMENT DETAIL
NO SCALE

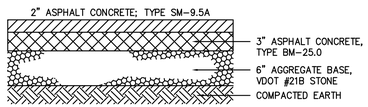


CONCRETE WALK
NO SCALE

PAVEMENT NOTES:
1. THE SIZE 21B AGGREGATE SHALL BE PRIMED WITH APPROXIMATELY 0.35 GAL/SY OF RC-250 ASPHALT AND COVERED WITH 16 TO 18 LBS/SY OF SIZE 8-P AGGREGATE BEFORE PLACING SM-9.5A FOR STANDARD PAVEMENT ONLY.



STANDARD-DUTY ASPHALT PAVEMENT DETAIL
NO SCALE



HEAVY-DUTY ASPHALT PAVEMENT DETAIL
NO SCALE

Received August 4, 2015 by Blue Ridge FO USACE Norfolk
Approved October 29, 2015.
This plan map is bing used as the official delineation map since no WOUS were found on site August 27, 2015

SITE AND ZONING TABULATIONS

TAX NUMBERS: 5460124, 5470301, 5470302, 5470303, 5470304, 5470305, 5470306, 5470307, 5470308
ZONING DISTRICT: INPUD
PROPOSED USE: GROUP CARE FACILITY, NURSING HOME
SITE ACREAGE: 11.376 ACRES
MAXIMUM DENSITY: 1 DWELLING UNIT PER 1,800 SF
PROPOSED DENSITY: 1 DWELLING UNIT PER 2,360 SF (INCLUDING FUTURE FACILITY)
MAXIMUM IMPERVIOUS SURFACE RATIO: 80%
PROPOSED IMPERVIOUS SURFACE RATIO: 22%
REQUIRED OPEN SPACE: 300 SF PER DWELLING UNIT
PROPOSED OPEN SPACE: 356 SF PER DWELLING UNIT (64 DWELLING UNITS - MEMORY CARE FACILITY)
SETBACK REQUIREMENTS:
ALL SETBACKS ARE ESTABLISHED BY THE DEVELOPMENT PLAN FOR THE DISTRICT. SETBACKS FOR THIS INPUD DISTRICT ARE ZERO FEET (0') FOR FRONT, REAR AND SIDE YARDS.
MAXIMUM HEIGHT: AS SPECIFIED ON THE DEVELOPMENT PLAN FOR THE DISTRICT; SEE EXHIBIT "B-1"
PARKING REQUIREMENTS: AS SPECIFIED ON THE DEVELOPMENT PLAN FOR THE DISTRICT; SEE EXHIBIT "A-1"
PROPOSED PARKING FOR MEMORY CARE FACILITY: 52 SPACES
PARKING SPACES PROVIDED = 52 SPACES
MINIMUM TREE CANOPY: 10% - SEE LANDSCAPE PLAN, SHEET 11, FOR ADDITIONAL INFORMATION

GENERAL NOTES

1. OWNER/DEVELOPER: SMITH/PACKETT MED-COM, L.L.C.
4423 PHEASANT RIDGE ROAD, SW, SUITE 301
ROANOKE, VA 24014
2. THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. DATED 2006 AND UPDATED IN 2013.
3. TOPOGRAPHY DATA BASED ON AERIAL MAPPING BY MCKENZIE SNYDER DATED 12/13/05 AND SUPPLEMENTED WITH FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. IN 2006 AND 2007.
4. NO TITLE REPORT WAS FURNISHED FOR THIS PROJECT, AND ENCUMBRANCES MAY EXIST THAT AFFECT THE SUBJECT PROPERTY THAT ARE NOT SHOWN HEREON.
5. THE DEVELOPMENT SHOWN ON THESE PLANS SHALL BE ACCESSED BY PRIVATE STREETS.
6. THE DEVELOPMENT SHOWN ON THESE PLANS SHALL BE SERVED BY PUBLIC WATER AND SANITARY SEWER.
7. ALL EXTERIOR LIGHTS SHALL BE DESIGNED, ARRANGED, AND LOCATED SO AS NOT TO DIRECT GLARE ON ADJACENT RESIDENTIAL PROPERTIES OR RIGHT OF WAYS. THE MAXIMUM LIGHTING DENSITY AT ADJOINING PROPERTIES OR RIGHTS OF WAY SHALL NOT EXCEED 0.5 FOOT CANDLES.
8. ANY EXTERIOR SIGN WILL REQUIRE A SEPARATE SIGN PERMIT. NO NEW EXTERIOR SIGNS ARE PROPOSED WITH THIESE PLANS.
9. ALL REFUSE DUMPSTERS AND/OR CONTAINERS SHALL BE SCREENED FROM SURROUNDING VIEWS PURSUANT TO THE REQUIREMENTS OF SECTION 36.2-647 AND TABLE 647-1.
10. MECHANICAL EQUIPMENT LOCATED ON THE GROUND OR MOUNTED ON A ROOF SHALL BE SCREENED PURSUANT TO THE REQUIREMENTS OF SECTION 36.2-647 AND TABLE 647-1.
11. ALL UTILITY SERVICE LATERALS, INCLUDING ELECTRIC, SHALL BE INSTALLED UNDERGROUND.
12. NO CONSTRUCTION/FIELD REVISIONS ARE ALLOWED WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER, THE CITY OF ROANOKE, AND/OR THE WESTERN VIRGINIA WATER AUTHORITY.
13. THIS PROPERTY IS NOT LOCATED WITHIN THE LIMITS OF A SPECIAL FLOOD HAZARD AREA AS DESIGNATED BY FEMA. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAP AND HAS NOT BEEN VERIFIED BY ACTUAL FIELD ELEVATIONS. SEE MAP NUMBER 51161C0252G. DATED SEPTEMBER 28, 2007. ZONE "X" UNSHADED.
14. THIS PLAT DOES NOT GUARANTEE THE EXISTENCE OR LOCATION OF ANY UNDERGROUND UTILITY. STORM DRAIN STRUCTURES, SANITARY SEWER MANHOLES, AND OTHER SURFACE UTILITIES WERE FIELD LOCATED. ALL UNDERGROUND UTILITIES SHOWN WERE ESTABLISHED USING ABOVE GROUND STRUCTURES, MISS UTILITY MARKINGS AND AVAILABLE UTILITY MAPS. ALL UNDERGROUND UTILITY LINES ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO THE START OF ANY CONSTRUCTION.

CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY STANDARDS AND SPECIFICATIONS AND THE CURRENT EDITION OF THE VDOT ROAD AND BRIDGE STANDARDS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION.
5. SEE VDOT ROAD AND BRIDGE STANDARDS FOR CONCRETE CURB AND STORM DRAINAGE DETAILS.
6. THE CONTRACTOR AND OR OWNER SHALL PROVIDE A STORAGE CONTAINER FOR TEMPORARY STORAGE AND DISPOSAL OF LAND CLEARANCE DEBRIS AND BUILDING MATERIALS. ON-SITE BURIAL OF MATERIAL SHALL NOT BE PERMITTED.
7. ANY NEW ALIGNMENTS, CHANGES IN GRADES, ALTERNATE PIPE SIZES, MANHOLES OR EROSION & SEDIMENT CONTROL MEASURES WILL REQUIRE A NEW SET OF PLANS STAMPED BY THE CONSULTING ENGINEER AND APPROVED BY THE CITY OF ROANOKE.
8. ALL NECESSARY UTILITY LATERAL CONDUITS (I.E. WATER, SEWER, STORM DRAIN, GAS, ELECTRIC, COMMUNICATIONS) SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF BASE MATERIAL.

GRADING NOTES

1. AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION, STRUCTURES, AND OTHER PHYSICAL FEATURES IN PREPARATION OF GRADING.
2. TOPSOIL SHALL BE REMOVED FROM THE CLEARED AREA AND STOCKPILED FOR FUTURE USE. A SEPARATE E & S PLAN MAY BE REQUIRED FOR OFFSITE STOCKPILES.
3. FILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER AND ROCKS LARGER THAN 6 INCHES IN DIAMETER.
4. FILL MATERIAL SHALL BE PLACED AND COMPACTED IN EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, STANDARD PROCTOR. MAINTAIN MOISTURE CONTENT OF FILL MATERIAL WITHIN THREE (3) PERCENT OF OPTIMUM TO ATTAIN REQUIRED COMPACTION DENSITY.
5. A DETAILED SUBSURFACE SOILS REPORT HAS NOT BEEN FURNISHED TO THE DESIGNING ENGINEER (LUMSDEN ASSOCIATES, P.C.). A QUALIFIED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF VIRGINIA, SHOULD BE CONSULTED CONCERNING SOIL STABILITY, SLOPE STABILIZATION, SOIL COMPACTION, TESTING, AND OTHER SOIL CHARACTERISTICS. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING FROM SAME.

WESTERN VIRGINIA WATER AUTHORITY GENERAL NOTES

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (WVWA).
2. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH ROANOKE CITY ENGINEERING DIVISION, AND THE WESTERN VIRGINIA WATER AUTHORITY, TO BE HELD AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
3. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE WESTERN VIRGINIA WATER AUTHORITY AND ROANOKE CITY INSPECTORS.
4. THE DEVELOPER OR CONTRACTOR SHALL SUPPLY THE CITY, AND THE WESTERN VIRGINIA WATER AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE TENTATIVE ACCEPTANCE.
5. FIELD CORRECTIONS SHALL BE APPROVED BY THE ROANOKE CITY ENGINEERING DIVISION AND THE WESTERN VIRGINIA WATER AUTHORITY PRIOR TO SUCH CONSTRUCTION.
6. THE WATER SERVICES FOR THIS DEVELOPMENT WILL REQUIRE A CONCRETE VAULT. CONTACT CLEAR FLOW AT (540)-942-3300 TO ORDER THE VAULT. THE APPLICANT IS RESPONSIBLE FOR PAYMENT, COORDINATION OF THE VAULT DELIVERY, AND INSTALLATION OF THE WATER SERVICE BETWEEN THE AUTHORITY MAIN AND THE VAULT. PRIOR TO START OF CONSTRUCTION, CALL THE AUTHORITY INSPECTOR AT 537-3243. THE APPLICANT IS RESPONSIBLE FOR ALL ASPECTS AND COMPONENTS OF THE METER SERVICE AND VAULT IN ACCORDANCE WITH AUTHORITY STANDARDS, INCLUDING BUT NOT LIMITED TO PAVEMENT RESTORATION, THE TAPPING SLEEVE, VALVE AND APPURTENANCES. THE WET TAP WILL BE MADE BY THE AUTHORITY UPON PAYMNET AND SCHEDULING. FOLLOWING PAYMNET FOR TAP, CALL UTILITY LINE SERVICES AT 540-853-2513, THREE (3) WORKING DAYS PRIOR TO ANTICIPATED TAP DATE.
7. PROPOSED HYDRANTS SHALL BE INSTALLED BY THE CONTRACTOR.

AVAILABLE FIRE FLOW NOTE:

FIRE FLOW MODELING WAS PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY, AND IS REFLECTIVE OF CALCULATED CHANGES TO THE SYSTEM BEING CONSTRUCTED AS OF THE DATE OF THESE PLANS. REFER TO SHEET 3, THIS SET, FOR CALCULATED FIRE FLOWS AT 20 PSI RESIDUAL PRESSURE FOR EACH OF THE PROPOSED NEW HYDRANTS.

LUMSDEN ASSOCIATES, P.C.
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COMMONWEALTH OF VIRGINIA
HOWARD BOGGS
LICENSE NO. 000920
FOR REVIEW ONLY
NOT FOR CONSTRUCTION
LANDSCAPE ARCHITECT

NOTES, EXISTING CONDITIONS AND DEMOLITION PLAN

COMPREHENSIVE DEVELOPMENT PLAN FOR
PHEASANT RIDGE MEMORY CARE
PREPARED FOR
SMITH/PACKETT MED-COM, L.L.C.
SITUATED AT 4414 PHEASANT RIDGE ROAD, SW
CITY of ROANOKE, VIRGINIA

REVISIONS		
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: May 20, 2015
SCALE: AS SHOWN
COMMISSION NO: 14-247
SHEET 2 OF X

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