According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

EXHIBIT C

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
Onion *(Allium Cepa L.)*

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
ADDRESS *(Street and No. or RD No., City, State, Zip Code, and Country)*		FOR OFFICIAL USE ONLY PVPO NUMBER

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (i.e., 0 8 9 or 0 9) when the number is either 99 or less or 9 or less.

1. TYPE:

☐ 1 = Bulb 2= Bunching

☐ 1= Short Day 2 = Long Day

☐☐ To ☐☐ Degrees mean latitude – Adaptation range

☐ Maturity (days): 1 = Early (75-90) 2 = Medium (100 – 120) 3 = Late (> 130)

2. PLANT:

☐☐ cm. Height above soil line to highest point of any foliage

☐☐ cm. Taller than _____ (Comparable variety)

☐☐ cm. Shorter than _____ (Comparable variety)

☐ 1 = Erect (Spartan Gem) 2 = Intermediate 3 = Floppy (Epoch)

3. LEAF:

☐☐ cm. Long (before maturity yellowing begins)

☐☐ mm. Wide ☐☐ mm Thick at midlength of longest leaf

☐ Color: 1 = Light Green (Early Grano) 2 = Medium Green (Yellow Bermuda) 3 = Blue Green (Australian Brown U.C. No. 1)

☐ Bloom: 1 = None – Glossy 2 = Light (Early Grano) 3 = Medium (Crystal Wax) 4 = Heavy (California Early Red)

4. SHEATH:

☐☐ mm Column length (Height form soil line to base of lowest succulent leaf) ☐☐ mm Diameter at midlength

☐☐ Scape: cm. From soil line to base of inflorescence

☐☐ Scape: mm. Diameter at midlength

5. INFLORESCENCE:

Umbel (for seed production)

☐ Maximum no. per plant ☐ Minimum no. per plant ☐ Average no. per plant

☐☐ mm. Diameter ☐ 1 = Compact 2 = Loose/Open 3 = Shaggy

☐ Spathe: 1 = Long Beak 2 = Short Beak ☐ Flower Color: 1 = White 2 = Green 3 = Bright Green

☐ mm. Anther length

☐ Anther Color: 1 = Light Green 2 = Dark Green 3 = Yellow 4 = Pale Yellow 5 = Chocolate 6 = Red

☐ Pollen Viability: 1 = Sterile 2 = Fertile ☐ Sepal Shape: 1 = Long Pointed 2 = Round Short

6. BULB:

☐☐ Average number bulbs per meter

☐ Size (Harvest): 1 = Small (Red Creole) 2= Medium (Australian Brown U.C. No. 1) 3 = Large (Early Grano)

☐ Shape (see attached chart): 1 = Globe (White Sweet Spanish) 2 = Deep Globe (Abundance)
3 = Flt. Globe (Australian Brn. U.C. No. 1) 4 = Top Shape (Texas Grano 502)
5 = Deep Flat (Granex) 6 = Thick Flat (Ebenezer)
7 = Flat (Crystal Wax) 8 = Torpedo-Long Oval (Italian Red)

☐☐ cm. Height ÷ ☐☐ cm. Diameter = _____ Shape Index

☐ 1 = Invaginate 2 = Evaginate

☐☐ Color (Skin): 01 = Brown (Australian Brn. U.C. No. 1) 02 = Purplish Red (Itanian Red)
03 = Buff Red (Red Creole) 04 = Pinkish Yellow (Ebenezer)
05 = Brownish Yellow (Mt. Danvers) 06 = Deep Yellow (Brigham Yellow Globe)
07 = Medium Yellow (Early Yellow Globe) 08 = Pale Yellow (Yellow Bermuda)
09 = White (White Sweet Spanish) 10 = Other (Specify) _____

☐ Color (Interior): 1 = Pink 2 = Red 3 = Purplish Red 4 = White
5 = Cream 6 = Light Green-Yellow 7 = Dark Green-Yellow

☐ Scales: 1 = Few (Crystal Wax) 2 = Medium (Australian Brown U.C. No. 1) 3 = Many (Sweet Spanish)

☐ Scales: 1 = Thick (Australian Brown U.C. No. 1) 2 = Medium (Red Creole) 3 = Thin (Crystal Wax)

☐ Scale Retention: 1 = Very Good (Australian Brn. U.S. No. 1) 2 = Good (Ebenezer)
3 = Fair (Red Wethersfield) 4 = Poor (Crystal Wax)

☐ Pugence: 1 = Mild (Early Grano) 2 = Medium (Crystal Wax) 3 = Strong (White Creole)

☐ Storage: 1 = Good (Ebenezer) 2 = Fair (Yellow Globe Danvers) 3 = Poor (Crystal Wax)

7. DISEASE RESISTANCE (0 = Not tested 1 = Susceptible 2 = Resistant)

☐ Black Mold ☐ Neck Rot ☐ Puple Blotch ☐ Smut

☐ Mildew ☐ Pink Root ☐ Smudge ☐ Yellow Dwarf

8. INSECT RESISTANCE: (0 = Not tested 1 = Susceptible 2 = Resistant)

☐ Thrip ☐ Other (Specify) _____

9. INDICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

Character	Name of Variety	Character	Name of Variety
Leaf Height		**Flower Ball**	
Leaf Color		**Bulb Color**	
Leaf Bloom/Wax		**Bulb Size**	
Flower Stalk		**Bulb Shape**	
Maturity at Same Location			

REFERENCES

Jones, H. A. and Mann, L. K. 1963 – Onions and Their Allies, Interscience Publishers, Inc., New York

USDA Misc. Pub. No. 435, 1941 – Description of Types of Principal American Varieties of Onions

Hayward, H. E., 1938 – The Structure of Economic Plants, McMillan, New York (Reprint 1967)

Ag Research, 7 (8):8 – Feb. 1959 – Branding Onion Outcasts

Salem, I. A. 1966 – Inheritance of Onion Buld Shape, Iowa St. University – PhD thesis