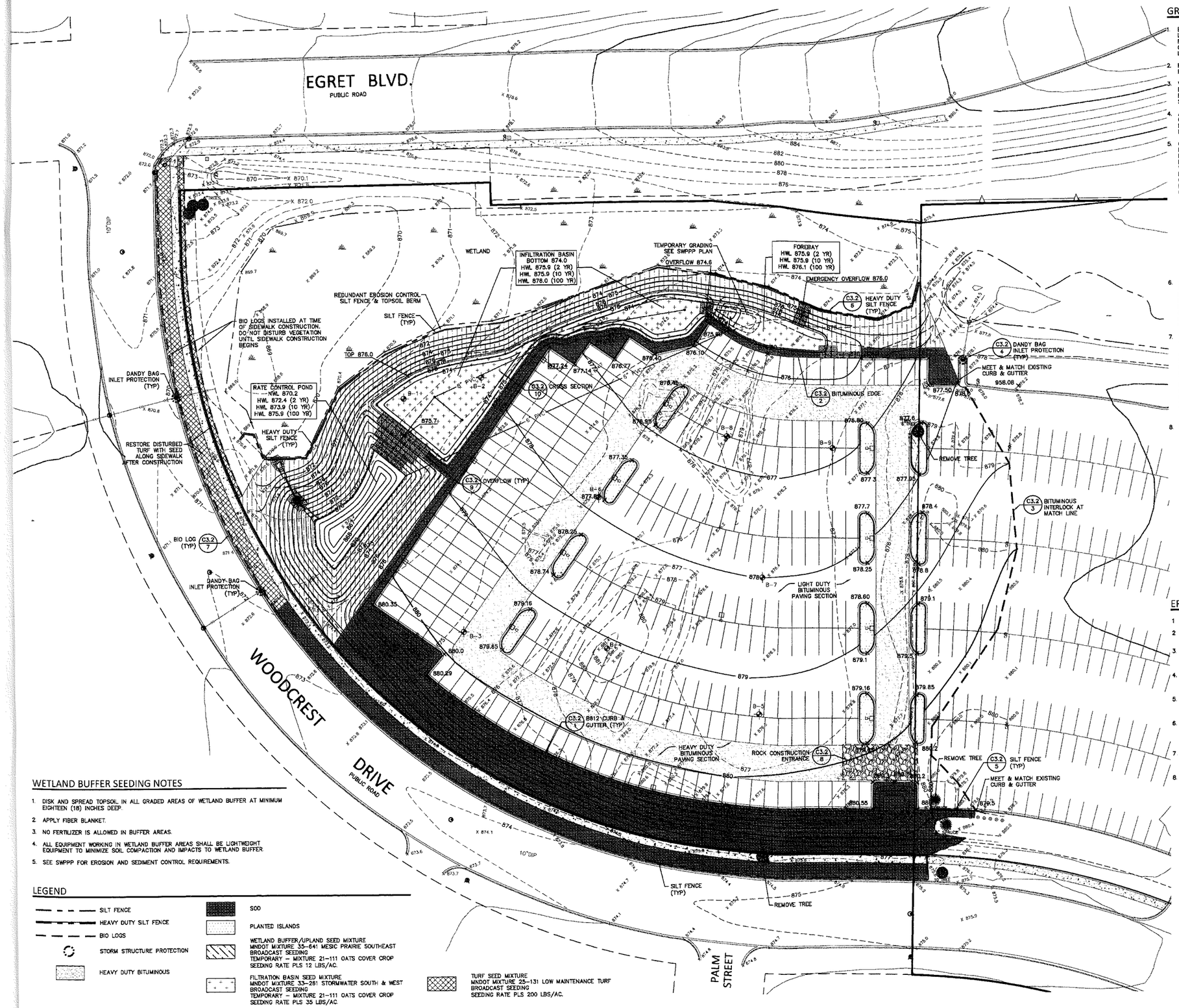

WETLAND BUFFER SEEDING NOTES

1. DISK AND SPREAD TOPSOIL IN ALL GRADED AREAS OF WETLAND BUFFER AT MINIMUM EIGHTEEN (18) INCHES DEEP.
2. APPLY FIBER BLANKET.
3. NO FERTILIZER IS ALLOWED IN BUFFER AREAS.
4. ALL EQUIPMENT WORKING IN WETLAND BUFFER AREAS SHALL BE LIGHTWEIGHT EQUIPMENT TO MINIMIZE SOIL COMPACTION AND IMPACTS TO WETLAND BUFFER.
5. SEE SWPPP FOR EROSION AND SEDIMENT CONTROL REQUIREMENTS.

LEGEND

- SILT FENCE
- HEAVY DUTY SILT FENCE
- BIO LOGS
- STORM STRUCTURE PROTECTION
- HEAVY DUTY BITUMINOUS
- SOD
- PLANTED ISLANDS
- WETLAND BUFFER/UPLAND SEED MIXTURE
  MNDOT MIXTURE 35-641 MESIC PRAIRIE SOUTHEAST
  BROADCAST SEEDING
  TEMPORARY – MIXTURE 21-111 OATS COVER CROP
  SEEDING RATE PLS 12 LBS/AC.
- FILTRATION BASIN SEED MIXTURE
  MNDOT MIXTURE 33-261 STORMWATER SOUTH & WEST
  BROADCAST SEEDING
  TEMPORARY – MIXTURE 21-111 OATS COVER CROP
  SEEDING RATE PLS 35 LBS/AC
- TURF SEED MIXTURE
  MNDOT MIXTURE 25-131 LOW MAINTENANCE TURF
  BROADCAST SEEDING
  SEEDING RATE PLS 200 LBS/AC.

GRADING NOTES

1. BACKGROUND INFORMATION AND TOPOGRAPHIC SURVEY PROVIDED BY CORNERSTONE LAND SURVEYING INC., STILLWATER, MINNESOTA ON JANUARY 13, 2015, EXPRESSLY FOR THIS PROJECT. WETLANDS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY, INC. IN OCTOBER, 2014 AND WETLAND FLAGS LOCATED BY CORNERSTONE LAND SURVEYING INC., ON OCTOBER 10, 2014.
2. BACKGROUND INFORMATION FOR EXISTING LOT BASED ON ORIGINAL SITE PLAN PREPARED BY DARWIN LINDAHL ARCHITECTS, MINNEAPOLIS, MINNESOTA.
3. VERIFY ALL FIELD CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. IF ANY DISCREPANCIES OR UNKNOWN UTILITIES ARE FOUND THAT IMPACT DESIGN OR IMPAIR CONSTRUCTION, THE ENGINEER AND OWNER SHOULD BE IMMEDIATELY NOTIFIED.
4. ALL TOPSOIL SHALL BE REMOVED FROM WITHIN THE PROPOSED PARKING LOT. A GEOTECHNICAL ENGINEER OR THEIR DESIGNATED REPRESENTATIVE SHALL OBSERVE THE PROJECT EXCAVATIONS TO VERIFY THAT UNSUITABLE MATERIALS HAVE BEEN PROPERLY REMOVED AND THAT STRUCTURAL FILL IS PLACED APPROPRIATELY.
5. ON-SITE NON-ORGANIC SAND IS GENERALLY SUITABLE FOR STRUCTURAL FILL. PLACEMENT OF STRUCTURAL FILL SHALL BE OBSERVED AND TESTED BY AN EXPERIENCED TECHNICIAN OR ENGINEER TO VERIFY THAT PROPER COMPACTION HAS BEEN ACHIEVED. STRUCTURAL FILL SHALL BE MOISTURE CONDITIONED (DRIED OR WETTED) AS APPROPRIATE PRIOR TO PLACEMENT. MOISTURE CONDITIONED ENGINEERED FILL SHALL BE PLACED AND COMPACTED IN LOOSE LIFTS OF 8 INCHES OR LESS. EACH LIFT OF FILL SHOULD BE COMPACTED BY LARGE VIBRATORY EQUIPMENT UNTIL THE IN-PLACE SOIL DENSITY IS EQUAL TO OR GREATER THAN THE CRITERIA ESTABLISHED WITHIN THE FOLLOWING TABULATION.

TYPE OF CONSTRUCTION	COMPACTION CRITERIA (% RESPECTIVE PROCTOR)
GENERAL FILL (GREEN SPACE)	95
ENGINEERED FILL PLACED AS PAVEMENT AGGREGATE BASE	100
ENGINEERED FILL PLACED MORE THAN 3 FEET BELOW PAVEMENT AGGREGATE BASE	100
ENGINEERED FILL PLACED IN UPPER 3 FEET BELOW PAVEMENT AGGREGATE BASE	100
UTILITY TRENCHES	100

6. SIDEWALLS SHALL BE BENCHED OR SLOPED TO PROVIDE SAFE WORKING CONDITIONS AND STABILITY FOR ENGINEERED FILL PLACEMENT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ASSESSING THE STABILITY OF AND EXECUTING PROJECT EXCAVATIONS USING SAFE METHODS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR NAMING THE 'COMPETENT INDIVIDUAL' AS PER SUBPART P OF 29 CFR 1926.6 (FEDERAL REGISTER – OSHA). IF SOIL CORRECTION IS REQUIRED IT SHALL EXTEND 3 FEET OUTSIDE OF THE PAVEMENT OR BUILDING LIMITS PLUS ONE FOOT HORIZONTAL FOR EVERY VERTICAL FOOT OF CORRECTION.
7. THE CONTRACTOR SHALL PROTECT THE SUBGRADE FROM INCLEMENT WEATHER TO MAINTAIN STABILITY. FOLLOWING REMOVAL OF TOPSOIL AND ANY UNSUITABLE SOILS, THE RESULTING SUBGRADE SHOULD BE SCARIFIED AND RE-COMPACTED TO A DEPTH OF 12 INCHES. A PROOFROLL TEST SHOULD THEN BE PERFORMED TO DETERMINE SOFT OR UNSTABLE SUBGRADE AREAS. IF RUTTING OR LOCALIZED UNSTABLE SUBGRADE AREAS ARE OBSERVED, THOSE AREAS SHOULD BE SUBCUT, MOISTURE-CONDITIONED, AND RE-COMPACTED OR REMOVED TO A STABLE DEPTH. THE PROOF ROLL SHOULD BE PERFORMED WITH A TANDEM AXLE DUMP TRUCK LOADED TO GROSS CAPACITY (AT LEAST 20 TONS). ACCEPTANCE CRITERIA OF THE PROOF ROLL SHALL BE LIMITED TO RUT FORMATION NO MORE THAN ONE INCH (1") DEPTH (FRONT OR REAR AXLES) AND NO PUMPING (ROLLING) OBSERVED DURING THE VISUAL INSPECTION. PROOF ROLL TESTS SHOULD BE OBSERVED BY AN EXPERIENCED TECHNICIAN OR ENGINEER PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE TO VERIFY THE SUBGRADE WILL PROVIDE ADEQUATE PAVEMENT SUPPORT.
8. PAVING (SUBJECT TO REVISION FOLLOWING RECEIPT OF GEOTECHNICAL REPORT)

HEAVY DUTY BITUMINOUS
- 2.0" BITUMINOUS WEAR (MNDOT 2360 WEARING COURSE MIXTURE SPWEA340B)
- TACK COAT (MNDOT 2357)
- 2.5" BITUMINOUS NON-WEAR (MNDOT 2360 NON-WEARING COURSE MIXTURE SPNWB330B)
- 8" AGGREGATE BASE (MNDOT 3138 CL5 OR CL7) COMPACTED SUBGRADE

LIGHT DUTY BITUMINOUS
- 1.5" BITUMINOUS WEAR (MNDOT 2360 WEARING COURSE MIXTURE SPWEA240B)
- TACK COAT (MNDOT 2357)
- 2.0" BITUMINOUS NON-WEAR (MNDOT 2360 NON-WEARING COURSE MIXTURE SPNWB230B)
- 8" AGGREGATE BASE (MNDOT 3138 CL5 OR CL7) COMPACTED SUBGRADE

CONCRETE WALKWAYS
- 4.0" CONCRETE WALK
- 6" AGGREGATE BASE COMPACTED SUBGRADE

NOTE: BITUMINOUS PAVEMENTS SHALL BE COMPACTED TO 92% OF THE MAXIMUM THEORETICAL DENSITY.

EROSION CONTROL NOTES

1. SEE SWPPP FOR DETAILED REQUIREMENTS.
2. FOLLOW ALL LOCAL, COUNTY, WATERSHED, AND STATE REQUIREMENTS COVERING STORMWATER COMPLIANCE.
3. INSTALL TEMPORARY BMP'S PRIOR TO COMMENCING GRADING ACTIVITIES. MAINTAIN BMP'S THROUGHOUT THE DURATION OF THE PROJECT. REMOVE TEMPORARY BMP'S AFTER SITE IS STABILIZED.
4. INSPECTIONS SHALL BE CONDUCTED BY THE CONTRACTOR ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.
5. ADJACENT STREETS TO BE CONTINUOUSLY MONITORED FOR VEHICLE TRACKING AND IF NECESSARY SCRAPED CLEAN DAILY AND SWEPT CLEAN WEEKLY OR MORE OFTEN AS NEEDED.
6. THE CONTRACTOR SHALL LIMIT THEIR ACTIVITIES TO THE GRADING LIMITS SHOWN ON THE GRADING PLAN. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL ORDINANCE. THE CONTRACTOR SHALL SCHEDULE THEIR OPERATIONS TO MINIMIZE THE DISTURBED AREA AT ANY GIVEN TIME.
7. ANY TEMPORARY SOIL STOCKPILES ON THE SITE ARE TO BE SURROUNDED WITH SILT FENCE AND HYDRO MULCHED AND SHALL NOT BE PLACED IN STORM WATER CONVEYANCES OR SURFACE WATERS.
8. RESTORATION:
   - A. ALL DISTURBED NON-PAVED AREAS SHALL BE RESTORED WITH A MINIMUM OF SIX INCHES (6") OF TOPSOIL AND SEED AS DIRECTED BY THE ENGINEER, WITHIN 7 DAYS FOLLOWING COMPLETION OR SUSPENSION OF GRADING ACTIVITY IN THAT PARTICULAR AREA.
   - B. ALL SEED, SOD, MULCH AND FERTILIZER PLACEMENT SHALL CONFORM WITH MnDOT SPECIFICATION 2575. MATERIALS SHALL CONFORM WITH THE SPECIFICATIONS INDICATED BELOW.

ITEM	MnDOT SPECIFICATION NUMBER
SOD	3876
MULCH – HYDROMULCH WITH TACTIFIER (TYPE 1 FOR TURF AND TEMPORARY MIX & TYPE 3 FOR NATIVE SEED MIX)	3882
FERTILIZER	3881
FIBER BLANKET	3885 (CATEGORY 3)

   - C. ALL NATIVE SEEDING USED ON THIS PROJECT SHALL BE CERTIFIED TO BE OF MINNESOTA (OR AS SPECIFIED) ORIGIN BY THE MINNESOTA CROP IMPROVEMENT ASSOCIATION (MCIA). DOCUMENTATION VERIFYING THE ORIGIN OF THIS SEED IS TO BE PROVIDED TO THE LANDSCAPE ARCHITECT AT LEAST 30 DAYS PRIOR TO INSTALLATION DATE.
   - D. FOLLOW SEEDING METHOD, SEEDING INSTALLATION, AND SITE PREPARATION AS PER THE MNDOT SEEDING MANUAL 2014 UNLESS NOTED OTHERWISE ON THE LANDSCAPE PLANS OR IN THE SPECIFICATION BOOKLET.

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SCALE IN FEET

OWNER/DEVELOPER

CAROUSEL

TCA REAL ESTATE, LLC
15802 WAYZATA BOULEVARD
MINNETONKA, MN 55391
952-303-7531

PROJECT

COON RAPIDS CHRYSLER DODGE JEEP RAM DEALERSHIP EXPANSION

COON RAPIDS, MINNESOTA

ISSUE

SITE PLAN, PRELIMINARY AND FINAL PLAT REVIEW
04/10/15

ISSUE INDEX	DATE

SHEET INDEX

C0.1	COVER SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEMOLITION PLAN
C2.1	OVERALL SITE PLAN
C2.2	SITE PLAN
C3.1	GRADING & EROSION CONTROL PLAN
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C5.1	PRELIMINARY PLAT
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SWPPP	SWPPP PLAN
ES	LIGHTING AND PHOTOMETRICS

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CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA

NOT FOR CONSTRUCTION

Stephen M. Johnston — DATE
REGISTRATION NO. 18914 — 04/10/15

SHEET C301CMG01.DWG

GRADING & EROSION CONTROL PLAN

C3.1

PROJECT NO. CMG14001