

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**

TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

# SHADY OAK CROSSING

## MINNETONKA, MN

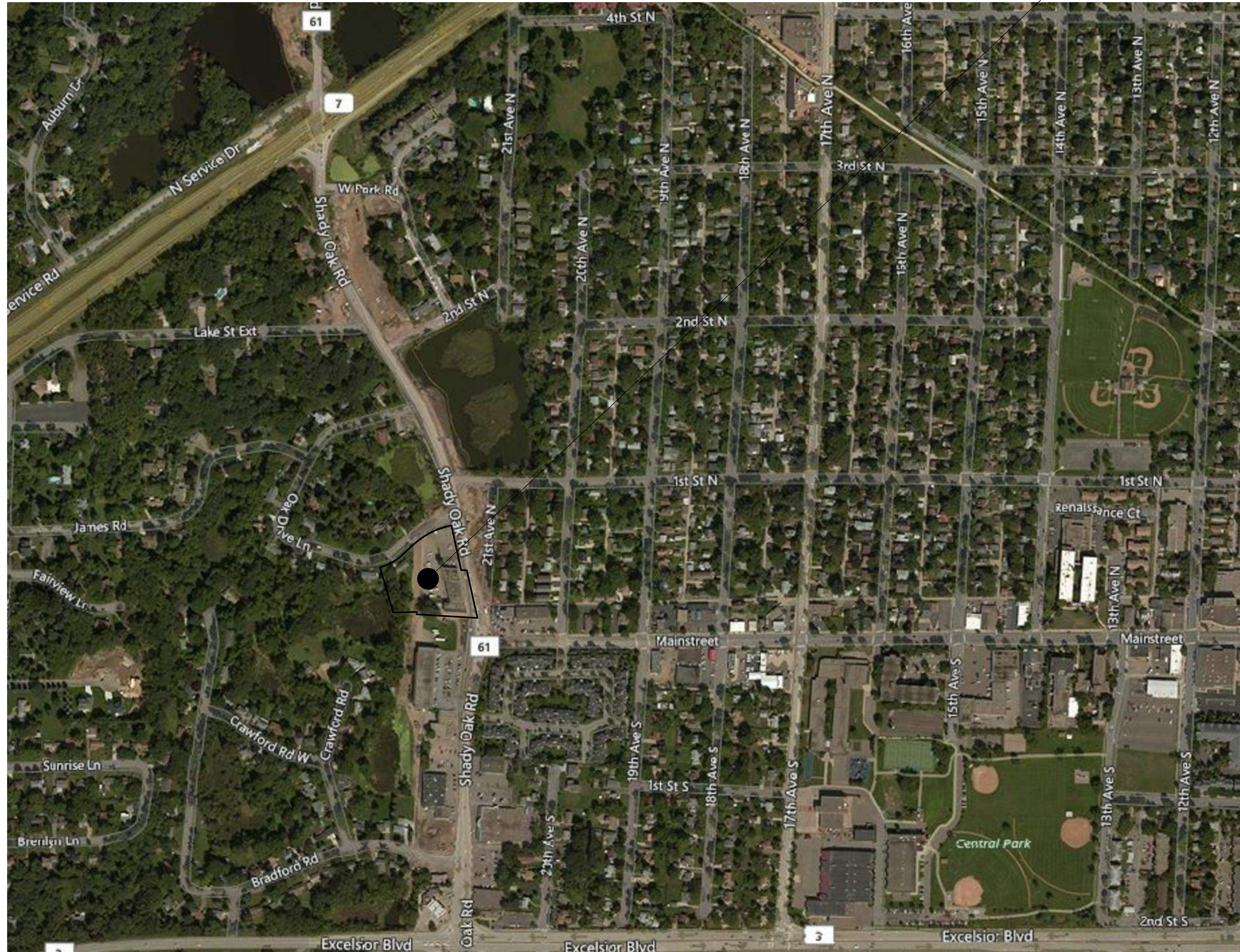
**PROJECT DIRECTORY**

**OWNER:**  
 RON CLARK CONSTRUCTION & DESIGN  
 MIKE ROEBUCK  
 7500 WEST 78TH STREET  
 EDINA, MN 55439  
 PH. 952.947.3022  
 EMAIL: MIKE@RONCLARK.COM

**ENGINEER:**  
 CAMPION ENGINEERING SERVICES, INC.  
 MARTY CAMPION  
 1800 PIONEER CREEK CENTER  
 MAPLE PLAIN, MN 55364  
 PH. 763.479.5172  
 EMAIL: MCAMPION@CAMPIONENG.COM

**SURVEYOR:**  
 WENCK ASSOCIATES  
 1800 PIONEER CREEK CENTER  
 MAPLE PLAIN, MN 55359  
 PH. 763.479.4200

PROJECT LOCATION



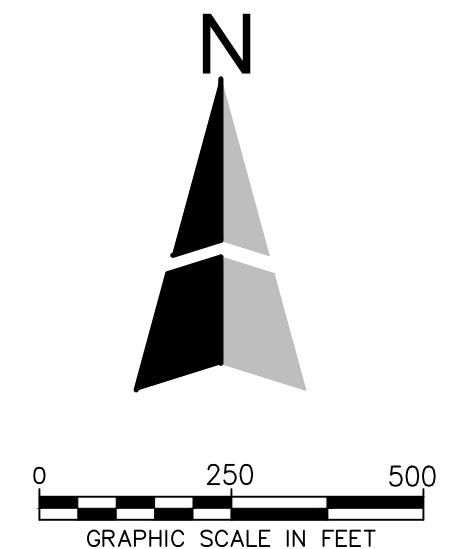
**NOTE:**  
 BOUNDARY AND TOPOGRAPHIC INFORMATION PER SURVEY PREPARED BY WENCK ASSOCIATES, DATED FEBRUARY 6, 2017.

**GOVERNING SPECIFICATIONS:**

1. THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" LATEST EDITION & SUPPLEMENTS.
2. CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD UTILITIES SPECIFICATIONS. (LATEST EDITION)
3. ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCE WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.
4. CITY OF MINNETONKA STANDARD SPECIFICATIONS & DETAILS.

*INDEX*

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	CERTIFICATE OF SURVEY
3.	PRELIMINARY PLAT—SHADY OAK CROSSING
4.	PRELIMINARY SITE PLAN
5.	PRELIMINARY UTILITY PLAN
6.	PRELIMINARY GRADING PLAN
7.	PRELIMINARY STORM WATER POLLUTION PREVENTION PLAN
8.	TREE INVENTORY
9.	TREE PRESERVATION PLAN
10.	DETAILS
11.	DETAILS



Plot Date & Time: C:\Users\mkr-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CAD1 COVER SHEET.dwg

NO.	DATE	DESCRIPTION
1	07/22/2017	PARKING STALL COUNT

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

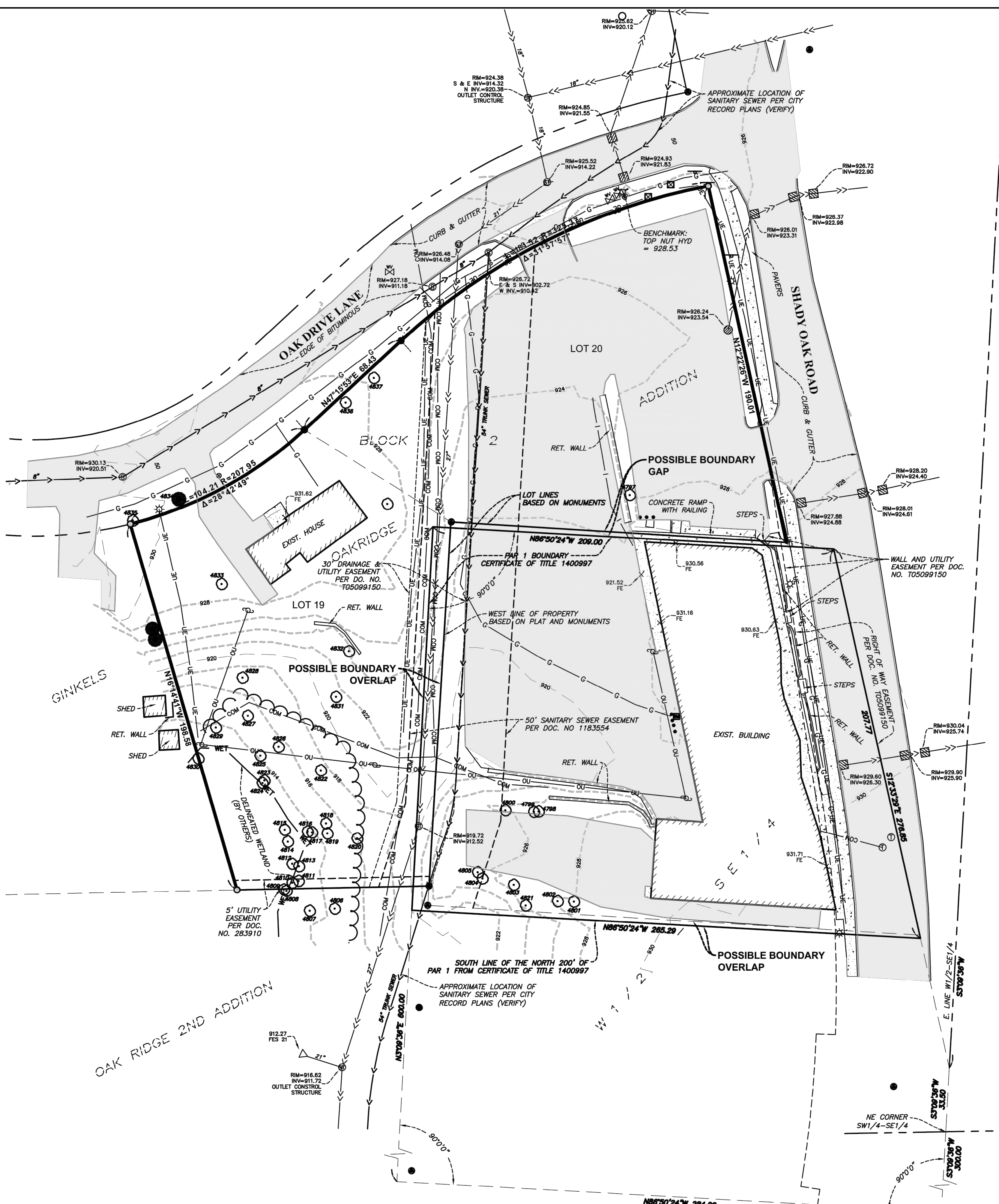
Martin P. Campion -Lic. # 19901 Date: \_\_\_\_\_

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

COVER SHEET	PROJECT NO: <b>17-011</b>
SHEET NO. 1 OF 11 SHEETS	DATE: <b>07/24/2017</b>

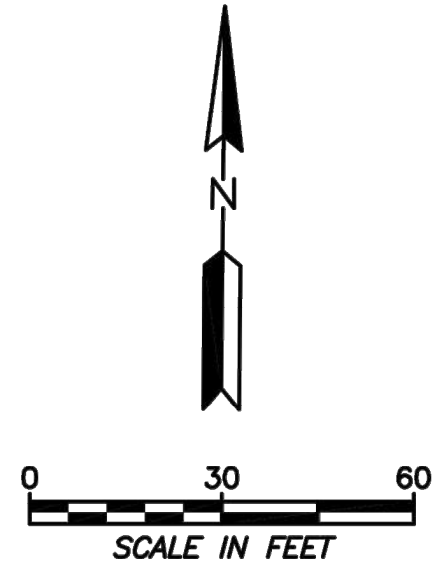
# CERTIFICATE OF SURVEY

MINNETONKA, MN



**LEGEND**

- SET 3/4"ODx14" IRON PIPE WITH PLASTIC CAP 43055 OR MAG NAIL W/WASHER
- PROPERTY MARKER FOUND BY HENNEPIN COUNTY SURVEYOR
- FOUND MONUMENT
- ⊙ SANITARY SEWER MANHOLE
- ⊙ STORM SEWER MANHOLE
- ⊙ STORM SEWER INLET
- ⊙ STORM SEWER INLET
- ⊙ TELEPHONE MANHOLE
- ⊙ GAS METER
- ⊙ COMMUNICATIONS PEDESTAL
- ⊙ ELECTRIC MANHOLE
- ⊠ ELECTRIC TRANSFORMER
- ⊠ TRAFFIC SIGN
- BOLLARD/POST
- ⊙ UTILITY POLE
- ⊙ LIGHT POLE
- CONIFEROUS TREE
- ⊙ DECIDUOUS TREE
- ⊙ WATER VALVE
- ⊙ HYDRANT
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- UNDERGROUND GAS LINE
- UNDERGROUND COMMUNICATION LINE
- OVERHEAD UTILITY LINE
- TREE LINE
- ▭ BUILDING
- ▭ CONCRETE SURFACE
- ▭ ASPHALT SURFACE



**PROPERTY DESCRIPTION:**

Certificate of Title 1400998

Lot 19 Block 2, Ginkels Oakridge Addition AND

Certificate of Title 1400997

Par 1:

All that portion of the tract or parcel of land described at paragraph "A" below, which lies Northerly of a line drawn parallel to and 200 feet Southerly of the North line thereof and the same extended, to-wit:

Paragraph "A". That portion of the West Half of the Southeast Quarter of Section 23, Township 117, Range 22, described as follows: Starting at the Northeast corner of the Southwest Quarter of the Southeast Quarter of said Section; thence South along the East line of the West Half of the Southeast Quarter of said Section, a distance of 300 feet; thence Westerly at right angles to said East line for a distance of 284 feet; thence Northerly along a line parallel to said East line a distance of 600 feet; thence Easterly along a line at right angles to said East line 209 feet to the center line of McGinty Road; thence Southeasterly along the center line of McGinty Road to the East line of the West Half of the Southeast Quarter of said Section 23; thence Southerly along said East line 33.5 feet to the point of beginning.

Par 2:

Lot 20, Block 2, Ginkels Oakridge Addition

**SURVEYORS NOTES:**

1. Utility lines shown hereon are based on field markings and maps provided to us as a result of Gopher State One Call private utility locate (Ticket Numbers 170260089, 170260090). the surveyor cannot guarantee that all utilities were marked or that the markings/maps are accurate.
2. Horizontal Datum: Hennepin County Coordinate System NAD83(11)
3. Vertical Datum: NAVD88
4. Date of fieldwork: 2/3/2017
5. Gross area = 2.38 acres.
6. Portions of the subject property were covered by snow and ice at the time of survey, the surveyor does not guarantee that all improvements are shown hereon.
7. This survey was prepared based on a cursory title review, the surveyor does not guarantee that all or any adverse interests, easements or other encumbrances are shown or that the owner listed has fee title to the property.

**SURVEYORS CERTIFICATION:**

I hereby certify that this survey was completed by me or under my direct supervision and that I am a duly licensed land surveyor under the laws of the State of Minnesota.

Chris Ambour Date  
LS 43055

Responsive partner. Exceptional outcomes.  
1802 WOODDALE DRIVE  
WOODBURY, MN 55125  
Ph: 651-395-5212

CLIENT NAME		PROJECT TITLE	
RON CLARK CONSTRUCTION & DESIGN		CERTIFICATE SURVEY	
DWN BY	CHK'D	APP'D	DWG DATE
MLH	CNA	CNA	6-FEB-2017
SCALE		1" = 30'	
PROJECT NO.		SHEET NO.	
1531-0009		2 OF 11	
REV	REVISION DESCRIPTION	DWN	APP
			REV DATE

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

**LEGEND**

- SET 3/4"ODx14" IRON PIPE WITH PLASTIC CAP 43055 OR MAG NAIL W/WASHER
- ▲ PROPERTY MARKER FOUND BY HENNEPIN COUNTY SURVEYOR
- FOUND MONUMENT
- ⊙ SANITARY SEWER MANHOLE
- ⊙ STORM SEWER MANHOLE
- ⊙ STORM SEWER INLET
- ⊙ STORM SEWER INLET
- ⊙ TELEPHONE MANHOLE
- ⊙ GAS METER
- ⊙ COMMUNICATIONS PEDESTAL
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC TRANSFORMER
- ⊙ TRAFFIC SIGN
- BOLLARD/POST
- ⊙ UTILITY POLE
- ⊙ LIGHT POLE
- ⊙ CONIFEROUS TREE
- ⊙ DECIDUOUS TREE
- ⊙ WATER VALVE
- ⊙ HYDRANT
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- UNDERGROUND GAS LINE
- UNDERGROUND COMMUNICATION LINE
- OVERHEAD UTILITY LINE
- TREE LINE
- ▭ BUILDING
- ▭ CONCRETE SURFACE
- ▭ ASPHALT SURFACE
- - - EASEMENT LINE
- . - . - . STRUCTURE SETBACK LINE

**PROPERTY DESCRIPTION:**

Certificate of Title 1400998

Lot 19 Block 2, Ginkels Oakridge Addition  
 AND

Certificate of Title 1400997

Par 1:

All that portion of the tract or parcel of land described at paragraph "A" below, which lies Northerly of a line drawn parallel to and 200 feet Southerly of the North line thereof and the same extended, to-wit:

Paragraph "A". That portion of the West Half of the Southeast Quarter of Section 23, Township 117, Range 22, described as follows: Starting at the Northeast corner of the Southwest Quarter of the Southeast Quarter of said Section; thence South along the East line of the West Half of the Southeast Quarter of said Section, a distance of 300 feet; thence Westerly at right angles to said East line for a distance of 284 feet; thence Northerly along a line parallel to said East line a distance of 600 feet; thence Easterly along a line at right angles to said East line 209 feet to the center line of McGinty Road; thence Southeasterly along the center line of McGinty Road to the East line of the West Half of the Southeast Quarter of said Section 23; thence Southerly along said East line 33.5 feet to the point of beginning.

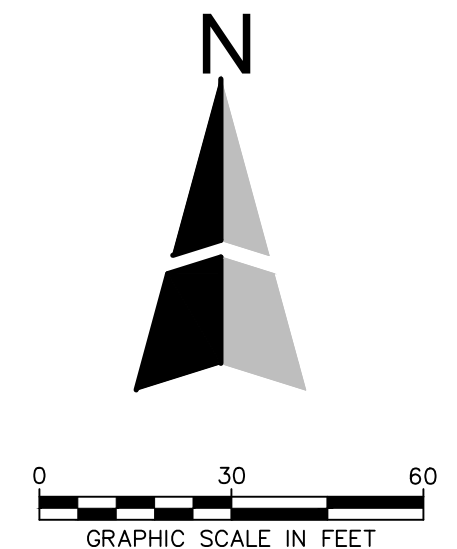
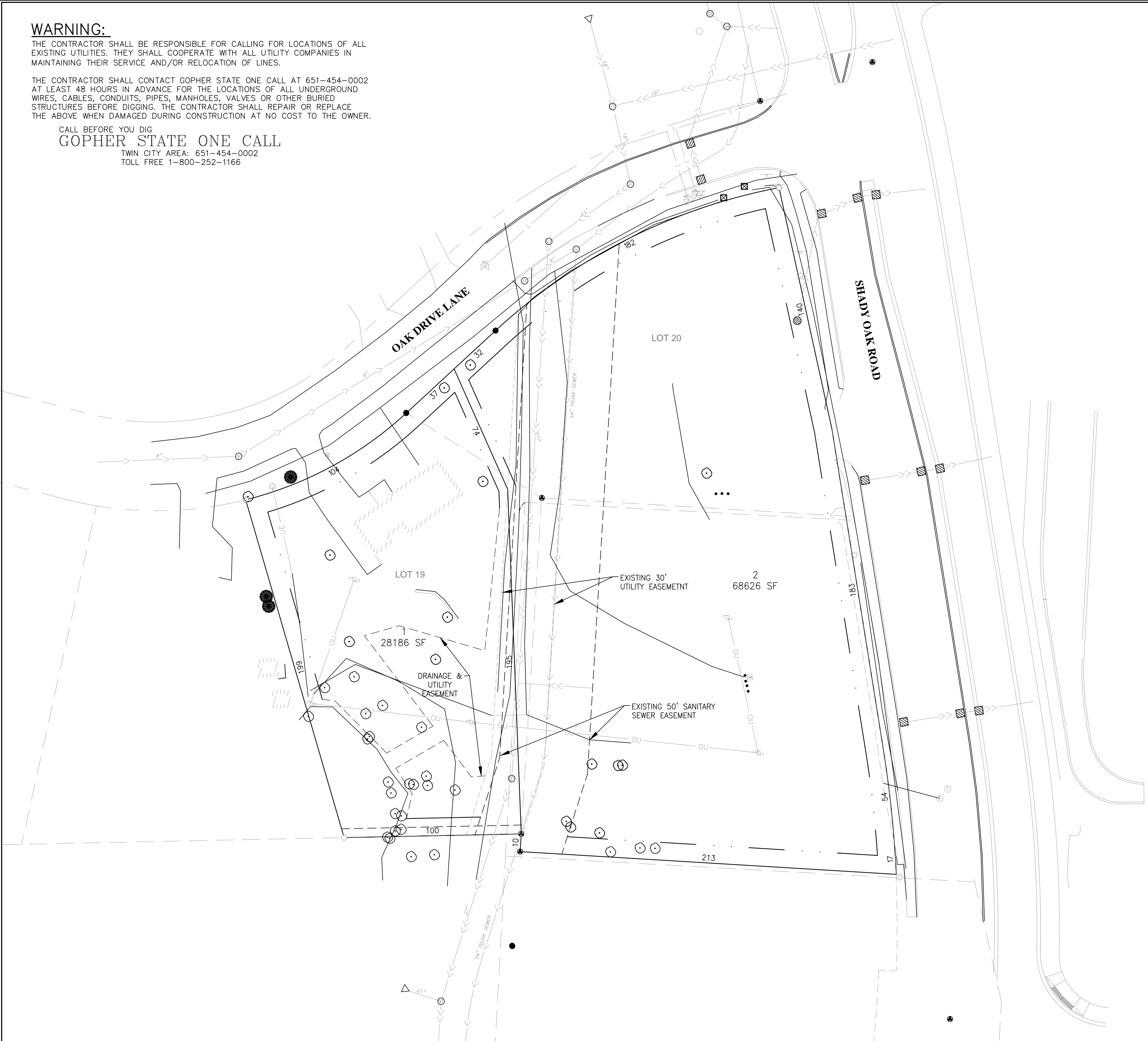
Par 2:

Lot 20, Block 2, Ginkels Oakridge Addition

EXISTING ZONING = B-2, R-1

TOTAL AREA = 2.38 AC  
 SHADY OAK RIGHT-OF-WAY AREA = 0.16 AC  
 WETLAND AREA = 0.63 AC

Plot Date & Time: C:\Users\kik-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CAD\_3 preliminary.plt.dwg



1	07/22/2017	PARKING STALL COUNT
NO.	DATE	DESCRIPTION
		REVISIONS

**CAMPION ENGINEERING SERVICES, INC.**

● Civil Engineering ● Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

PROJECT NO: 17-011

PRELIMINARY PLAT

SHEET NO. 3 OF 11 SHEETS

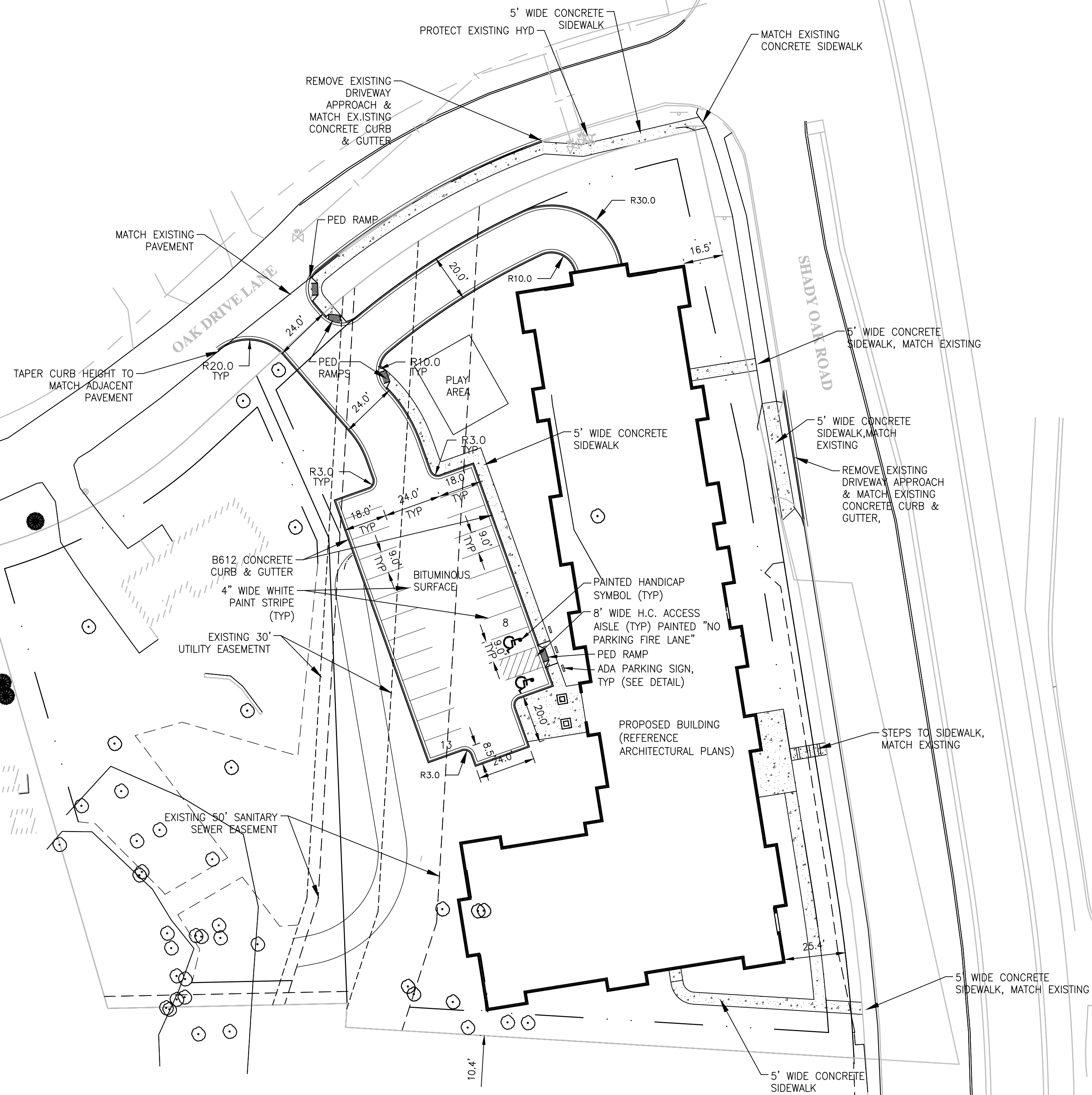
DATE: 07/24/2017

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166



**NOTES:**

- BOUNDARY AND EXISTING CONDITION INFORMATION PER SURVEY PREPARED BY WENCK AND CITY RECORD PLANS.
- ALL EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND LOCATIONS OF EXITS, RAMPS, CONCRETE APRONS AND STOOPS.
- ALL PARKING LOT STRIPING SHALL BE 4" WIDE LINES, STRIPED USING HIGH VISIBILITY TRAFFIC AND HIGHWAY APPROVED WHITE PAINT. PROVIDE APPROPRIATE STRIPING AND PAVEMENT MARKINGS FOR ALL HANDICAP PARKING AND ACCESS AISLES.
- GUTTER SHALL BE CONSTRUCTED TO TIP OUT ALONG THE FRONT OF ALL BUILDINGS.
- DIMENSIONS TAKE PRECEDENCE OVER SCALE. ALL DIMENSIONS ARE TO BACK OF CURB, EDGE OF SIDEWALK OR EXTERIOR BUILDING UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE INDICATED ON THE PLAN, CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS, AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND CONCRETE DRIVES. CONTROL JOINT MAXIMUM SPACING: WALKS - 8' O.C., ALL OTHERS - 10' O.C. SAW CUT CONTROL JOINTS MINIMUM ONE-QUARTER CONCRETE THICKNESS. EXPANSION JOINT MAXIMUM SPACING: WALKS - 24' O.C., ALL OTHERS - 40' O.C. DOWEL ALL EXPANSION JOINTS - MAXIMUM 24" O.C.
- WHEN DOING ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, THE CONTRACTOR SHALL COORDINATE THE REMOVAL LIMITS WITH THE CITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PEDESTRIAN RAMPS MEET ADA AND MNDOT GUIDELINES FOR ACCESSIBILITY.
- CONTRACTOR SHALL VERIFY CONDUIT REQUIREMENTS FOR POWER AND IRRIGATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE FIRE MARSHAL THE LOCATION OF FIRE LANE SIGNAGE AND CURB MARKINGS (IF NEEDED).
- CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING STRUCTURES THAT INTERFERE WITH NEW WORK AS SHOWN.
- ALL LANDSCAPE AREAS ARE TO BE IRRIGATED.
- ALL NEW UTILITIES SHALL BE UNDERGROUND. COORDINATE LOCATIONS WITH UTILITY PROVIDERS.
- SIDEWALKS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2%. ANY SIDEWALK EXCEEDING 2% CROSS SLOPE MUST BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.

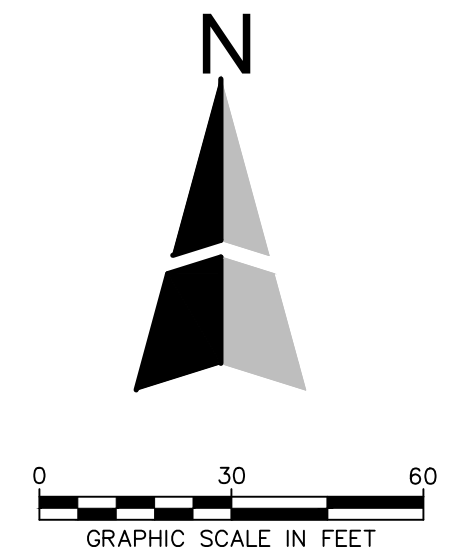
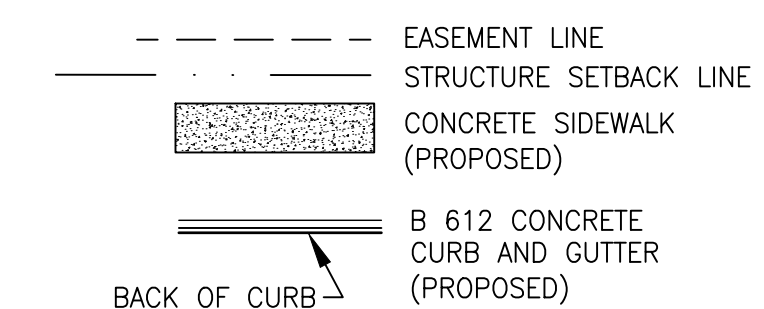
**GENERAL NOTES:**

- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL THE CONTRACTOR HAS REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY THE PERMITTING AUTHORITIES.
- WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY. THE SOILS REPORT AND RECOMMENDATION SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY BETWEEN THE SOILS REPORT AND PLANS.

**ADA REQUIREMENTS:**  
 CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PEDESTRIAN RAMPS MEET ADA AND MNDOT GUIDELINES FOR ACCESSIBILITY

**PARKING LOT STRIPING REQUIREMENTS:**  
 ALL PARKING LOT STRIPING SHALL BE 4" WIDE WHITE TRAFFIC AND HIGHWAY APPROVED MARKING PAINT AS APPROVED BY OWNER. H.C. PARKING AND ACCESS AISLES SHALL BE STRIPED AS INDICATED IN BLUE PAINT AND EACH H.C. STALL SHALL INCLUDE INTERNATIONAL SYMBOL OF ACCESSIBILITY CENTERED ON EACH STALL AS INDICATED ON PLANS.

**PROPOSED PARKING STALLS:**  
 H.C. = 2  
 STANDARD ABOVE GROUND = 21  
 STANDARD UNDER GROUND = 66  
 TOTAL = 89  
**STRUCTURE SETBACKS:**  
 10' FROM RIGHT OF WAY AND SOUTH PROPERTY LINE



C:\Users\kik-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CIVIL SITE PLAN.dwg

1	07/22/2017	PARKING STALL COUNT
NO.	DATE	DESCRIPTION
		REVISIONS

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.  
 Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

**PRELIMINARY SITE PLAN**

SHEET NO. 4 OF 11 SHEETS

PROJECT NO:  
**17-011**

DATE:  
**07/24/2017**

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

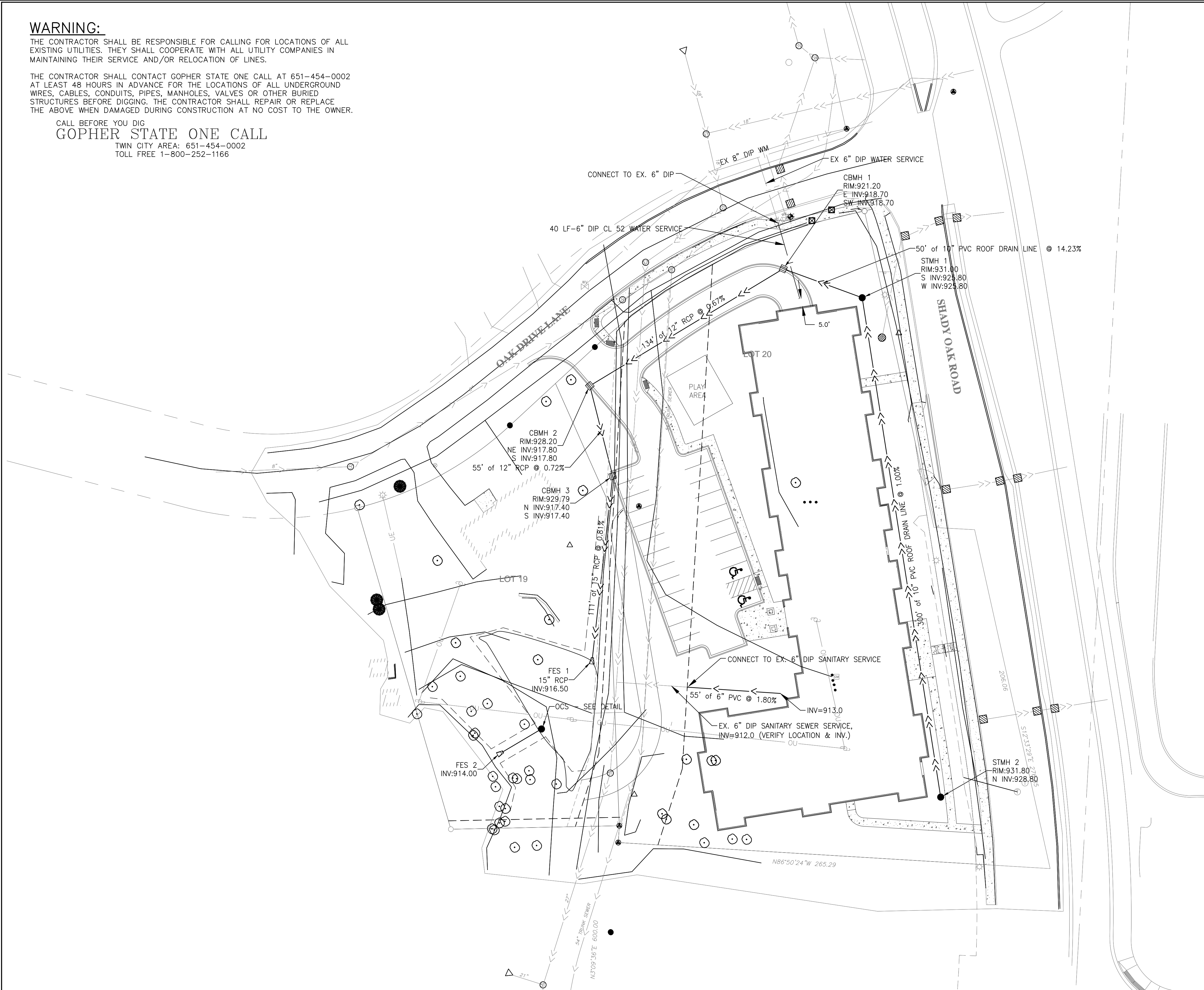
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**

TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

Plot Date & Time:

C:\Users\kik-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CIVIL UTILITY PLAN.dwg



**NOTES:**

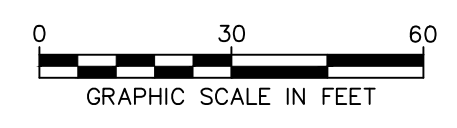
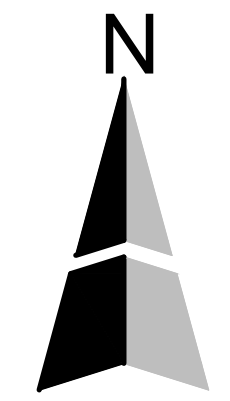
1. EXISTING CONDITION INFORMATION PER SURVEY PREPARED BY WENCK ASSOCIATES AND CITY RECORD PLANS.
2. THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY CONFLICTS.
3. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND FACILITIES TO ALLOW PROPER FUNCTIONING DURING AND AFTER CONSTRUCTION. SUPPORTING STRUCTURES, IF REQUIRED, SHALL BE SUPPLIED BY THE CONTRACTOR AS WORK INCIDENTAL TO THE CONTRACT.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN EXISTING UTILITIES AND THE PROPOSED CONSTRUCTION. THE ENGINEER WILL COORDINATE WITH UTILITY COMPANY IN QUESTION TO DETERMINE THE NEED FOR RELOCATION OF THE EXISTING UTILITY.
5. EXISTING CONDITIONS SUCH AS SAND IN MANHOLES OR VALVE BOXES SHALL BE IDENTIFIED BY THE CONTRACTOR AND THESE SHALL BE REPORTED TO THE ENGINEER PRIOR TO EXCAVATION BY THE CONTRACTOR. ONCE CONSTRUCTION HAS BEGUN, ALL DAMAGE TO UNDERGROUND UTILITIES WILL BE ASSUMED TO HAVE BEEN CAUSED BY THE CONTRACTOR, AND REPAIRS NECESSARY SHALL BE PERFORMED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
6. FINAL PLAT SHALL GOVERN FOR EASEMENTS AND LOT LINES.
7. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL JURISDICTION TO OBTAIN PERMITS AND METER FOR WATER SOURCE. ALL ASSOCIATED COSTS SHALL BE INCIDENTAL TO THE CONTRACTOR, INCLUDING DISPOSAL OF TEST WATER INTO CITY'S SANITARY SEWER SYSTEM. THE CONTRACTOR SHALL NOT OPERATE GATE VALVES OR HYDRANTS ON THE CITY WATER SYSTEM WITHOUT FIRST RECEIVING CITY APPROVAL.
8. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND THE PROJECT ENGINEER 48 HOURS PRIOR TO STARTING WORK OR AS REQUIRE BY THE CITY.
9. THE CONTRACTOR SHALL KEEP ACCESS ROADS CLEAR OF SOIL OR OTHER DEBRIS, AND PERFORM DAILY STREET CLEANING AS REQUIRED. POSITIVE DRAINAGE, CONTROLLED WITH EROSION CONTROL AND EROSION PREVENTION MEASURES AS REQUIRED SHALL BE PERFORMED. INLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS AFTER INLET CONSTRUCTION. UNLESS SPECIFIED ON THE PLANS OR AS A BID ITEM ON THE BID FORM, ANY TEMPORARY CULVERTS, DITCHES, FILTER FABRIC, ETC. NECESSARY TO ACCOMPLISH THIS SHALL BE PERFORMED AS INCIDENTAL TO THE CONTRACT.
10. THE CONTRACTOR SHALL PRESERVE AND PROTECT THE MARKERS AND MONUMENTS SET FOR THE SUBDIVISION OF LAND.
11. THE CONTRACTOR SHALL SCHEDULE THE SOILS ENGINEER TO FACILITATE CERTIFICATION OF ALL CONTROLLED FILLS IN A TIMELY FASHION. DENSITY TESTS SHALL MEET THE FOLLOWING:
  - A. DENSITY TESTS SHALL BE TAKEN ON ALL TRENCHES AT LOCATIONS AS DETERMINED BY THE ENGINEER OF HIS REPRESENTATIVE.
  - B. WITHIN 3 FEET OF PAVEMENT SUBGRADE, CONTRACTOR SHALL UTILIZE IMPROVED SOILS THAT ARE WITHIN 1% OPTIMUM MOISTURE CONTENT. COMPACTION SHALL MEET 100% STANDARD PROCTOR. BELOW THE UPPER 3FEET, COMPACTION SHALL BE 95%. GRADING TOLERANCE SHALL BE 0.1'.
12. THE OWNER SHALL PAY FOR ALL COMPACTION TESTING. ANY AREAS WHICH FAIL TO MEET THE ABOVE STANDARDS SHALL RE-CORRECTED AND RE-TESTED BY THE OWNER'S TESTING AGENT AT THE CONTRACTOR'S EXPENSE.
13. SANITARY SEWER AND WATERMAIN SHALL BE INSTALLED AT ELEVATIONS SHOWN ON THE PLAN.
14. WHERE WATERMAIN MUST BE LOWERED TO AVOID CONFLICT WITH ANOTHER UTILITY, THE COST OF BENDS, FITTINGS, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
15. CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH THE CURRENT MNDOT "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL" FOR CONSTRUCTION ADJACENT TO TRAVEL WAYS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE DEPTH OF EXISTING UTILITIES LISTED ON THIS PLAN PRIOR TO ORDERING OF ANY FITTINGS, STRUCTURES, CASTINGS, ETC. ENGINEER AND THE OWNER SHALL NOT BE RESPONSIBLE FOR ANY DISCREPANCIES FOUND AS DEPTHS ARE ESTIMATED.
17. CONTACT CITY FOR INSPECTION PRIOR TO CONNECTING TO EXISTING CITY UTILITIES.
18. CONTRACTOR TO COMPLY WITH ALL REGULATORY AGENCY PERMIT CONDITIONS FOR PERMITS OBTAINED BY OWNER AND FOR PERMITS OBTAINED BY GENERAL CONTRACTOR.
19. ALL WORK PERFORMED AND MATERIALS USED FOR CONSTRUCTION OF UTILITIES MUST CONFORM TO THE CITY OF MINNETONKA STANDARD SPECIFICATIONS AND DETAILS.
20. SANITARY SEWER SERVICE SHALL BE EITHER 6" PVC SDR 35.
21. WATER SERVICE SHALL BE 6" DIP CLASS 52 WITH 4 MIL POLY WRAP.
22. WATER SERVICE SHALL BE INSTALLED WITH 7.5' COVER MINIMUM.
23. VERIFY LOCATION OF FIRE DEPARTMENT CONNECTION (FDC) WITH MECHANICAL ENGINEER.
24. INSTALL SERVICES TO WITHIN 5' OF THE BUILDING. VERIFY LOCATION WITH MECHANICAL ENGINEER.
25. ALL 12" - 15" RCP STORM SEWER SHALL BE CLASS V.
26. ALL STORM SEWER SHALL HAVE CLASS C BEDDING.
27. HDPE STORM SEWER SHALL BE DUAL WALL CORRUGATED WITH SMOOTH INTERIOR.
28. ALL STRUCTURE ADJUSTMENT SHALL BE CONSIDERED INCIDENTAL TO PAVING.

**BENCHMARK:**

1. TOP NUT HYDRANT NE CORNER OF SITE.  
ELEVATION 928.53

**GOVERNING SPECIFICATIONS:**

1. MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" LATEST EDITION AND SUPPLEMENTS.
2. CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD UTILITIES SPECIFICATION. LATEST EDITION.
3. CITY OF MINNETONKA STANDARD SPECIFICATIONS AND DETAILS
4. ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCE WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.



NO.	DATE	DESCRIPTION
1	07/22/2017	PARKING STALL COUNT

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.  
 Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

<b>PRELIMINARY UTILITY PLAN</b>	PROJECT NO: <b>17-011</b>
SHEET NO. 5 OF 11 SHEETS	DATE: <b>07/24/2017</b>

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

**GRADING NOTES**

- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- THE CONTRACTOR MUST CONTACT ALL APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING GOPHER STATE ONE CALL (1-800-252-1166).
- SAFETY NOTICE TO CONTRACTORS: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON OR NEAR THE CONSTRUCTION SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
- THE CONTRACTOR SHALL RESTRICT ALL GRADING AND CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON THE PLANS. ACTIVITIES PROHIBITED OUTSIDE THE CONSTRUCTION BOUNDARIES INCLUDE, BUT ARE NOT LIMITED TO: STOCKPILING SOILS AND OTHER MATERIAL, STORING EQUIPMENT OR OTHER MACHINERY, DRIVING VEHICLES, LEAKING OR SPILLING OF ANY "WASHOUT" OR OTHER TOXIC MATERIALS.
- ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTES AND INSPECTIONS WITH THE SOILS ENGINEER.
- PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A TEST ROLL WILL BE REQUIRED ON THE PARKING LOT SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER AND AS SPECIFIED.
- THE SITE HAS NOT NECESSARILY BEEN DESIGNED TO BALANCE THE ON-SITE MATERIALS. AFTER THE SITE GRADING IS COMPLETE, IF EXCESS SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL OFF-SITE IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
- THE EXISTING TOPSOIL ON THIS SITE VARIES IN DEPTH. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ALL SURFACE VEGETATION AND ANY TOPSOIL OR OTHER LOOSE, SOFT OR OTHERWISE UNSUITABLE MATERIAL BE REMOVED FROM THE STREET AND BUILDING PAD AREAS PRIOR TO PLACEMENT OF ANY EMBANKMENT IN ACCORDANCE WITH THE SOILS REPORT.
- EMBANKMENT MATERIAL NOT PLACED IN THE PARKING LOT OR BUILDING PAD AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE QUALITY COMPACTION METHOD AS OUTLINED IN MN/DOT 2105.3F2 OR AS DIRECTED BY THE SOILS ENGINEER.
- EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE SOILS ENGINEER. EMBANKMENT MATERIAL PLACED IN THE PARKING LOT SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MN/DOT 2105.3F1. EMBANKMENT MATERIAL PLACED IN THE BUILDING PAD AREA SHALL BE COMPACTED IN ACCORDANCE WITH THE SOILS REPORT.
- TOLERANCES:
  - THE PARKING LOT SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
  - AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED BY THE ENGINEER.
  - TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/8 INCH OF THE SPECIFIED THICKNESS.
- ALL DISTURBED UNSURFACED AREAS ARE TO IMMEDIATELY RECEIVE FOUR INCHES OF TOPSOIL, SEED AND MULCH AND BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- SPOT ELEVATIONS SHOWN INDICATE FINISHED GRADE ELEVATION UNLESS OTHERWISE NOTED.
- PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE OR GUTTER LINE IF CURB. PLAN GRADE IS TO FINISHED GARAGE FLOOR ELEVATION.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE ALONG MATCHING PAVEMENT AREAS AND/OR CURBS.
- THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- THE CONTRACTOR SHALL PROVIDE DEWATERING AS REQUIRED TO COMPLETE THE SITE GRADING CONSTRUCTION OR AS DIRECTED BY THE SOILS ENGINEER.

**CAUTION NOTES:**

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 CONTACT ALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 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. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING GOPHER STATE ONE CALL AT 800-252-1166 OR 651-454-0002.

**POND GRADING**

- THE CONTRACTOR SHALL AVOID COMPACTING THE POND BOTTOM. RUBBER Tired EQUIPMENT SHALL BE PROHIBITED WHEN WORKING IN THE POND AREA.
- THE BOTTOM AND SIDE SLOPES SHALL BE STABILIZED WITH THE SPECIFIED PLANT MATERIALS WITHIN 7 DAYS OF COMPLETING THE POND GRADING.
- POND SHALL BE GRADED 12" - 18" ABOVE FINAL GRADE UNTIL SITE GRADING IS SUBSTANTIALLY COMPLETE.
- AS PART OF FINISH GRADING, NATIVE SOILS IN THE POND SHALL BE DE-COMPACTED TO A DEPTH OF 12" - 18".

**CAUTION NOTES:**

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.

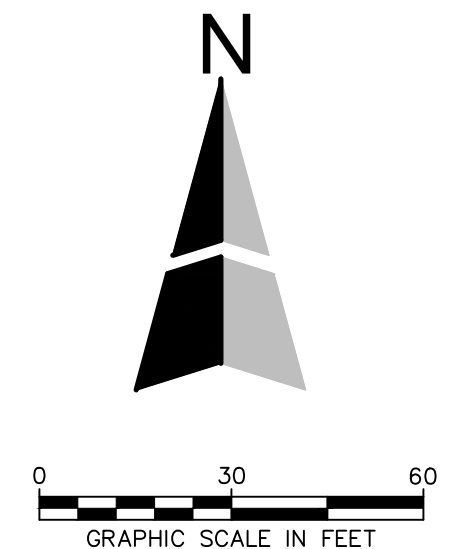
THE CONTRACTOR MUST CONTACT ALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING GOPHER STATE ONE CALL AT 800-252-1166 OR 651-454-0002.

**NOTES:**

- ALL RETAINING WALLS 4' AND HIGHER SHALL BE DESIGNED BY A STRUCTURAL ENGINEER

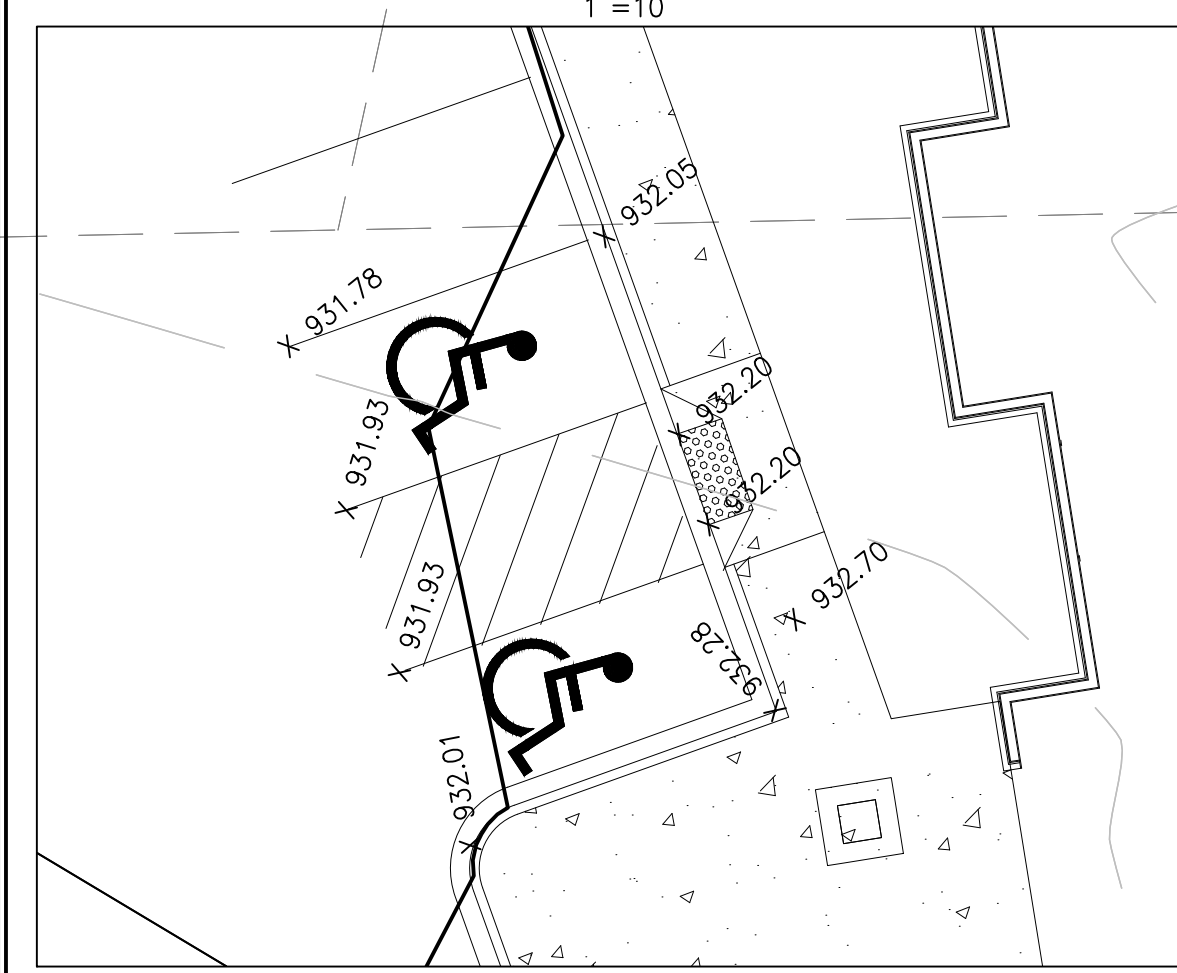
**LEGEND**

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED CONTOURS
- x 896.55 PROPOSED SPOT ELEVATION

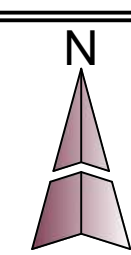


**HANDICAP PARKING DETAIL**

1"=10'



NO.	DATE	DESCRIPTION
1	07/22/2017	PARKING STALL COUNT
REVISIONS		



**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.  
 Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

<b>PRELIMINARY GRADING PLAN</b>		PROJECT NO: <b>17-011</b>
SHEET NO. <b>6</b> OF <b>11</b> SHEETS		DATE: <b>07/24/2017</b>

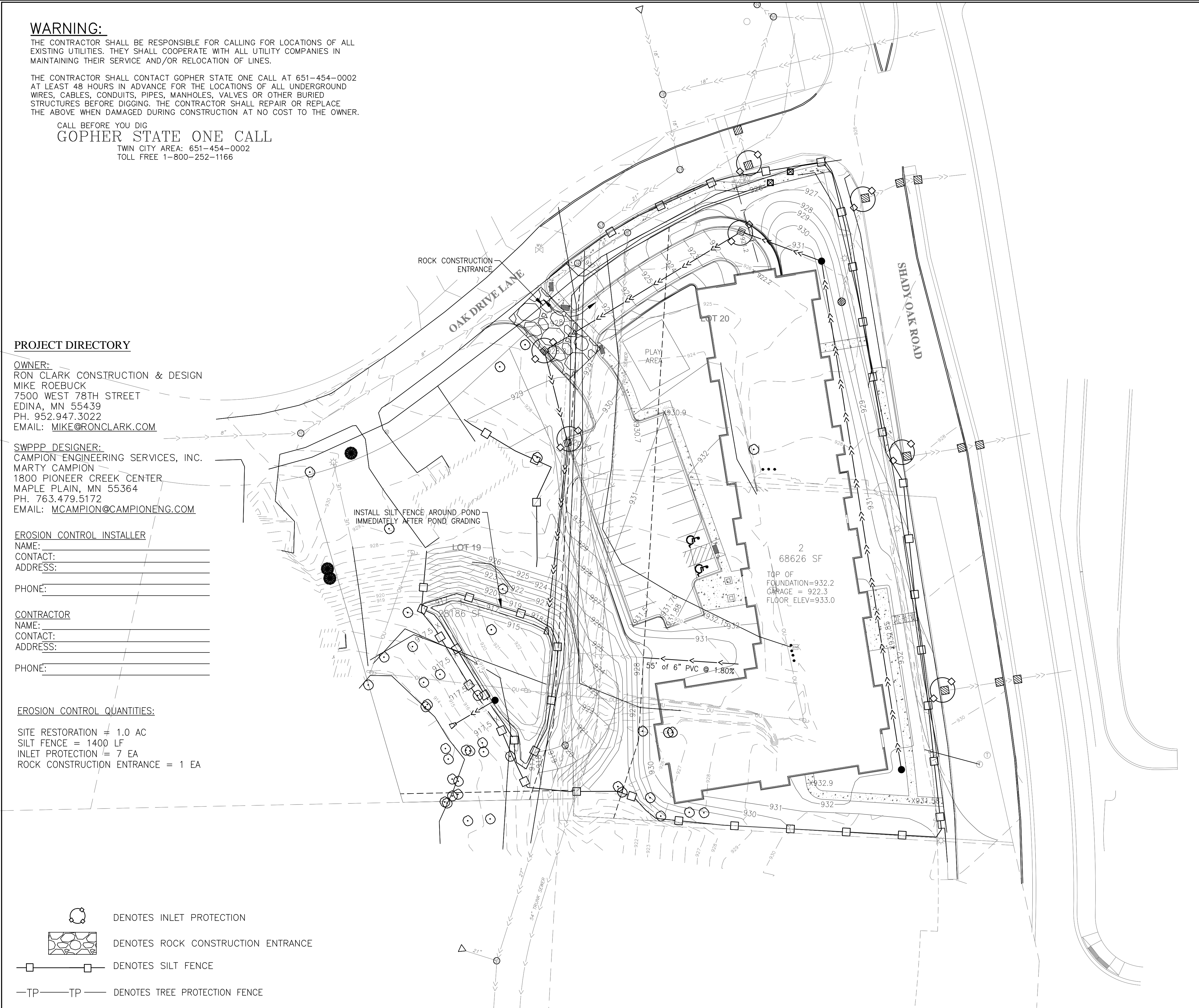
**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
TWIN CITY AREA: 651-454-0002  
TOLL FREE 1-800-252-1166

Plot Date & Time:



**PROJECT DIRECTORY**

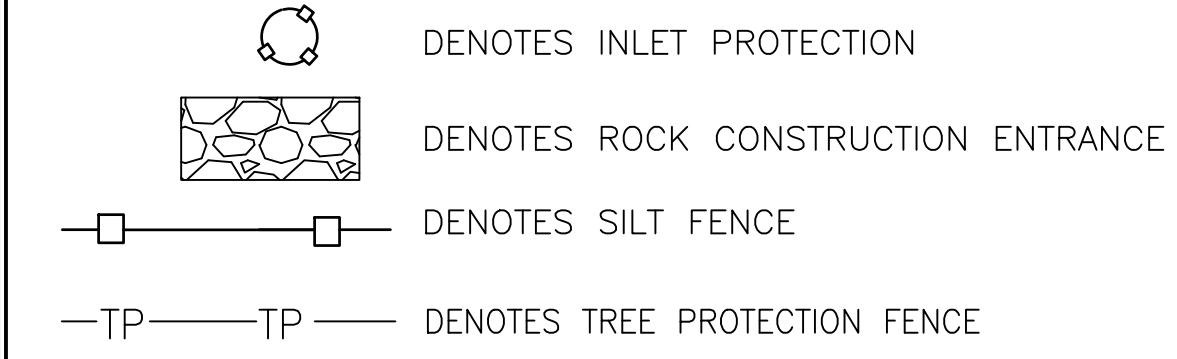
**OWNER:**  
RON CLARK CONSTRUCTION & DESIGN  
MIKE ROEBUCK  
7500 WEST 78TH STREET  
EDINA, MN 55439  
PH. 952.947.3022  
EMAIL: MIKE@RONCLARK.COM

**SWPPP DESIGNER:**  
CAMPION ENGINEERING SERVICES, INC.  
MARTY CAMPION  
1800 PIONEER CREEK CENTER  
MAPLE PLAIN, MN 55364  
PH. 763.479.5172  
EMAIL: MCAMPION@CAMPIONENG.COM

**EROSION CONTROL INSTALLER**  
NAME: \_\_\_\_\_  
CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_

**CONTRACTOR**  
NAME: \_\_\_\_\_  
CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_

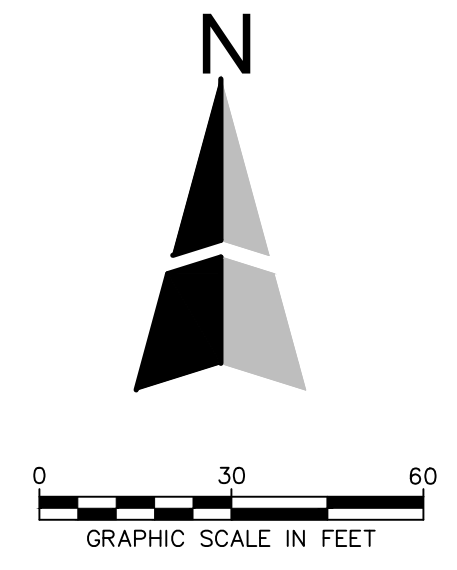
**EROSION CONTROL QUANTITIES:**  
SITE RESTORATION = 1.0 AC  
SILT FENCE = 1400 LF  
INLET PROTECTION = 7 EA  
ROCK CONSTRUCTION ENTRANCE = 1 EA



- EROSION/SILTATION CONTROL**
1. ALL EROSION CONTROL AND SILTATION CONTROL WILL COMPLY WITH MINNESOTA'S BEST MANAGEMENT PRACTICES MANUAL AND REGULATIONS OF THE CITY.
  2. THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW ALL REQUIREMENTS OF THE MPCA NPDES PHASE II PERMIT FOR CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO: WEEKLY EROSION CONTROL INSPECTIONS, INSPECTION AFTER 0.5" RAINFALL OR MORE AND DOCUMENTATION OF ALL CORRECTIVE MEASURES. BY BEGINNING CONSTRUCTION, THE CONTRACTOR ACKNOWLEDGES THE TERMS OF THIS PERMIT AND AGREES TO ABIDE BY THEM.
  3. THE CONTRACTOR SHALL PERFORM ANY CORRECTIVE MEASURES ORDERED BY THE CITY OR THE MPCA WITHIN 24 HOURS OF NOTIFICATION. ALSO, ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY BY EITHER THE CITY OR THE MPCA SHALL BE INSTALLED WITHIN 24 HOURS OF NOTIFICATION.
  4. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT, IN TEMPORARY SEDIMENTATION BASINS, OR IN EXISTING STORM SEWERS OR SWALE'S SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED.
  5. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION INCLUDING BUT NOT LIMITED TO ROCK ENTRANCES AND/OR SILT FENCES. CONTROL SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY, AT HIS/HER OPTION DIRECT THE CONTRACTOR IN HIS/HER METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS.
  6. ANY DEPOSITING OF SILT IN SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. THE SILT FENCES SHALL BE REMOVED AND THE SILT REMOVED FROM THE PONDING AREAS BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
  7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH AND MONITORING THE REQUIREMENT OF THE MPCA PERMIT.
  8. ALL DISTURBED AREAS, EXCEPT ROADWAYS, BUILDING AREAS, PARKING AREAS, ISLANDS AND SIDEWALK, SHALL BE RESTORED WITH A MINIMUM 4 INCHES TOPSOIL, SEEDED AND MULCHED (TYPE I) WITHIN 72 HOURS OF COMPLETION OF SITE GRADING, OR WITHIN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED. SEEDING SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATION 2575, SEED MIX 150 @ 40 LBS/ACRE (OR APPROVED EQUAL). DORMANT SEEDING AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH MNDOT SPECIFICATIONS, STRAW MULCHING QUANTITY SHALL BE TWO TONS PER ACRE, FERTILIZER (10-10-20) SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE (CAN BE OMITTED IN LANDSCAPED AREAS IF LANDSCAPED SEEDING IS DONE CONCURRENTLY).
  9. CONSTRUCTION SHALL PROCEED IN THE FOLLOWING SEQUENCE:
    - a. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY.
    - b. INSTALL EROSION CONTROL MEASURES AND ROCK CONSTRUCTION ENTRANCE.
    - c. CONTACT CITY FOR APPROVAL OF EROSION CONTROL INSTALLATION.
    - d. CONSTRUCT TEMPORARY SEDIMENTATION PONDS AND INSTALL TEMPORARY OUTFALL WITH STANDPIPE.
    - e. CONSTRUCT TEMPORARY DRAINAGE DITCHES/SWALES/STORM SEWER TO DIVERT SURFACE RUNOFF TO TEMPORARY SEDIMENTATION PONDS.
    - f. MAINTAIN EROSION MEASURE, I.E. SILT FENCE, ROCK CONSTRUCTION ENTRANCE.
    - g. MAINTAIN ALL TEMPORARY SEDIMENTATION PONDS. COMPLETE SITE GRADING TOLERANCING.
    - h. INSTALL SEED AND MULCH ON AREAS THAT ARE NOT TO BE HARD SURFACES.
  10. SLOPE PROTECTION AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH SECTION 02370 SLOPE PROTECTION, EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN OF THE PROJECT MANUAL.
  11. ALL STORM SEWER INLETS AND FLARED END SECTIONS SHALL BE ADEQUATELY PROTECTED BEFORE AND AFTER PAVEMENT CONSTRUCTION UNTIL ALL DISTURBED AREAS ARE STABILIZED. CONTRACTOR SHALL PLACE MIRAFI FABRIC AND GRAVEL OVER ALL CATCH BASIN GRATE INLETS UNTIL PAVING SURFACES ARE PAVED AND THE LANDSCAPING IS COMPLETED.
  12. STOCKPILE AREAS WHICH REMAIN ON THE SITE FOR MORE THAN SEVEN DAYS SHALL BE SEEDED, MULCHED, AND SURROUNDED BY SILT FENCE.
  13. TEMPORARY AND PERMANENT SEDIMENTATION PONDS, AT LOCATION SELECTED BY OWNER, SHALL BE CONSTRUCTED WITH THE INITIAL GRADING. THE SEDIMENT MUST BE REMOVED FROM THESE PONDS, AS NECESSARY, PRIOR TO COMPLETION OF THE PROJECT.
  14. BIO LOGS SHALL BE INSTALLED AT PIPE INLETS AND OUTLETS UNTIL RIPRAP IS INSTALLED. PERMANENT ENERGY DISSIPATORS SHALL BE INSTALLED WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.
  15. INSTALL SILT FENCE AROUND POND UPON COMPLETION OF GRADING.
  16. EROSION AND SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE UNTIL THE OWNER HAS DETERMINED THAT THE SITE SOILS HAVE BEEN PERMANENTLY STABILIZED AND SHALL BE REMOVED WITHIN 30 DAYS THEREAFTER.
  17. ALL STOCKPILES OF SOIL OR OTHER MATERIALS SUBJECT TO EROSION BY WIND OR WATER SHALL BE COVERED, VEGETATED, ENCLOSED, FENCED ON THE DOWN GRADIENT SIDE OR OTHERWISE EFFECTIVELY PROTECTED FROM EROSION IN ACCORDANCE WITH THE AMOUNT OF TIME THE MATERIAL WILL BE ON SITE AND THE MANNER OF ITS PROPOSED USE.

- WETLAND BUFFER RE-VEGETATION**
1. EROSION/SEDIMENT CONTROL PRACTICES SHALL BE USED DURING BUFFER VEGETATION ESTABLISHMENT.
  2. DISTURBED BUFFER AREAS SHALL BE PLANTED WITH STATE SEED MIX 35-641 (BWSR U5) OR EQUIVALENT.

- EROSION MAT REQUIREMENTS**
1. TEMPORARY EROSION MATS SHALL BE BIODEGRADABLE DOULBE-NET STRAW (NORTH AMERICAN GREEN 5150 OR APPROVED EQUAL) AND EROSION MATS SHALL HAVE A MINIMUM FUNCTIONAL LONGEVITY OF 10 MONTHS.
  2. PERMANENT EROSION CONTROL MAT SHALL BE ENKAMAT 7010/7016 OR APPROVED EQUAL AND SHALL BE COVERED WITH TEMPORARY EROSION CONTROL MAT AFTER TOPSOIL AND SEEDING.
  3. EROSION MATS PLACED ON SLOPES 3:1 OR GREATER SHALL BE ROLLED DOWN SLOPE AND WITH 4" MINIMUM LAP AND STAPLED AT 1' O.C.
  4. CONSTRUCT A 6"x12" ANCHOR TRENCH 3' BEYOND CREST AND TOE OF SLOPE. STAPLE EROSION MAT IN TRENCH AT 1' O.C.



NO.	DATE	DESCRIPTION
1	07/22/2017	PARKING STALL COUNT

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
1800 Pioneer Creek Center,  
P.O. Box 249  
Maple Plain, MN 55359  
Phone: 763-479-5172  
Fax: 763-479-4242  
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.  
Martin P. Campion -Lic. # 19901 Date: \_\_\_\_\_

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
MINNETONKA, MN

**PRELIMINARY STORM WATER POLLUTION PREVENTION PLAN**

SHEET NO. 7 OF 11 SHEETS

PROJECT NO: 17-011  
DATE: 07/24/2017

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

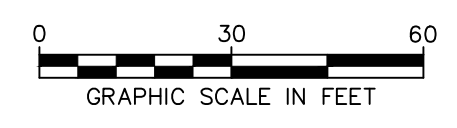
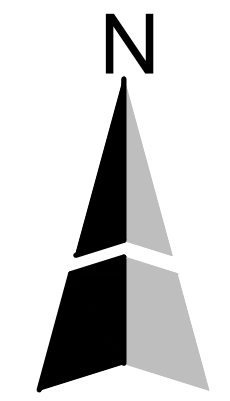
CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

Plot Date & Time:



#	Tag number	Size	Common Name	Scientific Name	Notes
1	4797	15	Siberian Elm	<i>Ulmus pumila</i>	
2	4798	11	White Mulberry	<i>Morus alba</i>	
3	4799	10	White Mulberry	<i>Morus alba</i>	
4	4800	8	White Mulberry	<i>Morus alba</i>	
5	4801	19,11	Siberian Elm	<i>Ulmus pumila</i>	
6	4802	22,12	Siberian Elm	<i>Ulmus pumila</i>	
7	4803	16	Siberian Elm	<i>Ulmus pumila</i>	
8	4804	11,11,10,9,8	Siberian Elm	<i>Ulmus pumila</i>	
9	4805	12,11,10	Siberian Elm	<i>Ulmus pumila</i>	
10	4806	24	Siberian Elm	<i>Ulmus pumila</i>	major internal decay along trunk
11	4807	10	Green Ash	<i>Fraxinus pennsylvanica</i>	
12	4808	12	Green Ash	<i>Fraxinus pennsylvanica</i>	
13	4809	15	Cottonwood	<i>Populus deltoides</i>	
14	4810	14	Cottonwood	<i>Populus deltoides</i>	
15	4811	25	Cottonwood	<i>Populus deltoides</i>	
16	4812	20	Silver Maple	<i>Acer saccharinum</i>	
17	4813	18	Cottonwood	<i>Populus deltoides</i>	
18	4814	11,11	Green Ash	<i>Fraxinus pennsylvanica</i>	
19	4815	11	Green Ash	<i>Fraxinus pennsylvanica</i>	
20	4816	16	Green Ash	<i>Fraxinus pennsylvanica</i>	
21	4817	8	Box Elder	<i>Acer negundo</i>	
22	4818	17	Box Elder	<i>Acer negundo</i>	
23	4819	9	Box Elder	<i>Acer negundo</i>	
24	4820	8	American Elm	<i>Ulmus americana</i>	
25	4821	12	Siberian Elm	<i>Ulmus pumila</i>	
26	4822	22,22	Northern Pin Oak	<i>Quercus ellipsoidalis</i>	
27	4823	16	Green Ash	<i>Fraxinus pennsylvanica</i>	
28	4824	14	Siberian Elm	<i>Ulmus pumila</i>	
29	4825	40	Cottonwood	<i>Populus deltoides</i>	
30	4826	8	Green Ash	<i>Fraxinus pennsylvanica</i>	
31	4827	17,16,12	White Mulberry	<i>Morus alba</i>	internal decay in 16" stem along trunk
32	4828	25	Siberian Elm	<i>Ulmus pumila</i>	
33	4829	8	Green Ash	<i>Fraxinus pennsylvanica</i>	
34	4830	9,8	Green Ash	<i>Fraxinus pennsylvanica</i>	
35	4831	18,11	Silver Maple	<i>Acer saccharinum</i>	
36	4832	13	White Mulberry	<i>Morus alba</i>	
37	4833	25	Siberian Elm	<i>Ulmus pumila</i>	
38	4834	14	Colorado Blue Spruce	<i>Picea pungens</i>	25' in height
39	4835	42	Silver Maple	<i>Acer saccharinum</i>	
40	4836	10	Russian Olive	<i>Elaeagnus angustifolia</i>	
41	4837	11,10	Russian Olive	<i>Elaeagnus angustifolia</i>	

TREE INVENTORY COMPLETED BY KEN ARNDT, SR. FOREST ECOLOGIST, MIDWEST NATURAL RESOURCES



1	07/22/2017	PARKING STALL COUNT
NO.	DATE	DESCRIPTION
		REVISIONS

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.  
 Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

**PRELIMINARY TREE INVENTORY PLAN**

SHEET NO. 8 OF 11 SHEETS

PROJECT NO:  
**17-011**

DATE:  
**07/24/2017**

C:\Users\kik-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CIVIL TREE INVENTORY.dwg



**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

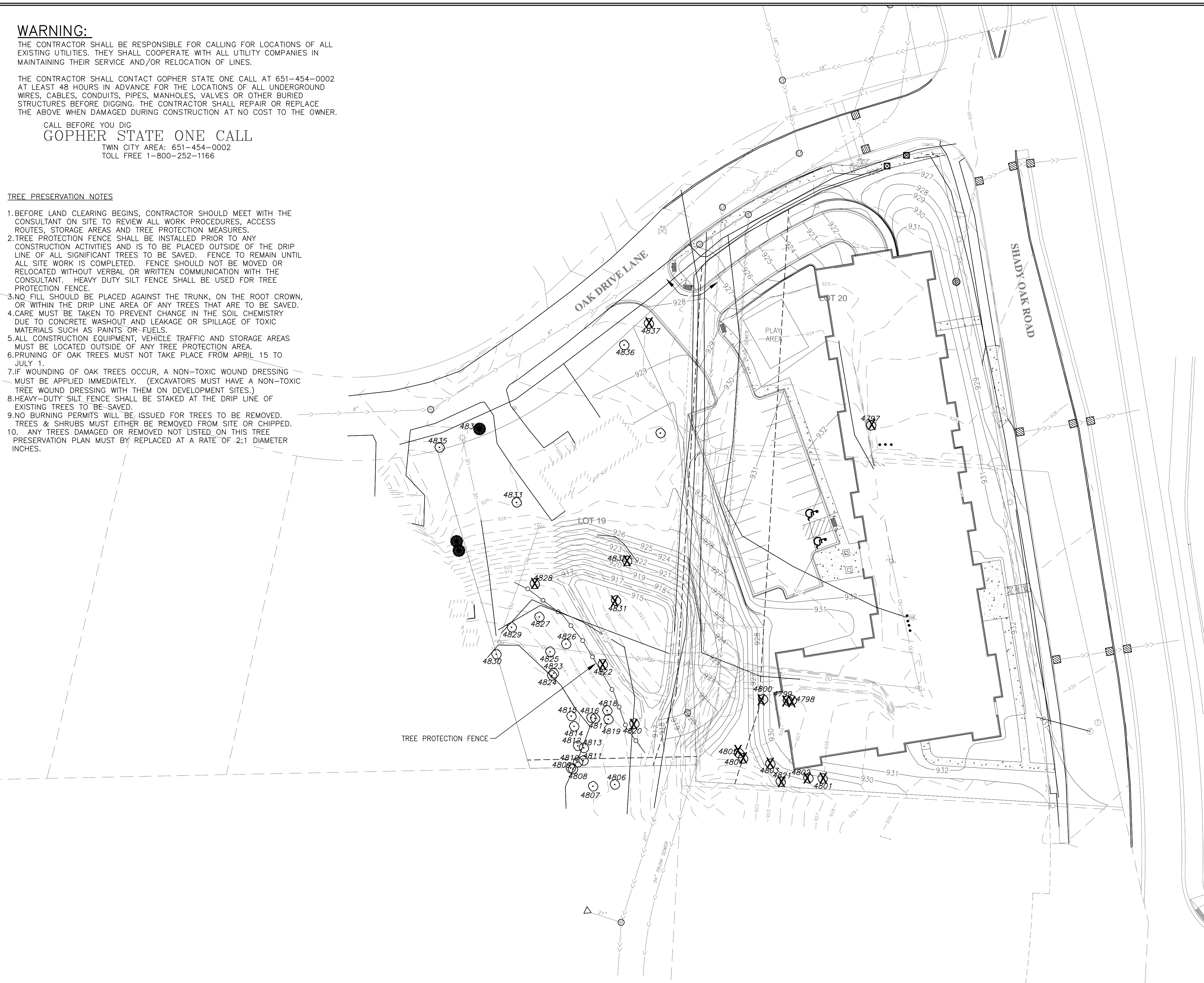
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG  
**GOPHER STATE ONE CALL**

TWIN CITY AREA: 651-454-0002  
 TOLL FREE 1-800-252-1166

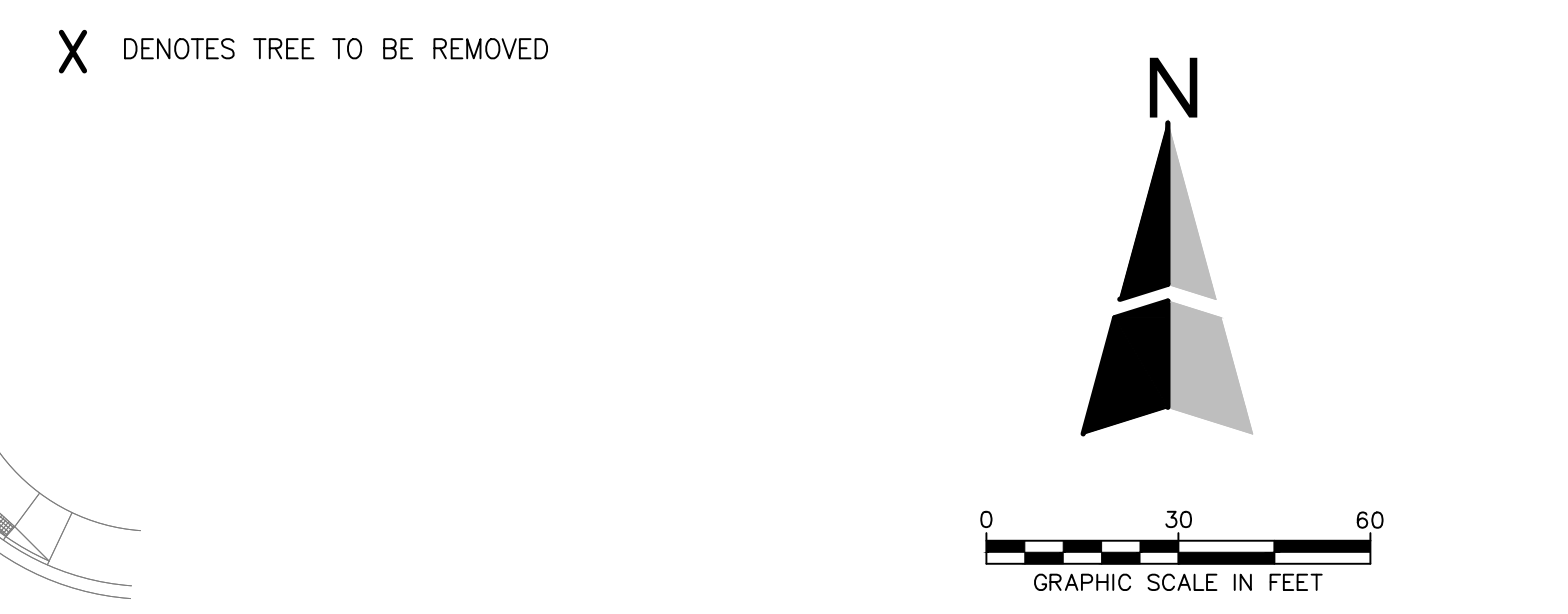
**TREE PRESERVATION NOTES**

- BEFORE LAND CLEARING BEGINS, CONTRACTOR SHOULD MEET WITH THE CONSULTANT ON SITE TO REVIEW ALL WORK PROCEDURES, ACCESS ROUTES, STORAGE AREAS AND TREE PROTECTION MEASURES.
- TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES AND IS TO BE PLACED OUTSIDE OF THE DRIP LINE OF ALL SIGNIFICANT TREES TO BE SAVED. FENCE TO REMAIN UNTIL ALL SITE WORK IS COMPLETED. FENCE SHOULD NOT BE MOVED OR RELOCATED WITHOUT VERBAL OR WRITTEN COMMUNICATION WITH THE CONSULTANT. HEAVY DUTY SILT FENCE SHALL BE USED FOR TREE PROTECTION FENCE.
- NO FILL SHOULD BE PLACED AGAINST THE TRUNK, ON THE ROOT CROWN, OR WITHIN THE DRIP LINE AREA OF ANY TREES THAT ARE TO BE SAVED.
- CARE MUST BE TAKEN TO PREVENT CHANGE IN THE SOIL CHEMISTRY DUE TO CONCRETE WASHOUT AND LEAKAGE OR SPILLAGE OF TOXIC MATERIALS SUCH AS PAINTS OR FUELS.
- ALL CONSTRUCTION EQUIPMENT, VEHICLE TRAFFIC AND STORAGE AREAS MUST BE LOCATED OUTSIDE OF ANY TREE PROTECTION AREA.
- PRUNING OF OAK TREES MUST NOT TAKE PLACE FROM APRIL 15 TO JULY 1.
- IF WOUNDING OF OAK TREES OCCUR, A NON-TOXIC WOUND DRESSING MUST BE APPLIED IMMEDIATELY. (EXCAVATORS MUST HAVE A NON-TOXIC TREE WOUND DRESSING WITH THEM ON DEVELOPMENT SITES.)
- HEAVY-DUTY SILT FENCE SHALL BE STAKED AT THE DRIP LINE OF EXISTING TREES TO BE SAVED.
- NO BURNING PERMITS WILL BE ISSUED FOR TREES TO BE REMOVED. TREES & SHRUBS MUST EITHER BE REMOVED FROM SITE OR CHIPPED.
- ANY TREES DAMAGED OR REMOVED NOT LISTED ON THIS TREE PRESERVATION PLAN MUST BE REPLACED AT A RATE OF 2:1 DIAMETER INCHES.



Tag Number	Size	Common Name	High Priority	Save/Remove	Notes
4797	15	Siberian Elm	No	Remove (1)	
4798	11	White Mulberry	No	Remove (1)	
4799	10	White Mulberry	No	Remove (1)	
4800	8	White Mulberry	No	Remove (1)	
4801	19,11	Siberian Elm	No	Remove (1)	
4802	22,12	Siberian Elm	No	Remove (1)	
4803	16	Siberian Elm	No	Remove (1)	
4804	11,11,10,9,8	Siberian Elm	No	Remove	
4805	12,11,10	Siberian Elm	No	Remove	
4806	24	Siberian Elm	No	Save	major internal decay along trunk
4807	10	Green Ash	No	Save	
4808	12	Green Ash	No	Save	
4809	15	Cottonwood	Yes	Save	
4810	14	Cottonwood	No	Save	
4811	25	Cottonwood	Yes	Save	
4812	20	Silver Maple	No	Save	
4813	18	Cottonwood	Yes	Save	
4814	11,11	Green Ash	No	Save	
4815	11	Green Ash	No	Save	
4816	16	Green Ash	No	Save	
4817	8	Box Elder	No	Save	
4818	17	Box Elder	No	Save	
4819	9	Box Elder	No	Save	
4820	8	American Elm	No	Remove (2)	
4821	12	Siberian Elm	No	Remove (1)	
4822	22,22	Northern Pin Oak	Yes	Remove (2)	
4823	16	Green Ash	No	Save	
4824	14	Siberian Elm	No	Save	
4825	40	Cottonwood	Yes	Save	
4826	8	Green Ash	No	Save	
4827	17,16,12	White Mulberry	No	Save	internal decay in 16" stem
4828	25	Siberian Elm	No	Remove (2)	
4829	8	Green Ash	No	Save	
4830	9,8	Green Ash	No	Save	
4831	18,11	Silver Maple	No	Remove (2)	
4832	13	White Mulberry	No	Remove (2)	
4833	25	Siberian Elm	No	Save	
4834	14	Colorado Blue Spruce	No	Save	25' in height
4835	42	Silver Maple	No	Save	
4836	10	Russian Olive	No	Save	
4837	11,10	Russian Olive	No	Remove (1)	

Total trees	55
Significant trees	53
High priority trees	6
Significant trees removed outside of Basic Tree Removal and Pond area	8
High Priority trees removed	2 (44 inches)
Required Mitigation	(8 x 2") + 44" = 60"
Remove (1)	Indicates trees removed within the "basic tree removal area"
Remove (2)	Indicates trees removed within the ponding area



Plot Date & Time: C:\Users\kik-ca\OneDrive\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CIV\3 TREE PRESERVATION PLAN.dwg

1	07/22/2017	PARKING STALL COUNT
NO.	DATE	DESCRIPTION REVISIONS

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

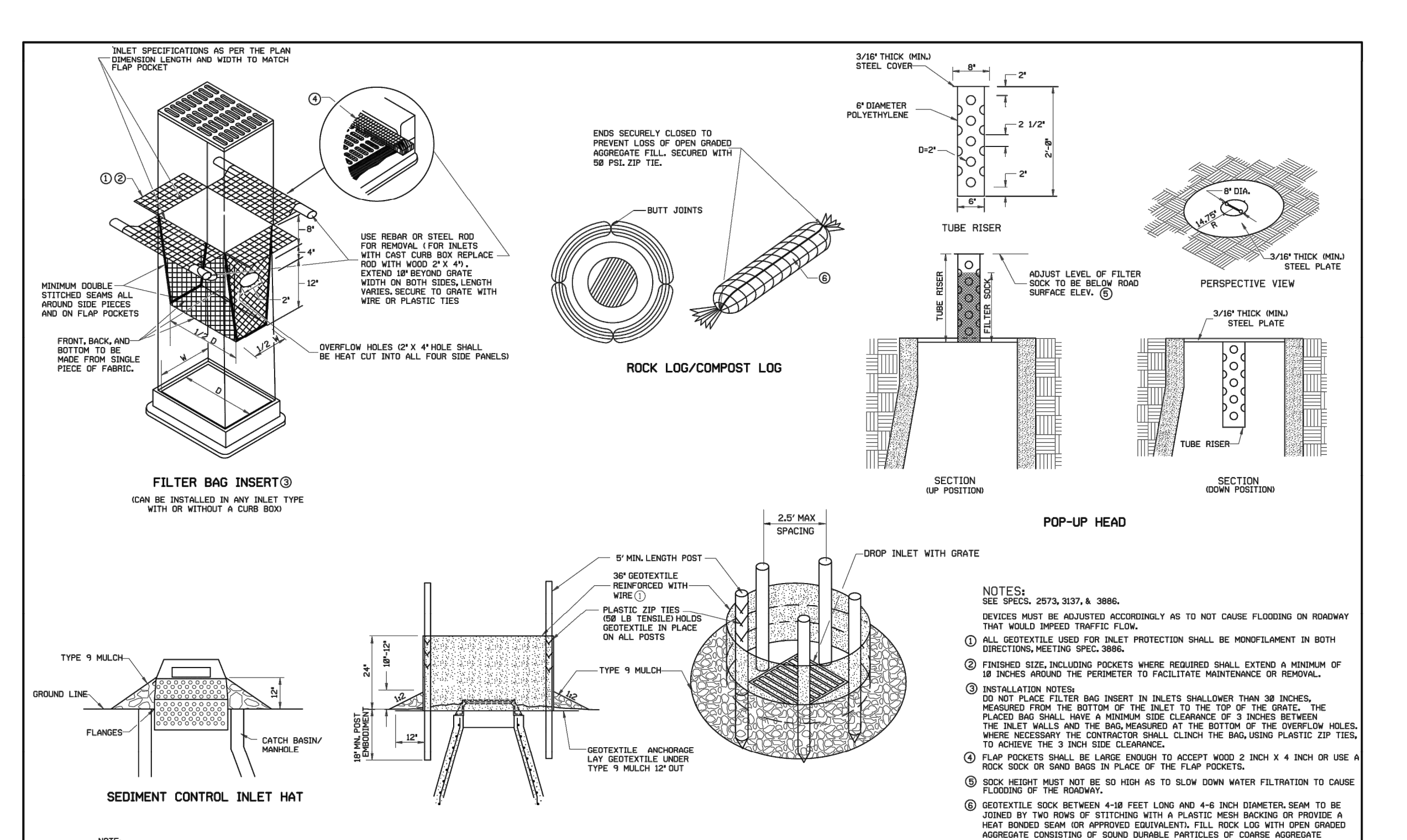
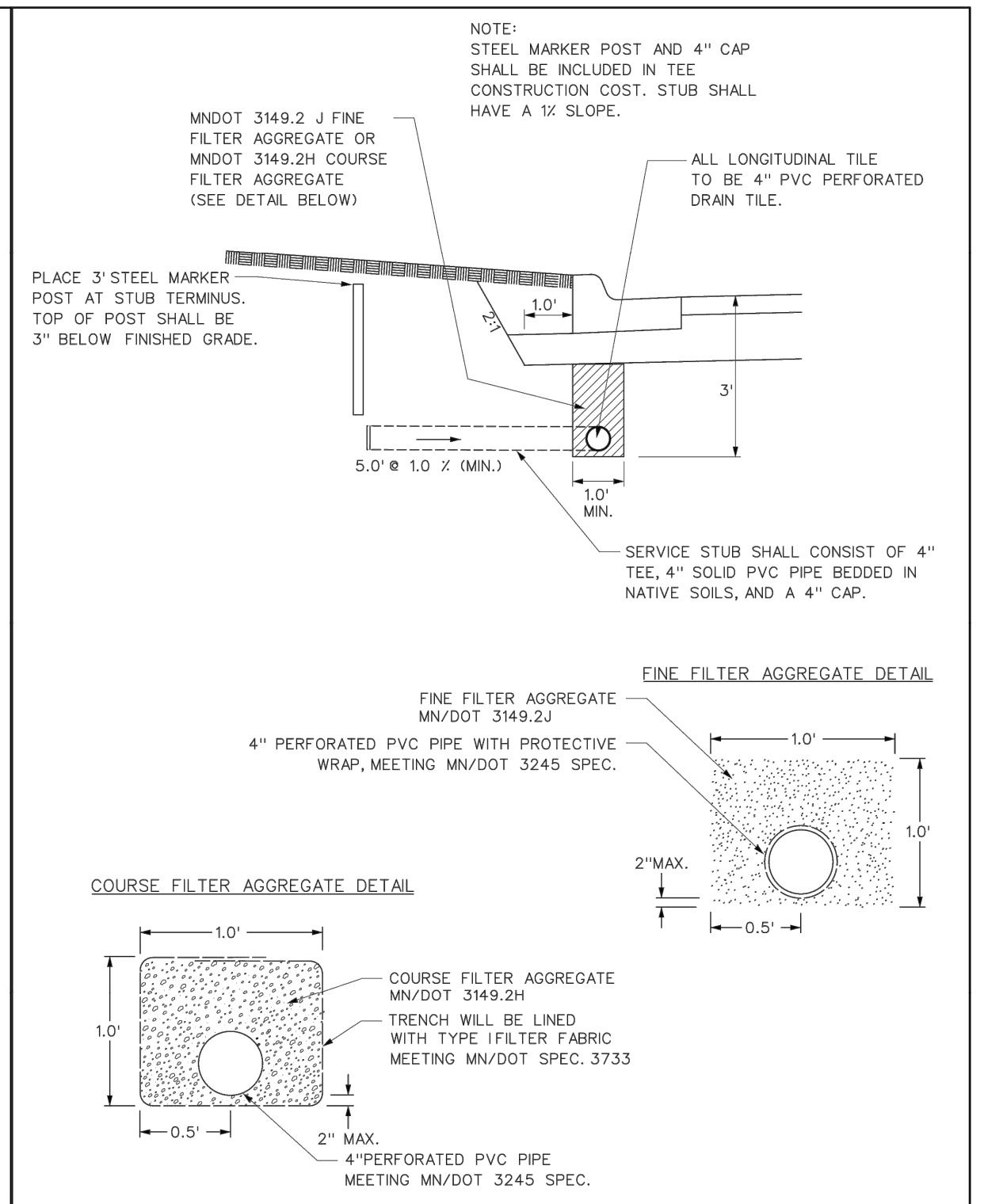
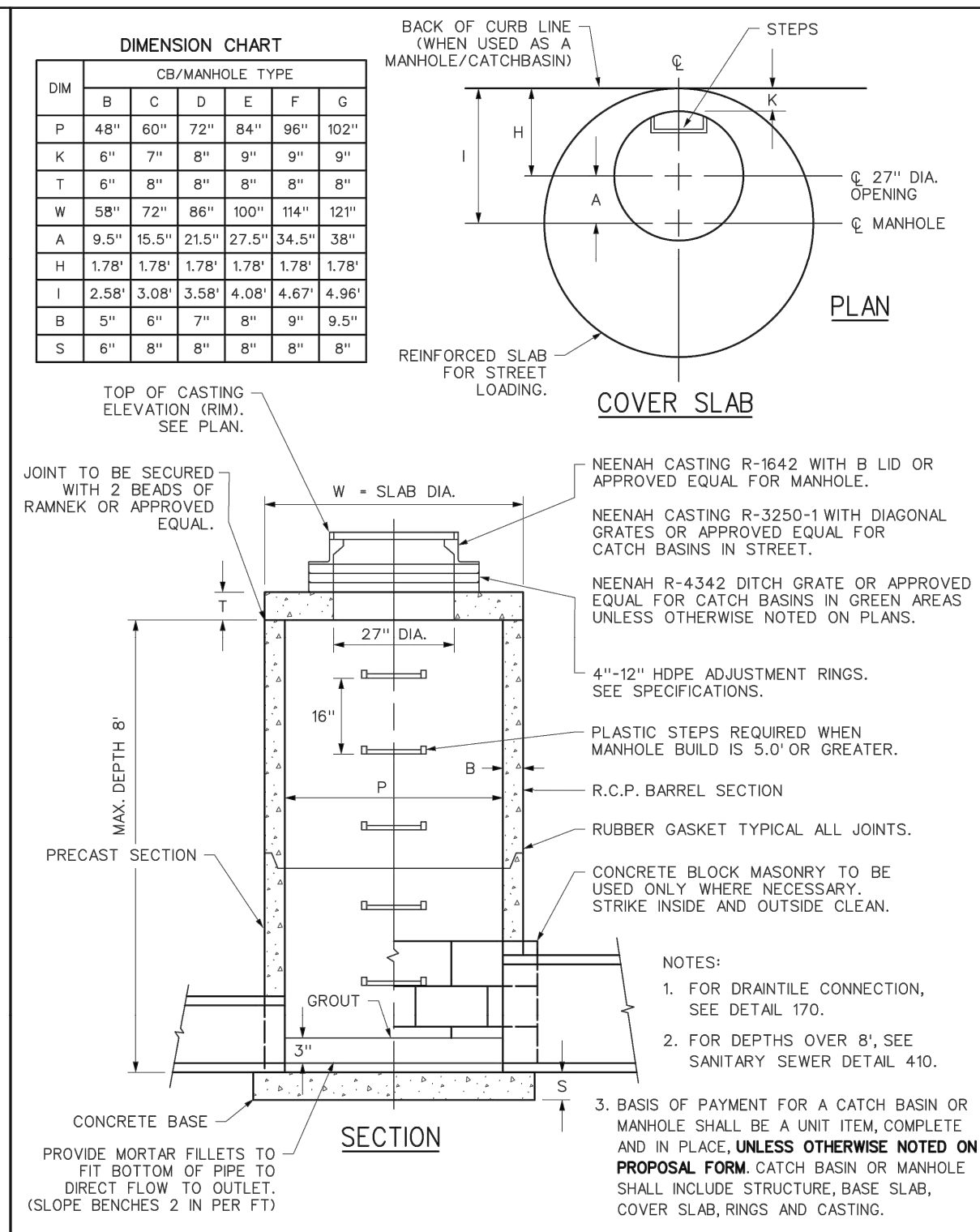
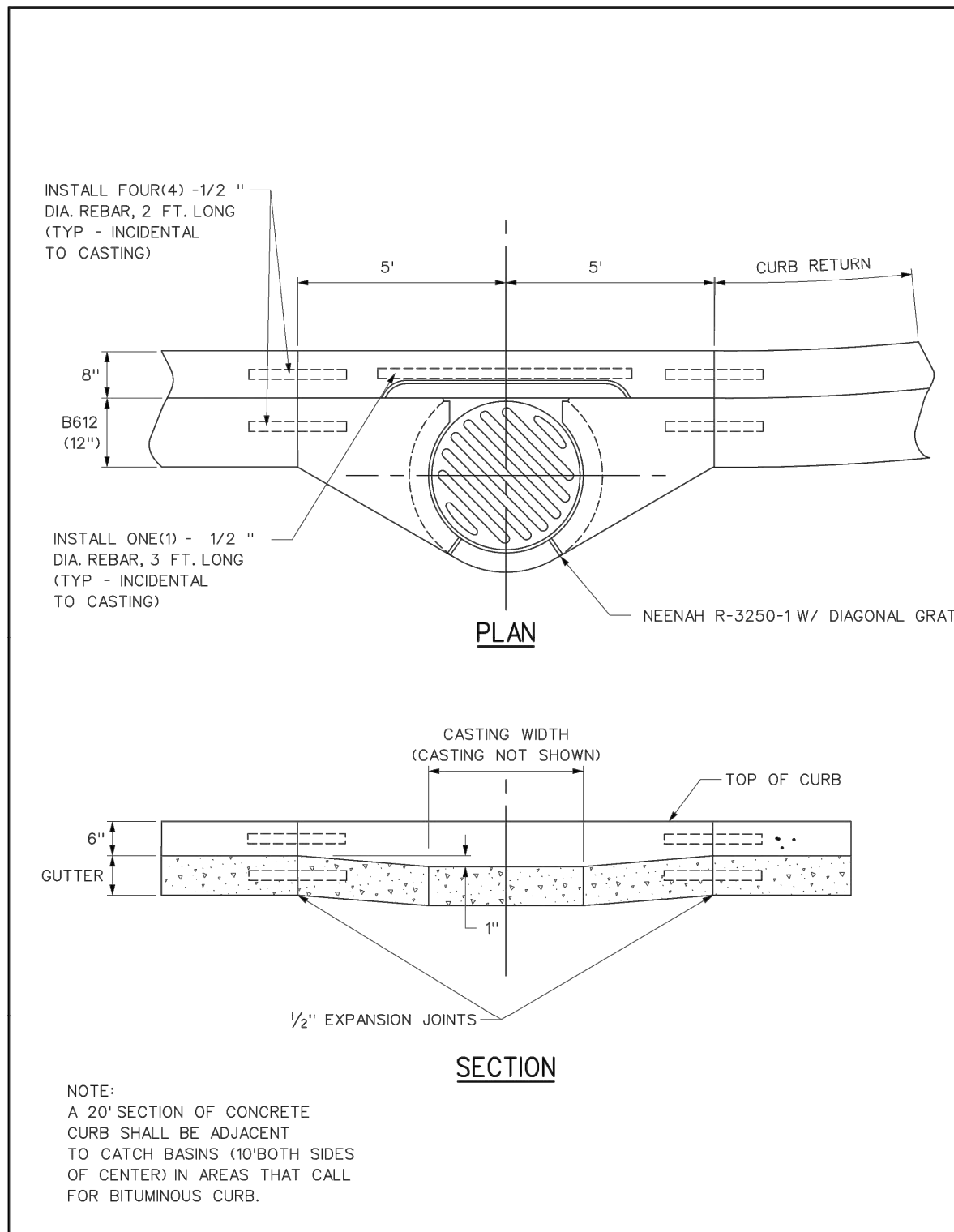
I hereby certify that this plan, specification or report has been prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.  
 Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

**PRELIMINARY TREE PRESERVATION PLAN**

PROJECT NO: **17-011**  
 SHEET NO. **9** OF **11** SHEETS  
 DATE: **07/24/2017**

Plot Date & Time: C:\Users\krc-ca\OneDrive\2017\17-011 - Shady Oak Crossing\CAD\CAD 10 - DETAILS.dwg

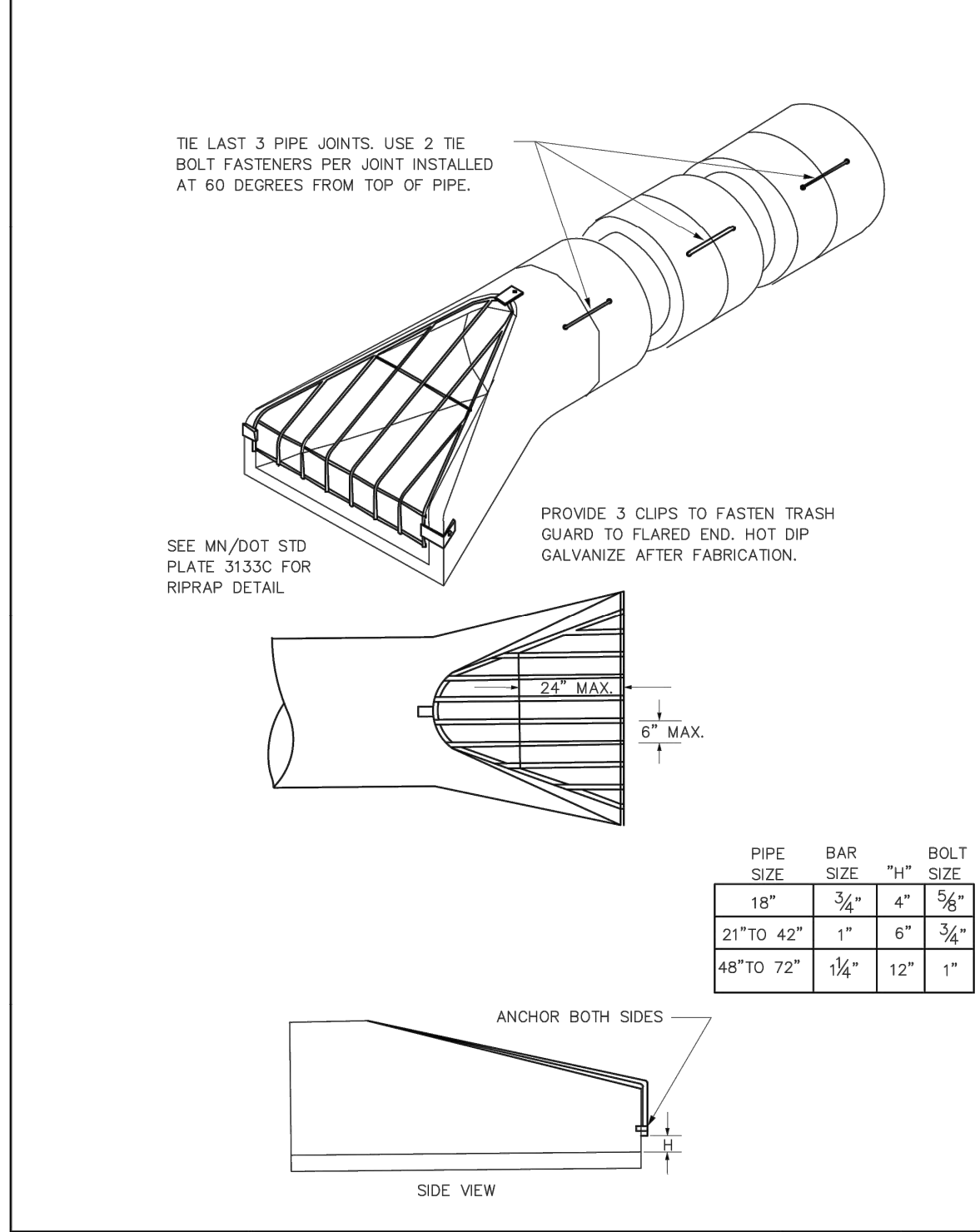


City of minnetonka CATCH BASIN INSTALLATION SCALE: NOT TO SCALE STD. PLATE NO: 190 APPROVED: 9/2008 REVISED: 1/2008

City of minnetonka STANDARD CATCH BASIN / MANHOLE 4020 SCALE: NOT TO SCALE STD. PLATE NO: 120 APPROVED: 4/2005 REVISED: 2/2015

City of minnetonka DRAIN TILE INSTALLATION (CONCRETE CURB) SCALE: NOT TO SCALE STD. PLATE NO: 160 APPROVED: 2/2001 REVISED: 3/2015

STANDARD SHEET NO. 5-257,485 (4 OF 7) TITLE: TEMPORARY SEDIMENT CONTROL STORM DRAIN INLET PROTECTION DRAWN BY: DECEMBER 11, 2013



**TABLE OF QUANTITIES RIPRAP AT RCP OUTLETS**

DIA. OF ROUND PIPE (IN.)	L (FT.)	CLASS II 12" dia. = 12"		CLASS III 18" dia. = 18"		CLASS IV 24" dia. = 24"	
		GEOTEXTILE FILTER UNDER APRON (CU.YD.)	12" GRANULAR FILTER UNDER APRON (CU.YD.)	GEOTEXTILE FILTER UNDER APRON (CU.YD.)	18" GRANULAR FILTER UNDER APRON (CU.YD.)	GEOTEXTILE FILTER UNDER APRON (CU.YD.)	24" GRANULAR FILTER UNDER APRON (CU.YD.)
12	8	18.9	8.2	15.9	8.3	4.4	22.6
15	8	18.8	8.2	15.9	8.3	4.8	23.9
18	8	25.4	8.5	21.6	8.5	5.2	29.8
21	8	24.1	8.4	20.7	8.6	7.1	38.9
24	12	25.7	8.5	22.6	8.6	12.3	38.9
27	12	31.4	8.6	28.2	8.9	9.9	39.2
30	14	37.4	8.8	33.5	9.1	16.8	41.6
36	18	45.9	1.1	38.6	1.6	15.8	55.4
42	18	52.8	1.2	42.5	1.7	16.7	63.8
48	24	61.1	1.3	49.2	1.9	20.2	72.8

**TABLE OF QUANTITIES RIPRAP AT RCP-A OUTLETS**

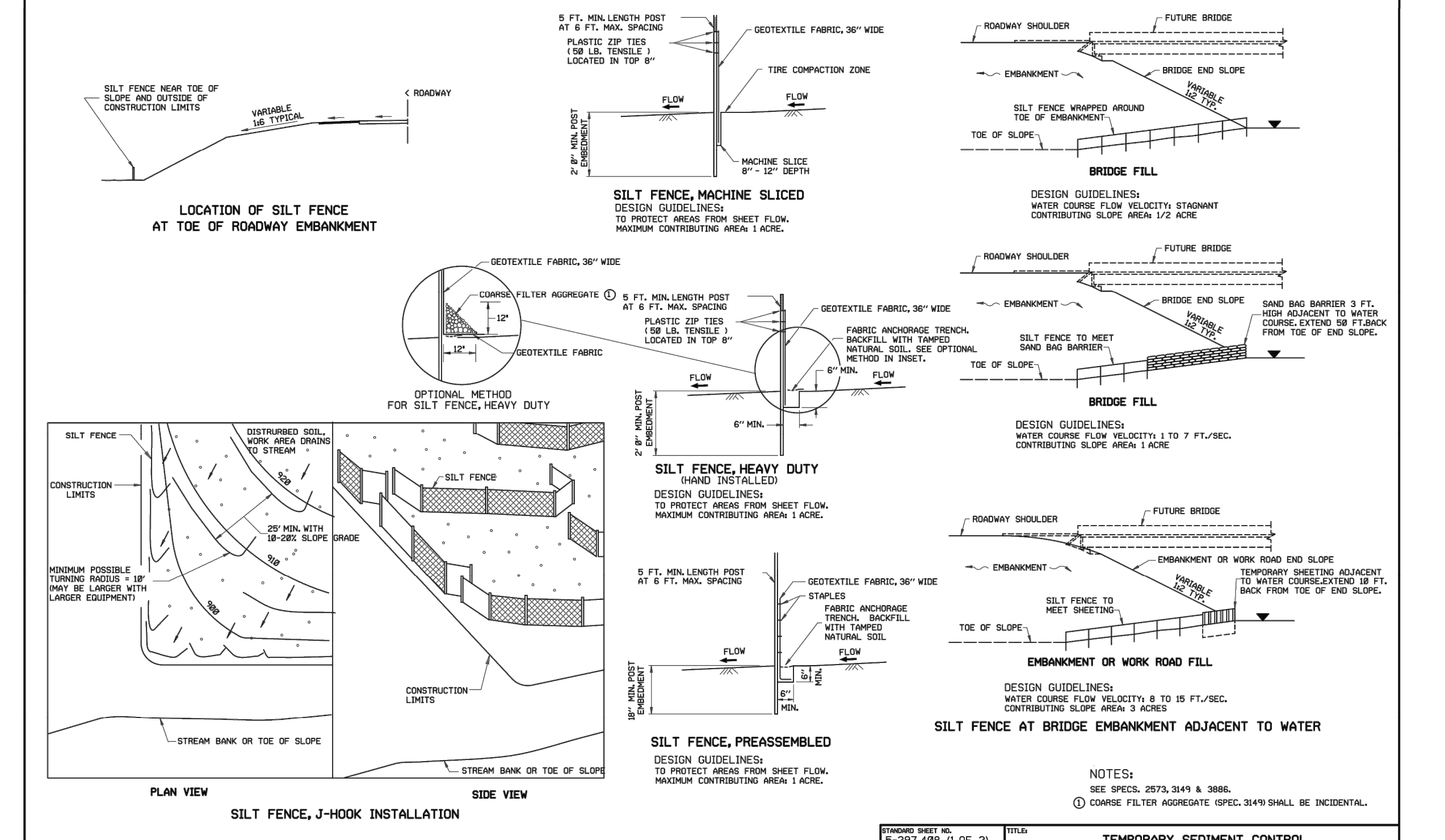
SPAN OF PIPE ARCH (IN.)	L (FT.)	CLASS II 12" dia. = 12"		CLASS III 18" dia. = 18"		CLASS IV 24" dia. = 24"	
		GEOTEXTILE FILTER UNDER APRON (CU.YD.)	12" GRANULAR FILTER UNDER APRON (CU.YD.)	GEOTEXTILE FILTER UNDER APRON (CU.YD.)	18" GRANULAR FILTER UNDER APRON (CU.YD.)	GEOTEXTILE FILTER UNDER APRON (CU.YD.)	24" GRANULAR FILTER UNDER APRON (CU.YD.)
22	18	32.4	8.3	28.8	8.4	8.1	32.8
28	12	29.5	8.5	27.2	8.7	8.5	37.1
36	14	37.3	8.8	33.2	9.1	11.2	45.8
43	16	45.9	1.1	39.5	1.6	14.3	55.3
51	18	52.8	1.2	43.3	1.7	16.9	62.7
58	24	59.9	1.3	49.2	1.9	19.8	78.7

NOTE: REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS SHALL BE DESIGNATED IN THE PLANS. PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.

- FOR PIPES GREATER THAN OR EQUAL TO 36", USE 1.5".
- GEOTEXTILE FILTER, SPEC. 3733, SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIPRAP. GRANULAR FILTER MATERIALS.
- DIMENSION E IS GIVEN ON STANDARD PLATES 3188 AND 3118.
- GRANULAR FILTER SPEC. 3681 MAY BE USED AS A CUSHION LAYER. PLACE FILTER PER SPEC. 2511. THE CUSHION LAYER IS INCIDENTAL.
- GRANULAR FILTER OR RIPRAP, SPEC. 3681, TO EXTEND UNDER ENTIRE OPEN PORTION OF PIPE APRON. DEPTH OF MATERIAL UNDER APRON SHALL MATCH RIPRAP DEPTH. WHEN USING RIPRAP INCREASE RIPRAP QUANTITY ACCORDINGLY AND PLACE A 2" LAYER OF 1.5" CRUSHED ROCK UNDER THE APRON TO AID IN GRADATION. FOR APRON PLACEMENT, CRUSHED ROCK IS INCIDENTAL.

City of minnetonka FLARED END SECTION SCALE: NOT TO SCALE STD. PLATE NO: 190 APPROVED: 1/2008 REVISED: 1/2008

STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION SPECIFICATION REFERENCE: 3188, 3189, 3681, 3733, 2511 STANDARD: 3133D



STANDARD SHEET NO. 5-297,488 (1 OF 2) TITLE: TEMPORARY SEDIMENT CONTROL SILT FENCE DRAWN BY: SEPTEMBER 27, 2006

NO.	DATE	DESCRIPTION
1	07/22/2017	PARKING STALL COUNT
REVISIONS		

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning

1800 Pioneer Creek Center,  
P.O. Box 249  
Maple Plain, MN 55359  
Phone: 763-479-5172  
Fax: 763-479-4242  
E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**

**RON CLARK CONSTRUCTION**

MINNETONKA, MN

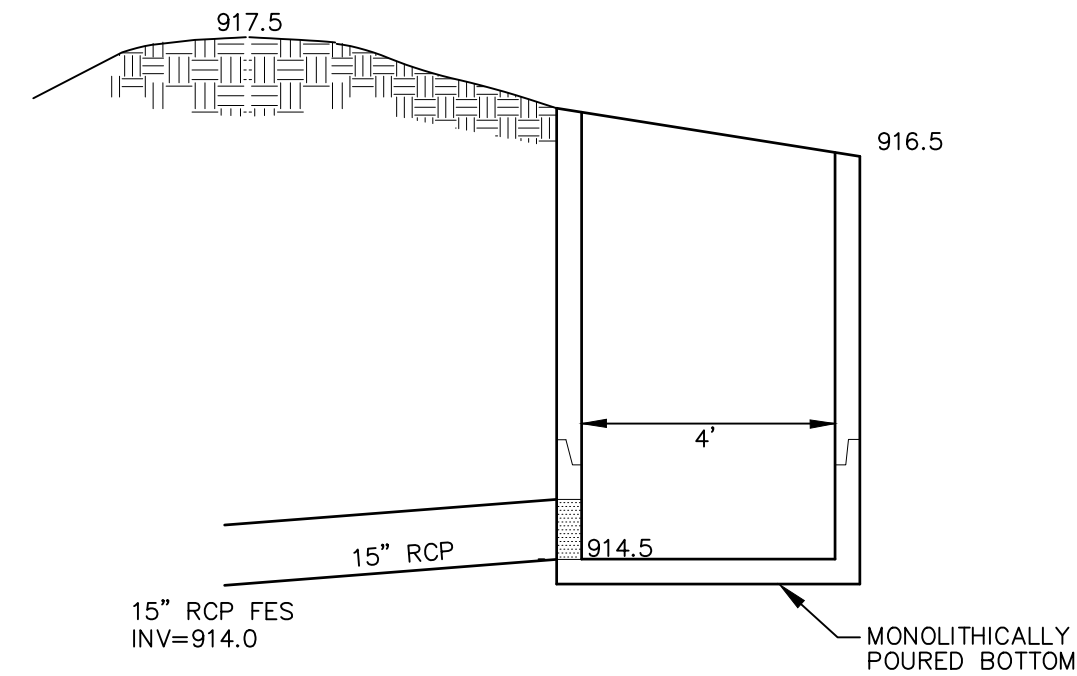
DETAILS

PROJECT NO: 17-011

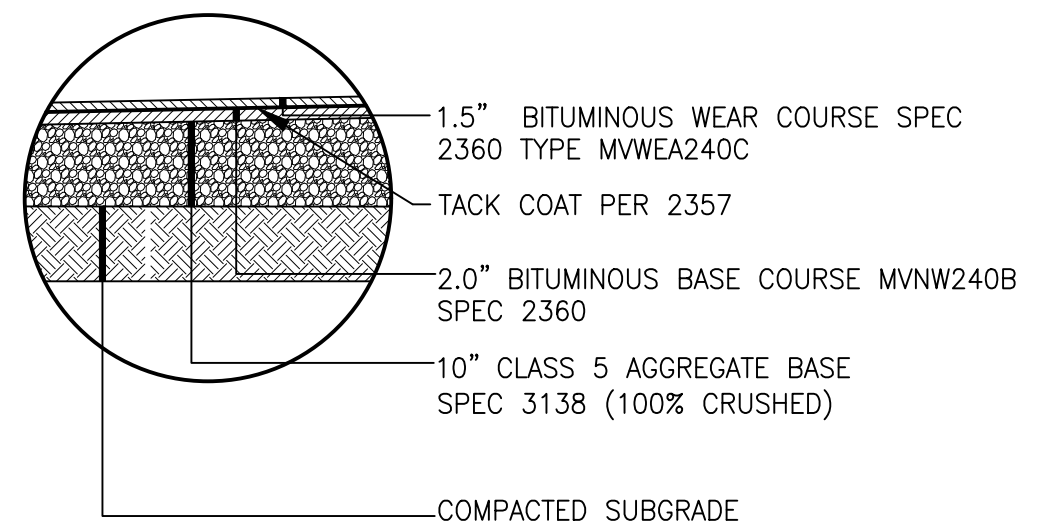
SHEET NO. 10 OF 11 SHEETS

DATE: 07/24/2017

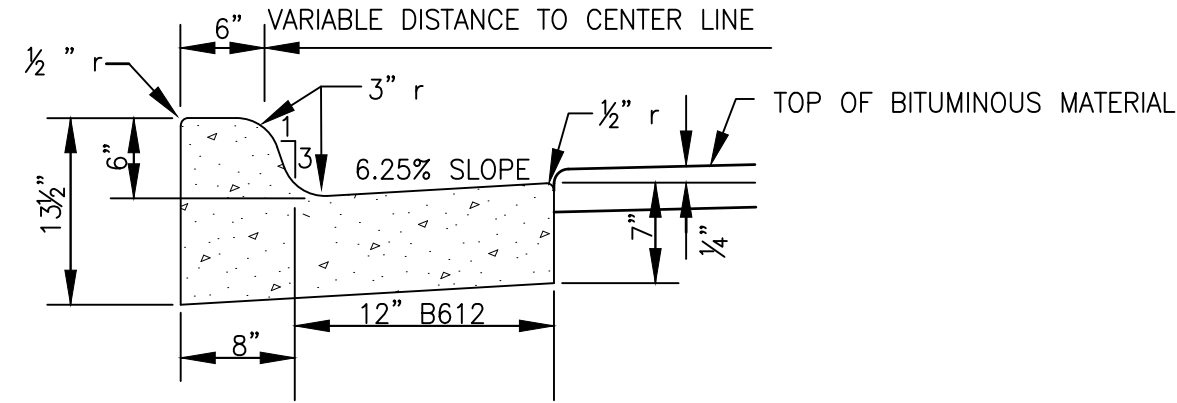
Plot Date & Time: C:\Users\kkr-ca\OneDrive\2017\17-011 Shady Oak Crossing\CAD\CIV\10 DETAILS.dwg



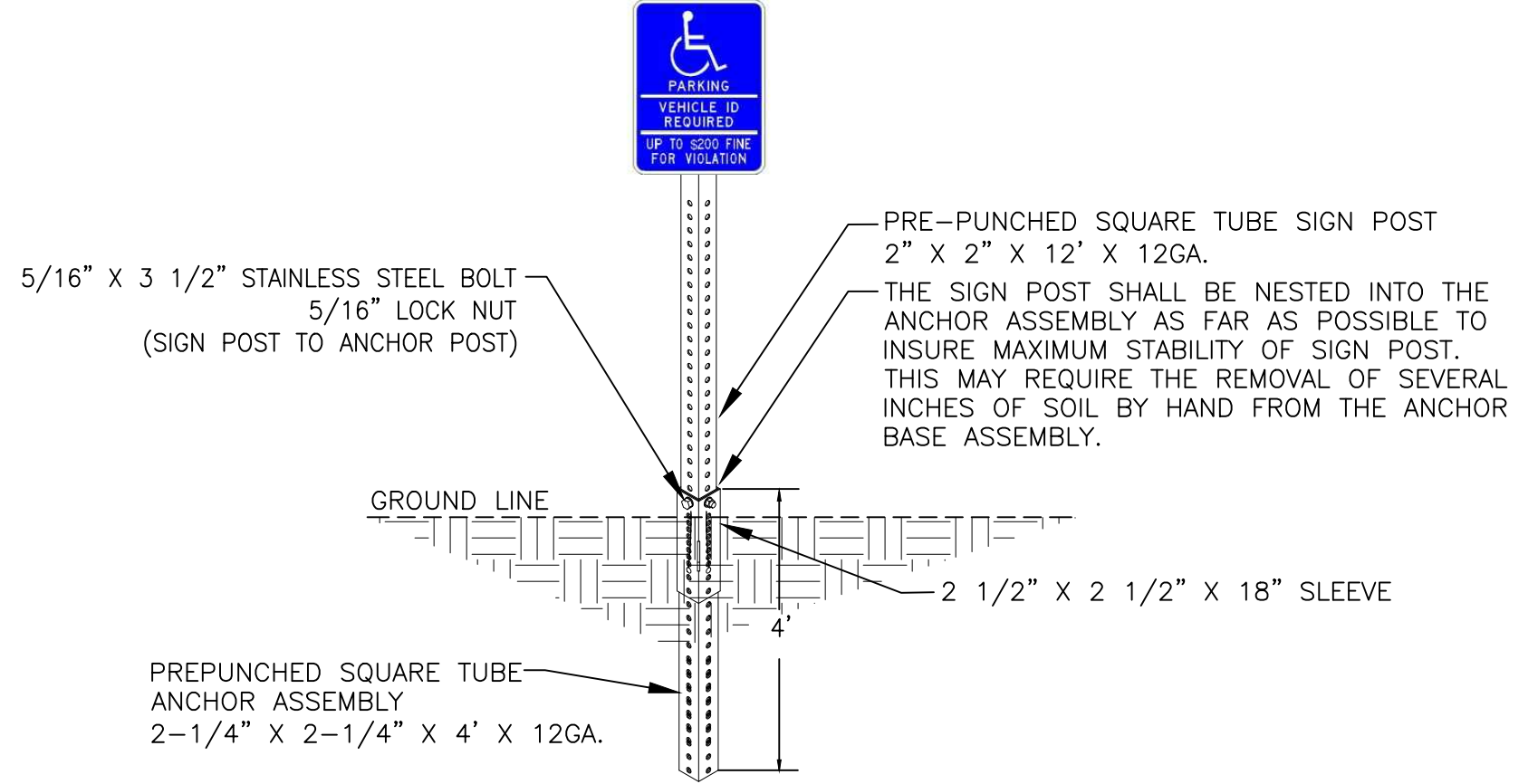
OUTLET CONTROL STRUCTURE



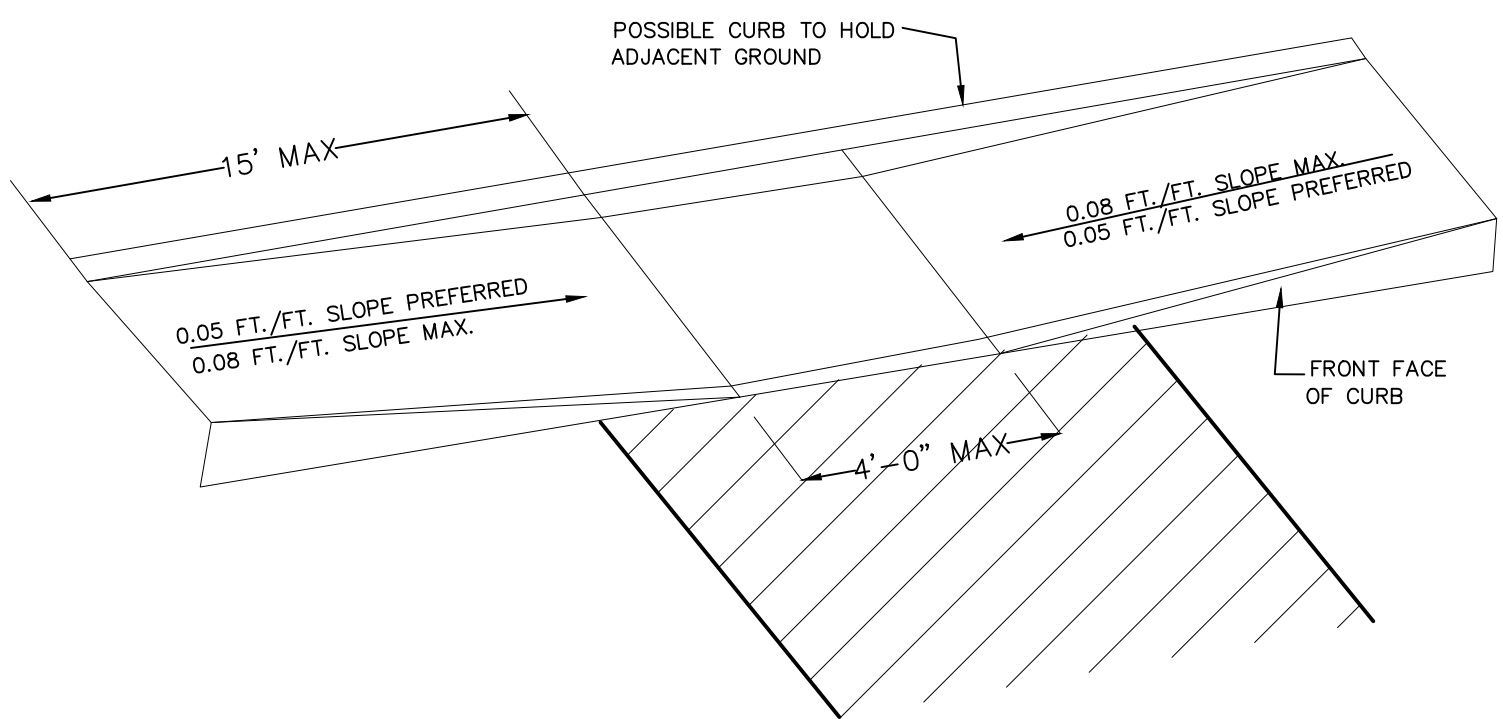
TYPICAL PARKING LOT SECTION



MNDOT B-612 CONCRETE CURB & GUTTER



ADA HANDICAP PARKING SIGN AND POST DETAIL



HANDICAP ACCESS AISLE

1	07/22/2017	PARKING STALL COUNT
NO.	DATE	DESCRIPTION REVISIONS

**CAMPION ENGINEERING SERVICES, INC.**

• Civil Engineering • Land Planning  
 1800 Pioneer Creek Center,  
 P.O. Box 249  
 Maple Plain, MN 55359  
 Phone: 763-479-5172  
 Fax: 763-479-4242  
 E-Mail: mcampion@campioneng.com

I hereby certify that this plan, specification or report has been 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.

Martin P. Campion -Lic. # 19901 Date:

**SHADY OAK CROSSING**  
**RON CLARK CONSTRUCTION**  
 MINNETONKA, MN

DETAILS	
SHEET NO. 11 OF 11 SHEETS	

PROJECT NO: 17-011
DATE: 07/24/2017