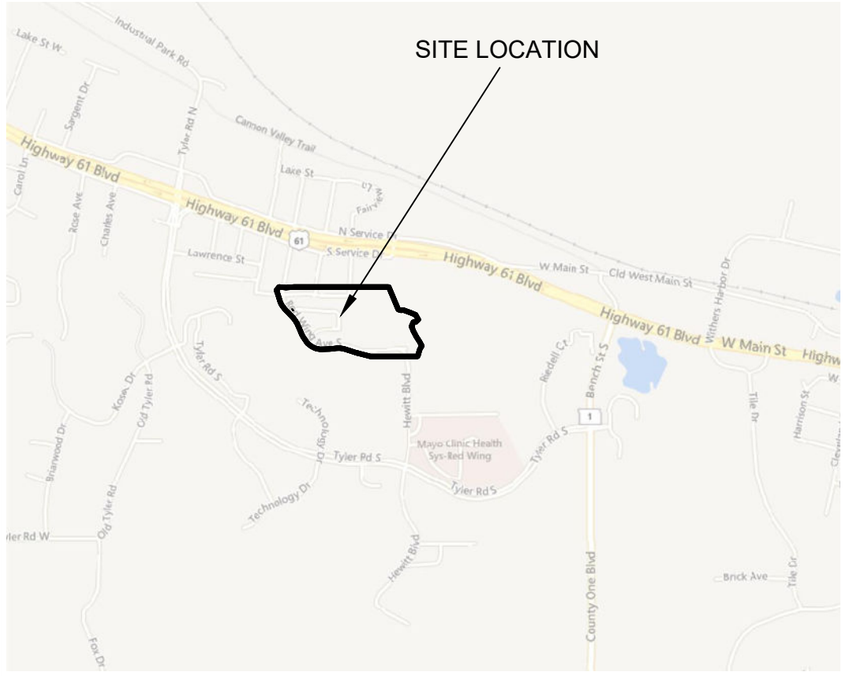
NOT TO SCALE



LEGEND

These standard symbols will be found in this plan set.

- DENOTES PLAT BOUNDARY
- DENOTES EXISTING LOT LINES
- DENOTES RIGHT OF WAY LINES
- 770 — DENOTES EXISTING INDEX CONTOUR AND LABEL
- 766 — DENOTES EXISTING CONTOUR AND LABEL
- DENOTES EXISTING CURB AND GUTTER
- SAN — DENOTES RIGHT OF WAY LINES
- STORM — DENOTES EXISTING INDEX CONTOUR AND LABEL
- WM — DENOTES EXISTING CONTOUR AND LABEL
- CB MH No.6 — DENOTES EXISTING STORM WATER CATCH BASIN
- DENOTES EXISTING SANITARY SEWER MANHOLE
- DENOTES WATER CURB STOP
- DENOTES WATER VALVE
- DENOTES FIRE HYDRANT
- DENOTES EXISTING HAND HOLE
- DENOTES EXISTING STREET LIGHT
- DENOTES EXISTING ELECTRIC PEDESTAL
- DENOTES EXISTING TELEPHONE PEDESTAL
- DENOTES PROPOSED MODULAR BLOCK RETAINING WALL
- DENOTES PROPOSED ENGINEERED RETAINING WALL BY OTHERS
- 801.82 — DENOTES PROPOSED FINISHED FLOOR ELEVATION
- 800 — DENOTES PROPOSED INDEX CONTOUR OF ELEVATION
- 802 — DENOTES PROPOSED CONTOUR OF ELEVATION
- 801.25 — DENOTES PROPOSED WALL ELEVATION
- DENOTES PROPOSED HOUSE
- DENOTES PROPOSED CONCRETE
- DENOTES PROPOSED BITUMINOUS

NORTH — DENOTES NORTH DIRECTION OF PLAN SHEET

0 100 200 FEET — DENOTES SCALE OF FEET IN INCHES

INDEX TO PLAN SHEETS

THIS PLAN CONTAINS 18 TOTAL SHEETS

SITE ADDRESS

RIVERS RIDGE DR, RED WING, MN 55066

NORTH

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

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

TITLE SHEET

SHEET 1 OF 18 SHEETS

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

THIS SWPPP MUST REMAIN ON SITE THROUGHOUT PROJECT CONSTRUCTION
INCLUDING INSPECTION LOGS AND DOCUMENTED AMENDMENTS TO THE SWPPP

LOCATION OF PROPOSED WORK:
RIVERS RIDGE DRIVE
CITY OR TOWNSHIP: RED WING
STATE: MN
ZIP CODE: 55066
COUNTY: GOODHUE

DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY
NEW TOWNHOUSE CONSTRUCTION ALONG EXISTING STREET.

DESCRIPTION OF LAND FEATURE CHANGE
TOTAL PROJECT AREA = 6.72 ACRES
DISTURBED AREA = 5.80 ACRES
CHANGE IN IMPERVIOUS SURFACE AREA = 2.85 ACRES

DESCRIPTION OF PROJECT SOIL TYPES
ACCORDING TO THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS), THE GREATEST AREA OF SOILS IN THE PROJECT AREA CONSIST OF HAWICK SANDY LOAM WITH 18 TO 45 PERCENT SLOPES. THE TYPICAL PROFILE OF THIS SOIL IS AS FOLLOWS : INCHES 0 TO 4 CONTAINS SANDY LOAM, INCHES 4 TO 14 CONTAINS LOAMY SAND, INCHES 14 TO 22 CONTAINS SAND, INCHES 22 TO 80 CONTAINS STRATIFIED GRAVELLY COARSE SAND TO SAND. THE DEPTH TO A RESTRICTIVE FEATURE IS MORE THAN 80 INCHES, AND DEPTH TO GROUND WATER IS MORE THAN 80 INCHES. THIS SOIL CONTAINS A LOW AVAILABLE WATER STORAGE OF ABOUT 3.9 INCHES, AND A HIGH TRANSMIT CAPACITY OF 2.00 TO 6.00 INCHES PER HOUR. ALL THE SOILS WITHIN THE PARCEL ARE CLASSIFIED AS HYDROLOGIC SOIL GROUP 'A', AND HAS NO HYDRIC SOIL RATING.

SWPPP IMPLEMENTATION RESPONSIBILITY
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN AND SHALL IDENTIFY AN EROSION CONTROL SUPERVISOR TO OVERSEE THIS. THE EROSION CONTROL SUPERVISORS DUTIES INCLUDE IMPLEMENTING, REVISING AND AMENDING THE SWPPP, AND PERFORMING INSPECTIONS AS REQUIRED IN SECTION 11 OF THE NPDES GENERAL STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY. THEY SHALL ALSO BE AVAILABLE FOR ON SITE INSPECTIONS WITHIN 72 HOURS UPON REQUEST OF THE MPCA. THE EROSION CONTROL SUPERVISOR SHALL BE KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S AND OVERSEE THE INSTALLATION. INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S, BEFORE AND DURING CONSTRUCTION, SHALL CONTINUE UNTIL THE PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A 'NOTICE OF TERMINATION' HAS BEEN SUBMITTED TO THE MPCA IN CONFORMANCE WITH SECTION 4 OF THE NPDES PERMIT. APPROPRIATE TRAINING DOCUMENTATION FOR THE EROSION CONTROL SUPERVISOR SHALL BE RECORDED IN THE SWPPP AS REQUIRED IN SECTION 21 OF THE NPDES PERMIT. ALL WORK CONSIDERED NECESSARY TO FULLY COMPLY WITH THE REQUIREMENTS OF IMPLEMENTING THE SWPPP SHALL BE CONSIDERED INCIDENTAL AND NO DIRECT COMPENSATION SHALL BE MADE FOR SAID WORK.

LONG TERM OPERATION AND MAINTENANCE AND PROJECT CONTACT
RESPONSIBLE PARTY: ANDY BAARTMAN
ADDRESS: PO BOX 31, RED WING MN, 55066
PHONE: (651) 301-5103

ENGINEER
JOHNSON & SCOFIELD, INC.
CONTACT PERSON: STEVEN P. VOIGT, PE
PHONE: (651) 388-1558, EXT. 103

PREPARER OF SWPPP
JOHNSON & SCOFIELD, INC.
CONTACT PERSON: STEVEN P. VOIGT, PE
PHONE: (651) 388-1558, EXT. 103
TRAINING: U OF M DESIGN OF CONSTRUCTION SWPPP (EXPIRATION MAY 31, 2020)

CONTRACTOR
(TO BE COMPLETED BY CONTRACTOR WHEN APPLYING FOR NPDES PERMIT)

THE CONTACT LISTED BELOW SHALL BE RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM AFTER A 'NOTICE OF TERMINATION' HAS BEEN SUBMITTED TO THE MPCA BY THE PROJECT CONTRACTOR.

EROSION CONTROL SUPERVISOR: _____
PHONE: _____
TRAINING: _____

AGENCY CONTACTS
MPCA 24-HOUR EMERGENCY NOTIFICATION (STATE DUTY OFFICER)
PHONE: (800) 422-0798

MPCA CONTACT (ROCHESTER OFFICE)
PHONE: (800) 657-3864

MN DNR AREA HYDROLOGIST (LAKE CITY OFFICE)
CONTACT PERSON: BILL HUBER
PHONE: (651) 345-5601 X 244
DRAINAGE CALCULATIONS
ALL DRAINAGE CALCULATIONS PERTINENT TO THE DESIGN OF THIS PROJECT ARE KEPT ON FILE AT THE OFFICE OF THE PROJECT ENGINEER. ALL CHANGES MADE IN THE FIELD POTENTIALLY AFFECTING PROJECT DRAINAGE SHALL BE DISCUSSED WITH THE PROJECT ENGINEER AND NOTED IN THE CONTRACTORS SWPPP RECORDS.

ENVIRONMENTALLY SENSITIVE AREAS
ALL ENVIRONMENTALLY SENSITIVE AREAS, INCLUDING WETLANDS, RIVERS, STREAMS AND LAKES, ARE LABELED AS "ENVIRONMENTALLY SENSITIVE AREAS" IN THE PLANS.

RECEIVING SURFACE WATERS
THE TABLE BELOW IDENTIFIES ALL SURFACE WATERS WITHIN ONE MILE OF THE PROJECT BOUNDARY THAT WILL RECEIVE STORM WATER RUNOFF FROM THE CONSTRUCTION SITE DURING AND AFTER CONSTRUCTION. THE IDENTIFIED SURFACE WATER MAY BE CONSIDERED SPECIAL WATERS AS LISTED IN SECTION 24 OF THE NPDES PERMIT AND/OR IMPAIRED WATERS AS IDENTIFIED UNDER SECTION 303 (D) OF THE FEDERAL CLEAN WATER ACT. SPECIAL WATERS HAVE QUALITIES THAT THE MINNESOTA POLLUTION CONTROL AGENCY FEEL WARRANT EXTRA PROTECTION MEASURES, AND IMPAIRED WATERS ARE BODIES OF WATER THAT DO NOT MEET THE WATER QUALITY STANDARDS SET UP FOR THEIR DESIGNATED USE AS DETERMINED BY THE STATE DUE TO THE PRESENCE OF POLLUTANTS OR STRESSORS INCLUDING PHOSPHORUS, TURBIDITY, DISSOLVED OXYGEN, AND BIOTIC IMPAIRMENT. STORM WATER FROM A DISCHARGE POINT ON THE PROJECT THAT FLOWS TO A SURFACE WATER IDENTIFIED AS SPECIAL AND/OR IMPAIRED WILL REQUIRE IMPLEMENTATION OF ADDITIONAL BMP'S OUTLINED IN SECTION 23 OF THE NPDES PERMIT.

RECEIVING SURFACE WATER	TYPE (DITCH,POND,WETLAND, LAKE, STREAM, RIVER)	SPECIAL WATER (YES,NO)	IMPAIRED WATER (YES/NO) IMPAIRMENT IF YES
SPRING CREEK	TROUT STREAM	YES	NO
HAY CREEK	TROUT STREAM	YES	NO

DISCHARGES TO WETLANDS
THERE ARE NO KNOWN STORM WATER DISCHARGES WITH THE POTENTIAL FOR SIGNIFICANT ADVERSE IMPACT TO A WETLAND UNDER THIS PROJECT.

OUTSTANDING RESOURCE VALUE WATERS
THERE ARE NO KNOWN STORM WATER DISCHARGES TO OUTSTANDING RESOURCE VALUE WATERS UNDER THIS PROJECT.

CALCAREOUS FENS
THERE ARE NO KNOWN STORM WATER DISCHARGES TO CALCAREOUS FENS UNDER THIS PROJECT.

KARST REGIONS
THERE ARE NO KNOWN KARST FEATURES (SINKHOLES, BLIND VALLEYS, MAPPED CAVES, SPRINGS, OR KARST WINDOWS) WITHIN THE PROJECT SITE.

TABLE OF ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNITS	TOTAL QUANTITY
1	SILT FENCE	LF	1,146
2	INLET PROTECTION	EA	13

THIS PROJECT IS REGULATED BY THE CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER AS ISSUED BY THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA). THE PROVISIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA). ANY REGULATIONS AND REQUIREMENTS OF LOCAL GOVERNING AGENCY'S HAVING JURISDICTION CONCERNING EROSION AND SEDIMENT CONTROL, AND THE PROVISIONS OF THE PROJECT PLANS AND SPECIFICATIONS. THESE CONDITIONS AND PROVISIONS MUST BE UNDERSTOOD AND FOLLOW BY THE GENERAL CONTRACTOR AS WELL AS ANY SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENT A POLLUTION CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). SOME OF THE CONTRACTORS RESPONSIBILITIES INCLUDE:

1. APPLY FOR AND OBTAIN WITH THE OWNER A 'NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM' (NPDES) PERMIT AS ISSUED BY THE MPCA PRIOR TO STARTING WORK AS REQUIRED BY THE PERMIT.
2. HAVE THE "NOTICE OF STORM WATER PERMIT COVERAGE" LETTER ON SITE.
3. HAVE THE "STORM WATER POLLUTION PREVENTION PLAN" (SWPPP) ON SITE.
4. PROVIDE A TRAINED AND CERTIFIED EROSION CONTROL SUPERVISOR TO OVERSEE THE IMPLEMENTATION OF THE SWPPP PROVISIONS DURING CONSTRUCTION FOR BOTH THE CONTRACTOR AND SUBCONTRACTORS OPERATIONS.
5. COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES PERTAINING TO EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT AFFECTING THE CONDUCT OF WORK ON THIS PROJECT.
6. COMPLY WITH ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS OF THE SWPPP AS OUTLINED IN THE PROJECT PLANS AND SPECIFICATIONS AS REQUIRED BY THE "NPDES" PERMIT.
7. PERFORM SITE INSPECTION PER PERMIT REQUIREMENTS AND AS OUTLINED BELOW.
8. SEND IN "NOTICE OF TERMINATION" (N.O.T.) TO MPCA UPON PROJECT COMPLETION AND PER PERMIT REQUIREMENTS.

THE CONTRACTOR SHALL PLACE AND MAINTAIN ALL BEST MANAGEMENT PRACTICES IN THE STORM WATER POLLUTION PREVENTION PLAN TO MINIMIZE THE POTENTIAL FOR EROSION OF SITE SOILS AND PREVENT THE TRANSPORT OF SILT FROM THE SITE AS A MINIMUM. THE CONTRACTOR SHALL SUPPLY ADDITIONAL STORM WATER CONTROL MEASURES IF FOUND NECESSARY AT NO ADDITIONAL COST TO THE OWNER.

REFER TO THE FOLLOWING SECTIONS FROM THE MPCA CONSTRUCTION STORMWATER GENERAL PERMIT IF APPLICABLE TO THE PROJECT

7.1 BMP SELECTION AND INSTALLATION. [MINN. R. 7090]

7.2 PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPS IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES. [MINN. R. 7090]

8.1 EROSION PREVENTION PRACTICES. [MINN. R. 7090]

8.2 BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. [MINN. R. 7090]
8.3 PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING). [MINN. R. 7090]
8.4 PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. [MINN. R. 7090]
8.5 FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD. [MINN. R.7090]
8.6 PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES. [MINN. R. 7090]
8.7 TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES. [MINN. R. 7090]
8.8 PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT. [MINN. R. 7090]
8.9 PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]
8. PERMITTEES MUST DESIGN BASINS USING AN IMPERMEABLE LINER IF LOCATED WITHIN ACTIVE KARST TERRAIN. [MINN. R. 7090]

9.1 SEDIMENT CONTROL PRACTICES. [MINN. R. 7090]

9.2 PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER. [MINN. R. 7090]
9.3 IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3. [MINN. R. 7090]
9.4 TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS. [MINN. R. 7090]
9.5 A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. [MINN. R. 7090]
9.6 PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE. [MINN. R. 7090]
9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. [MINN. R. 7090]
9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP. [MINN. R. 7090]
9.9 PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER. [MINN. R. 7090]
9.10 PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. [MINN.R.7090]
9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7090]
9.12 PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET. [MINN. R. 7090]
9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14. [MINN. R. 7090]
9.14 IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. [MINN. R. 7090]
9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE. [MINN. R. 7090]
9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE. [MINN. R. 7090]
9.17 PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. [MINN. R. 7090]
9.18 PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE. [MINN. R. 7090]

10.1 DEWATERING AND BASIN DRAINING. [MINN. R. 7090]

10.2 PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES. [MINN. R. 7050.0210]
10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE. [MINN. R. 7090]
10.4 PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. [MINN. R.7090]
10.5 IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. [MINN. R. 7090]

11.1 INSPECTIONS AND MAINTENANCE. [MINN. R. 7090]

11.2 PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN ½ INCH IN 24 HOURS. [MINN. R. 7090]
11.3 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS. [MINN. R. 7090]
11.4 PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPS WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA. [MINN. R. 7090]
11.5 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS. [MINN. R.7090]
11.6 PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. [MINN. R. 7090]
11.7 PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ½ OF THE HEIGHT OF THE DEVICE. [MINN. R. 7090]
11.8 PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES ½ THE STORAGE VOLUME. [MINN. R. 7090]
11.9 PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2. [MINN. R. 7090]
11.10 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:
INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE; OR WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT; OR WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. [MINN. R. 7090]
11.11 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE: DATE AND TIME OF INSPECTIONS; AND NAME OF PERSONS CONDUCTING INSPECTIONS; AND ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND DATE OF ALL RAINFALL EVENTS GREATER THAN ½ INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. [MINN. R. 7090]

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE: (651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

SWPPP SHEET 1

12.1 POLLUTION PREVENTION MANAGEMENT MEASURES. [MINN. R. 7090]

12.2 PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER. [MINN. R. 7090]
12.3 PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. [MINN. R. 7090]
12.4 PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE. [MINN. R. 7090]
12.5 PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035. [MINN. R. 7035]
12.6 PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITTEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041. [MINN. R. 7041]
12.7 PERMITTEES MUST TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061,
USING DRY CLEAN UP MEASURES WHERE POSSIBLE. [MINN. STAT. 115.061]
12.8 PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND MUST DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY. PERMITTEES MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS. [MINN. R. 7090]
12.9 PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY. [MINN. R. 7035, MINN. R. 7090]
12.10 EROSION CONTROL MATERIALS. DUE TO ENTANGLEMENT ISSUES WITH SMALL ANIMALS, USE OF EROSION CONTROL BLANKET SHALL BE LIMITED TO 'BIO-NETTING' OR 'NATURALNETTING' TYPES, AND SPECIFICALLY NOT PRODUCTS CONTAINING PLASTIC MESH NETTING OR OTHER PLASTIC COMPONENTS. THESE ARE CATEGORY 3N OR 4N IN THE 2016 & 2018 MNDOT STANDARDS SPECIFICATIONS FOR CONSTRUCTION. BE AWARE THAT HYDRO-MULCH PRODUCTS MAY CONTAIN SMALL SYNTHETIC (PLASTIC) FIBERS TO AID IN ITS MATRIX STRENGTH. THESE LOOSE FIBERS COULD RE-SUSPEND AND MAKE THEIR WAY INTO PUBLIC WATERS. AS SUCH, MULCH PRODUCTS CONTAINING PLASTIC FIVER ADDITIVES SHOULD NOT BE USED IN AREAS THAT DRAIN TO PUBLIC WATERS.

13.1 PERMIT TERMINATION CONDITIONS. [MINN. R. 7090]

13.2 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER. [MINN. R. 7090]
13.3 PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED. [MINN. R. 7090]
13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT. [MINN. R. 7090]
13.5 PERMITTEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS PRIOR TO SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPS DESIGNED TO DECOMPOSE ON-SITE IN PLACE. [MINN. R. 7090]
13.6 FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER. [MINN. R. 7090]
13. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITTEES MUST RETURN THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT. [MINN. R.7090]

14.1 TEMPORARY SEDIMENT BASINS. [MINN. R. 7090]

14.2 WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN TO PROVIDE TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS. PERMITTEES MAY CONVERT A TEMPORARY SEDIMENT BASIN TO A PERMANENT BASIN AFTER CONSTRUCTION IS COMPLETE. THE TEMPORARY BASIN IS NO LONGER REQUIRED WHEN PERMANENT COVER HAS REDUCED THE ACREAGE OF DISTURBED SOIL TO LESS THAN TEN (10) ACRES DRAINING TO A COMMON LOCATION. [MINN. R. 7090]
14.3 THE TEMPORARY BASIN MUST PROVIDE LIVE STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO (2)-YEAR, 24- HOUR STORM FROM EACH ACRE DRAINED TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER. [MINN. R. 7090]
14.4 WHERE PERMITTEES HAVE NOT CALCULATED THE TWO (2)-YEAR, 24-HOUR STORM RUNOFF AMOUNT, THE TEMPORARY BASIN MUST PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF THE BASINS' DRAINAGE AREA. [MINN. R. 7090]
14.5 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. [MINN. R. 7090]
14.6 PERMITTEES MUST DESIGN THE OUTLET STRUCTURE TO WITHDRAW WATER FROM THE SURFACE TO MINIMIZE THE DISCHARGE OF POLLUTANTS. PERMITTEES MAY TEMPORARILY SUSPEND THE USE OF A SURFACE WITHDRAWAL MECHANISM DURING FROZEN CONDITIONS. THE BASIN MUST INCLUDE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY. [MINN. R. 7090]
14.7 PERMITTEES MUST PROVIDE ENERGY DISSIPATION FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER. [MINN. R. 7090]
14.8 PERMITTEES MUST LOCATE TEMPORARY BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11. [MINN. R. 7090]
14.9 PERMITTEES MUST CONSTRUCT THE TEMPORARY BASINS PRIOR TO DISTURBING 10 OR MORE ACRES OF SOIL DRAINING TO A COMMON LOCATION. [MINN. R. 7090]
14.10 WHERE A TEMPORARY SEDIMENT BASIN MEETING THE REQUIREMENTS OF ITEM 14.3 THROUGH 14.9 IS INFEASIBLE PERMITTEES MUST INSTALL EFFECTIVE SEDIMENT CONTROLS SUCH AS SMALLER SEDIMENT BASINS AND/OR SEDIMENT TRAPS, SILT FENCES, VEGETATIVE BUFFER STRIPS OR ANY APPROPRIATE COMBINATION OF MEASURES AS DICTATED BY INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS INFEASIBLE, PERMITTEES MUST CONSIDER PUBLIC SAFETY AND MAY CONSIDER FACTORS SUCH AS SITE SOILS, SLOPE, AND AVAILABLE AREA ON-SITE. PERMITTEES MUST DOCUMENT THIS DETERMINATION OF INFEASIBILITY IN THE SWPPP. [MINN. R. 7090]

20.1 SWPPP AVAILABILITY. [MINN. R. 7090]

20.2 PERMITTEES MUST KEEP THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING NORMAL WORKING HOURS BY PERMITTEES WHO HAVE OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. [MINN. R. 7090]

21.1 TRAINING REQUIREMENTS. [MINN. R. 7090]

21.2 PERMITTEES MUST ENSURE ALL OF THE FOLLOWING INDIVIDUALS RECEIVE TRAINING AND THE CONTENT AND EXTENT OF THE TRAINING IS COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES COVERED UNDER THIS PERMIT: INDIVIDUALS PREPARING THE SWPPP FOR THE PROJECT. INDIVIDUALS OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA. INDIVIDUALS PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS. [MINN. R. 7090]
21.3 PERMITTEES MUST ENSURE INDIVIDUALS IDENTIFIED IN SECTION 21 RECEIVE TRAINING FROM LOCAL, STATE, FEDERAL AGENCIES, PROFESSIONAL ORGANIZATIONS, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PERMANENT STORMWATER TREATMENT AND THE MINNESOTA NPDES/SDS CONSTRUCTION STORMWATER PERMIT. PERMITTEES MUST ENSURE THESE INDIVIDUALS ATTEND A REFRESHER-TRAINING COURSE EVERY THREE (3) YEARS. [MINN. R. 7090]

23.1 ADDITIONAL REQUIREMENTS FOR DISCHARGES TO SPECIAL (PROHIBITED, RESTRICTED, OTHER) AND IMPAIRED WATERS. [MINN. R. 7090]

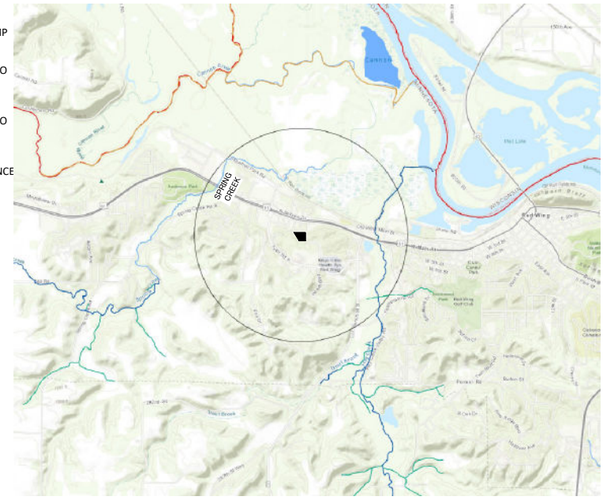
23.2 THE BMPS IDENTIFIED FOR EACH SPECIAL OR IMPAIRED WATER ARE REQUIRED FOR THOSE AREAS OF THE PROJECT DRAINING TO A DISCHARGE POINT ON THE PROJECT THAT IS WITHIN ONE MILE (AERIAL RADIUS MEASUREMENT) OF SPECIAL OR IMPAIRED WATER AND FLOWS TO THAT SPECIAL OR IMPAIRED WATER. [MINN. R. 7090]
23.3 DISCHARGES TO THE FOLLOWING SPECIAL WATERS IDENTIFIED AS PROHIBITED IN MINN. R. 7050.0035 SUBP. 3 MUST INCORPORATE THE BMPS OUTLINED IN ITEMS 23.9, 23.10, 23.11, 23.13 AND 23.14: BOUNDARY WATERS CANOE AREA WILDERNESS; VOYAGEURS NATIONAL PARK; KETTLE RIVER FROM THE SITE OF THE FORMER DAM AT SANDSTONE TO ITS CONFLUENCE WITH THE SAINT CROIX RIVER; RUM RIVER FROM OGECHIE LAKE SPILLWAY TO THE NORTHERNMOST CONFLUENCE WITH LAKE ONAMIA. THOSE PORTIONS OF LAKE SUPERIOR NORTH OF LATITUDE 47 DEGREES, 57 MINUTES, 13 SECONDS, EAST OF HAT POINT, SOUTH OF THE MINNESOTA-ONTARIO BOUNDARY, AND WEST OF THE MINNESOTA-MICHIGAN BOUNDARY; SCIENTIFIC AND NATURAL AREAS IDENTIFIED AS IN MINN. R. 7050.0335 SUBP. 3: BOOT LAKE, ANOKA COUNTY; KETTLE RIVER IN SECTIONS 15, 22, 23, T 41 N, R 20, PINE COUNTY; PENNINGTON BOG, BELTRAMI COUNTY; PURVIS LAKE-OBER FOUNDATION, SAINT LOUIS COUNTY; WATERS WITHIN THE BORDERS OF ITASCA WILDERNESS SANCTUARY, CLEARWATER COUNTY; WOLSFELD WOODS, HENNEPIN COUNTY; GREEN WATER LAKE, BECKER COUNTY; BLACKDOG PRESERVE, DAKOTA COUNTY; PRAIRIE BUSH CLOVER, JACKSON COUNTY; BLACK LAKE BOG, PINE COUNTY; PEMBINA TRAIL PRESERVE, POLK COUNTY; AND FALLS CREEK, WASHINGTON COUNTY. [MINN. R. 7050.0335, SUBP. 3]
23.4 DISCHARGES TO THE FOLLOWING SPECIAL WATERS IDENTIFIED AS RESTRICTED MUST INCORPORATE THE BMPS OUTLINED IN ITEMS 23.9, 23.10 AND 23.11: LAKE SUPERIOR, EXCEPT THOSE PORTIONS IDENTIFIED AS PROHIBITED IN ITEM 23.3.B; MISSISSIPPI RIVER IN THOSE PORTIONS FROM LAKE ITASCA TO THE SOUTHERLY BOUNDARY OF MORRISON COUNTY THAT ARE INCLUDED IN THE MISSISSIPPI HEADWATERS BOARD COMPREHENSIVE PLAN DATED FEBRUARY 12, 1981; SCENIC OR RECREATIONAL RIVER SEGMENTS: SAINT CROIX RIVER, ENTIRE LENGTH; CANNON RIVER FROM NORTHERN CITY LIMITS OF FARIBAULT TO ITS CONFLUENCE WITH THE MISSISSIPPI RIVER; NORTH FORK OF THE CROW RIVER FROM LAKE KORONIS OUTLET TO THE MEEKER-WRIGHT COUNTY LINE; KETTLE RIVER FROM NORTH PINE COUNTY LINE TO THE SITE OF THE FORMER DAM AT SANDSTONE; MINNESOTA RIVER FROM LAC QUE PARLE DAM TO REDWOOD COUNTY STATE AID HIGHWAY 11; MISSISSIPPI RIVER FROM COUNTY STATE AID HIGHWAY 7 BRIDGE IN SAINT CLOUD TO NORTHWESTERN CITY LIMITS OF ANOKA; AND RUM RIVER FROM STATE HIGHWAY 27 BRIDGE IN ONAMIA TO MADISON AND RICE STREETS IN ANOKA; LAKE TROUT LAKES IDENTIFIED IN MINN. R. 7050.0335 INCLUDING LAKE TROUT LAKES INSIDE THE BOUNDARIES OF THE BOUNDARY WATERS CANOE AREA WILDERNESS AND VOYAGEURS NATIONAL PARK; CALCAREOUS FENS LISTED IN MINN. R. 7050.0335, SUBP. 1. [MINN. R. 7050.0335, SUBP. 1]
23.5 DISCHARGES TO THE TROUT LAKES (OTHER SPECIAL WATER) IDENTIFIED IN MINN. R. 6264.0050, SUBP. 2 MUST INCORPORATE THE BMPS OUTLINED IN ITEMS 23.9, 23.10 AND 23.11. [MINN. R. 6264.0050, SUBP. 2]
23.6 DISCHARGES TO THE TROUT STREAMS (OTHER SPECIAL WATER) LISTED IN MINN. R. 6264.0050, SUBP. 4 MUST INCORPORATE THE BMPS OUTLINED IN ITEMS 23.9, 23.10, 23.11 AND 23.12. [MINN. R. 6264.0050, SUBP. 4]
23.7 DISCHARGES TO IMPAIRED WATERS OR A WATER WITH AN USEPA APPROVED TMDL FOR ANY OF THE IMPAIRMENTS LISTED IN THIS ITEM MUST INCORPORATE THE BMPS OUTLINED IN ITEMS 23.9 AND 23.10. IMPAIRED WATERS ARE WATERS IDENTIFIED AS IMPAIRED UNDER SECTION 303 (D) OF THE FEDERAL CLEAN WATER ACT FOR PHOSPHORUS (NUTRIENT EUTROPHICATION BIOLOGICAL INDICATORS), TURBIDITY, TSS, DISSOLVED OXYGEN OR AQUATIC BIOTA (FISH BIOASSESSMENT, AQUATIC PLANT BIOASSESSMENT AND AQUATIC MACROINVERTEBRATE BIOASSESSMENT). TERMS USED FOR THE POLLUTANTS OR STRESSORS IN THIS ITEM ARE SUBJECT TO CHANGE. THE MPCA WILL LIST TERMINOLOGY CHANGES ON ITS CONSTRUCTION STORMWATER WEBSITE. [MINN. R. 7090]
23.8 WHERE THE ADDITIONAL BMPS IN THIS SECTION CONFLICT WITH REQUIREMENTS ELSEWHERE IN THIS PERMIT, ITEMS 23.9 THROUGH 23.14 TAKE PRECEDENCE. [MINN. R. 7090]
23.9 PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4, AND COMPLETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES. [MINN. R. 7090]
23.10 PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN AS DESCRIBED IN SECTION 14 FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME. [MINN. R. 7090]
23.11 PERMITTEES MUST INCLUDE AN UNDISTURBED BUFFER ZONE OF NOT LESS THAN 100 LINEAR FEET FROM A SPECIAL WATER (NOT INCLUDING TRIBUTARIES) AND MUST MAINTAIN THIS BUFFER ZONE AT ALL TIMES, BOTH DURING CONSTRUCTION AND AS A PERMANENT FEATURE POST CONSTRUCTION, EXCEPT WHERE A WATER CROSSING OR OTHER ENCROACHMENT IS NECESSARY TO COMPLETE THE PROJECT. PERMITTEES MUST FULLY DOCUMENT THE CIRCUMSTANCE AND REASONS THE BUFFER ENCROACHMENT IS NECESSARY IN THE SWPPP AND INCLUDE RESTORATION ACTIVITIES. THIS PERMIT ALLOWS REPLACEMENT OF EXISTING IMPERVIOUS SURFACE WITHIN THE BUFFER. PERMITTEES MUST MINIMIZE ALL POTENTIAL WATER QUALITY, SCENIC AND OTHER ENVIRONMENTAL IMPACTS OF THESE EXCEPTIONS BY THE USE OF ADDITIONAL OR REDUNDANT (DOUBLE) BMPS AND MUST DOCUMENT THIS IN THE SWPPP FOR THE PROJECT. [MINN. R. 7090]
23.12 PERMITTEES MUST DESIGN THE PERMANENT STORMWATER TREATMENT SYSTEM SO THE DISCHARGE FROM THE PROJECT MINIMIZES ANY INCREASE IN THE TEMPERATURE OF TROUT STREAMS RESULTING FROM THE ONE (1) AND TWO (2) YEAR 24- HOUR PRECIPITATION EVENTS. THIS INCLUDES ALL TRIBUTARIES OF DESIGNATED TROUT STREAMS LOCATED WITHIN THE SAME PUBLIC LAND SURVEY SYSTEM (PLSS) SECTION. PERMITTEES MUST INCORPORATE ONE OR MORE OF THE FOLLOWING MEASURES, IN ORDER OF PREFERENCE: PROVIDE STORMWATER INFILTRATION OR OTHER VOLUME REDUCTION PRACTICES AS DESCRIBED IN ITEM 15.4 AND 15.5, TO REDUCE RUNOFF. INFILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS. PROVIDE STORMWATER FILTRATION AS DESCRIBED IN SECTION 17. FILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS. MINIMIZE THE DISCHARGE FROM CONNECTED IMPERVIOUS SURFACES BY DISCHARGING TO VEGETATED AREAS, OR GRASS SWALES, AND THROUGH THE USE OF OTHER NON-STRUCTURAL CONTROLS. IF PONDING IS USED, THE DESIGN MUST INCLUDE AN APPROPRIATE COMBINATION OF MEASURES SUCH AS SHADING, VEGETATED SWALE DISCHARGES OR CONSTRUCTED WETLAND TREATMENT CELLS THAT LIMIT TEMPERATURE INCREASES. THE POND MUST BE DESIGNED AS A DRY POND AND SHOULD DRAW DOWN IN 24 HOURS OR LESS. OTHER METHODS THAT MINIMIZE ANY INCREASE IN THE TEMPERATURE OF THE TROUT STREAM. [MINN. R. 7090]
23.13 PERMITTEES MUST CONDUCT ROUTINE SITE INSPECTIONS ONCE EVERY THREE (3) DAYS AS DESCRIBED IN ITEM 11.2 FOR PROJECTS THAT DISCHARGE TO PROHIBITED WATERS. [MINN. R. 7090]
23.14 IF DISCHARGES TO PROHIBITED WATERS CANNOT PROVIDE VOLUME REDUCTION EQUAL TO ONE (1) INCH TIMES THE NET INCREASE OF IMPERVIOUS SURFACES AS REQUIRED IN ITEM 15.4 AND 15.5, PERMITTEES MUST DEVELOP A PERMANENT STORMWATER TREATMENT SYSTEM DESIGN THAT WILL RESULT IN NO NET INCREASE OF TSS OR PHOSPHORUS TO THE PROHIBITED WATER. PERMITTEES MUST KEEP THE PLAN IN THE SWPPP FOR THE PROJECT. [MINN. R. 7090]

6.1 SWPPP AMENDMENTS. [MINN. R. 7090]

6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS. [MINN. R. 7090]
6.3 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER. [MINN. R. 7090]
6.4 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMDL. [MINN. R. 7050.0210]

IMPLEMENTATION SCHEDULE & PHASING

1. INSTALL SILT FENCE AND INLET PROTECTION
2. STOCK PILE EXISTING TOP SOIL
3. ADD ADDITIONAL TEMPORARY BMP'S AS NECESSARY DURING CONSTRUCTION BASED ON INSPECTION REPORTS.
4. ENSURE FINAL STABILIZATION.
5. SUBMIT NOTICE OF TERMINATION (NOT) TO MPCA WITHIN 30 DAYS OF FINAL STABILIZATION.



ALL PLAN SHEETS AND SPECIFICATIONS OF THIS PLAN SET ARE ALSO CONSIDERED A PART OF THE SWPPP FOR THIS PROJECT.

1. AMENDMENT DATE
2.
3.

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE: (651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

SWPPP SHEET 2
SHEET 3 OF 18 SHEETS

PLAN DISCLAIMER

- ALL TOPOGRAPHIC DATA SHOWN, AND DATA USED FOR DESIGN AND QUANTITIES IS BASED ON OUTDATED SURVEY DATA.

DEMOLITION NOTES

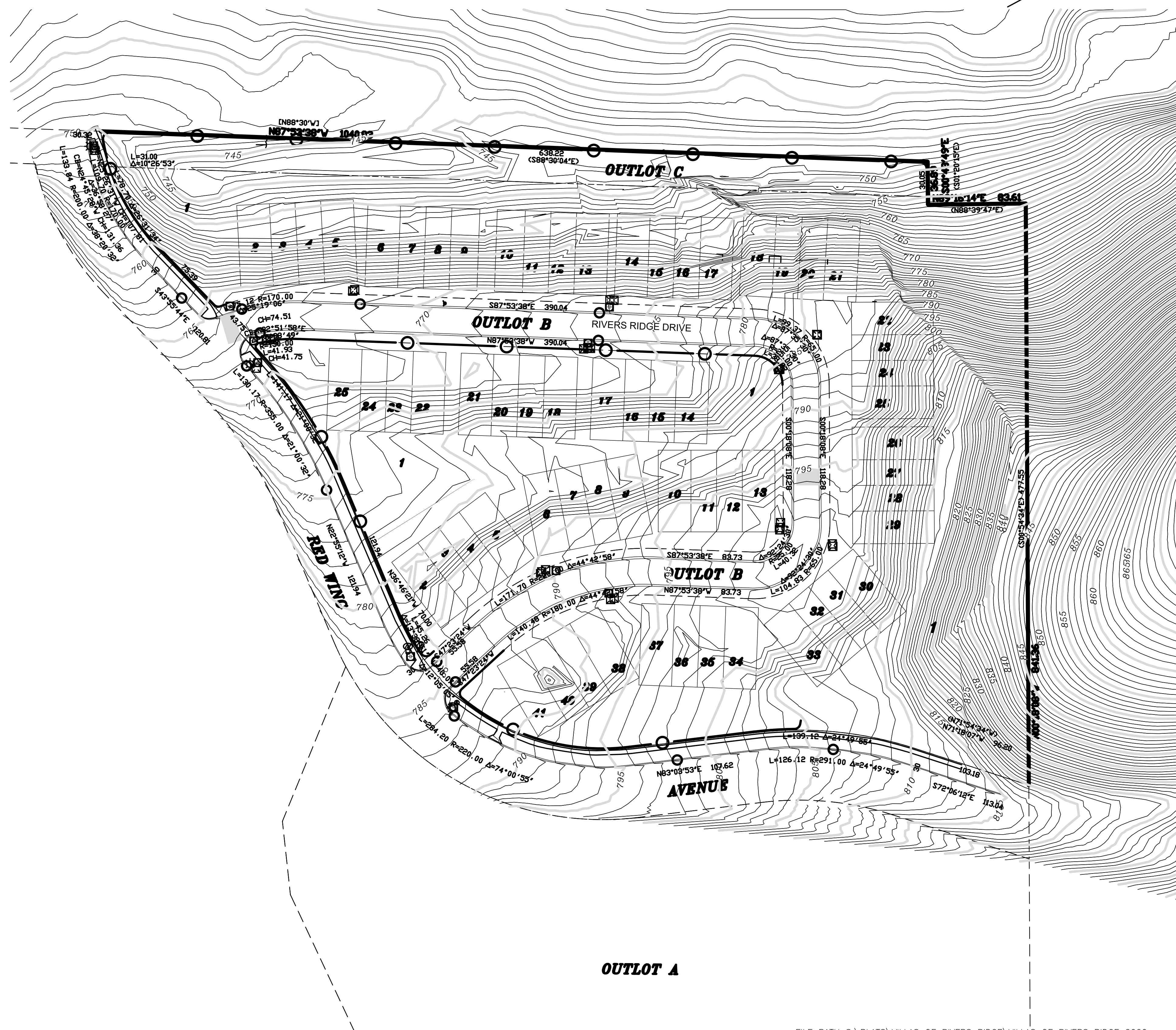
ALL ASPHALT TO REMAIN SHALL BE SAW CUT AT LIMITS OF REMOVAL.

REMOVE ALL DEMOLITION AND SALVAGED MATERIALS FROM SITE WITHIN 24 HOURS.

LOCATE AND PROTECT ALL UTILITY LINES PRIOR TO AND DURING DEMOLITION AND GRADING OPERATIONS. UTILITY LOCATIONS SHOWN ARE BASED ON BEST AVAILABLE INFORMATION AND ARE NOT GUARANTEED. THE CITY MAY REQUIRE A DISCONNECT PERMIT FOR SEWER AND WATER SERVICES.

CONTACT PRIVATE UTILITY SERVICE FOR ALL OTHER DISCONNECTS.

CONTACT PRIVATE UTILITY SERVICES FOR REROUTES.



NORTH

CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA 651-454-0002

MN. TOLL FREE 1-800-252-1166

0 100 200 Feet

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE

DATE: 06/18/2020 REG. NO. 20034

DESIGNED	JDP & SPV
DRAWN	JDP & SPD
CHECKED	SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20

Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE: (651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

EXISTING CONDITIONS

SITE PLAN NOTES

ALL RADII AND PAVEMENT LENGTHS ARE TO THE EDGE OF BITUMINOUS AND CONCRETE OR TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

DRIVEWAYS AND APRONS SHALL BE 6" CONCRETE.

CONCRETE SECTION CAN BE FOUND ON PAGE x OF THIS PLAN SET.

BUILDING DIMENSIONS MUST BE VERIFIED WITH ARCHITECTURAL DRAWINGS. IN THE EVENT OF A DISCREPANCY ARCHITECTURAL DIMENSIONS SHALL BE USED.

PLAN DISCLAIMER

- ALL TOPOGRAPHIC DATA SHOWN, AND DATA USED FOR DESIGN AND QUANTITIES IS BASED ON UNVERIFIED SURVEY DATA PROVIDED BY OTHERS.

SITE AREA NOTES

ORIGINAL PLAT IMPERVIOUS AREA (NOT INCLUDING STREET): 2.76 ACRES
PROPOSED IMPERVIOUS AREA (NOT INCLUDING STREET): 2.80 ACRES

NORTH

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

0 50 100 Feet

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG NO 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

SITE PLAN

SHEET 5 OF 18 SHEETS

EROSION CONTROL NOTES

CONTRACTOR SHALL INSTALL PERIMETER SILT FENCE BEFORE START OF ANY CONSTRUCTION ACTIVITY. TO PREVENT SEDIMENT RUNOFF FROM REACHING THE CURB OR STREET RIGHT OF WAY, PERIMETER DOWNSLOPE SILT FENCE SHALL BE INSTALLED ACROSS ALL PRIVATE LOTS. WHILE STILL VULNERABLE DUE TO EXPOSED SOIL, ROCK CHECK DAMS WILL BE PLACED EVERY 25 FEET ALONG THE CENTERLINE OF EACH DRAINAGE SWALE ON GRADES EXCEEDING 4% TO REDUCE FLOW VELOCITIES THAT CAUSE EROSION.

AS HOMES ARE CONSTRUCTED SILT IN THE DRIVEWAY FOOTPRINT SHALL BE REPLACED WITH BIO-LOGS.

TO PREVENT TRACKING OF DIRT ONTO HARD SURFACE STREET RIGHT-OF-WAY, ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED AND MAINTAINED UNTIL VEHICLE ENTRANCES ONTO THE SITE ARE NO LONGER REQUIRED AND TOPSOIL IS SCHEDULED TO BE REPLACED. ALL VEHICLE ACCESS TO THIS SITE SHALL USE THE ROCK CONSTRUCTION ENTRANCES. SHOULD THE ROCK CONSTRUCTION ENTRANCES BECOME INEFFECTIVE DUE TO EXCESSIVE SOIL CONTAMINATION, THEY SHALL BE REMOVED AND REPLACED. SEE DETAIL.

THE CONTRACTOR SHALL SALVAGE SUFFICIENT TOPSOIL TO PROVIDE COVER AFTER GRADING OPERATIONS. ALL SOIL STOCKPILES AND FINISHED GRADED AREAS ARE TO BE SEEDED IMMEDIATELY IN ORDER TO ESTABLISH VEGETATION WITH WHEAT OR RYE GRASS @ 100 LB./ACRE DURING CONSTRUCTION. INSTALL AND MAINTAIN APPROVED INLET PROTECTION AT ALL ACTIVE STORM SEWER INLETS. SEE DETAILS. SEDIMENT RUNOFF SHOULD BE MINIMIZED BY RESPONSIBLE SITE EROSION CONTROL. EROSION CONTROL MEASURES MUST BE INSPECTED BY THE CITY BEFORE ANY GRADING ACTIVITY BEGINS. TO PREVENT SILT AND SEDIMENT FROM ENTERING THE STORM SEWER SYSTEM, A FILTER BAG INSERT, SEDIMENT CONTROL INLET HAT, ROCK LOG RING OR OTHER DEVICE APPROVED BY THE CITY, SHALL BE INSTALLED AT THE INLET. THE CONTRACTOR MAY DECIDE TO REMOVE ALL TOPSOIL FROM THE SITE, AND IMPORT BEFORE TURF ESTABLISHMENT.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AS SOON AS POSSIBLE. AREAS THAT HAVE BEEN DISTURBED OR AT FINISH GRADE, BUT HAVE NO ACTIVE WORK, SHALL BE SEEDED AND MULCHED OR SODDED WITHIN 14 DAYS, EXCEPT ON SLOPES STEEPER THAN 4H:1V. STEEPER SLOPES SHALL BE SEEDED AND COVERED WITH AN EROSION CONTROL BLANKET OR SEEDED AND MULCHED WITH A TACKIFYING AGENT OR SODDED. AS SOON AS POSSIBLE AFTER GRADING OPERATIONS HAVE BEEN COMPLETED, TOPSOIL SHALL BE SPREAD AND THE ENTIRE SITE SHALL BE VEGETATED. FINAL SITE STABILIZATION SHALL BE EVIDENT WHEN SEEDED GRASS IS PRESENT ON ALL EXPOSED GRADING AREAS AND HAS GROWN TO A LENGTH OF 6 INCHES AND THERE ARE NO SIGNS OF ONGOING EROSION. IF SOD IS PLACED IN-LIEU OF SEED, IT SHALL BE WATERED AND MAINTAINED AND SHOW NO SIGNS OF STRESS FOR AT LEAST 30 DAYS. THE CITY SHALL APPROVE FINAL SITE STABILIZATION.

A NPDES STORM WATER PERMIT FOR CONSTRUCTION IS REQUIRED FOR THIS PROJECT. THE PROJECT OWNER AND/OR CONTRACTOR WILL NEED TO APPLY FOR THE PERMIT THROUGH THE MPCA.

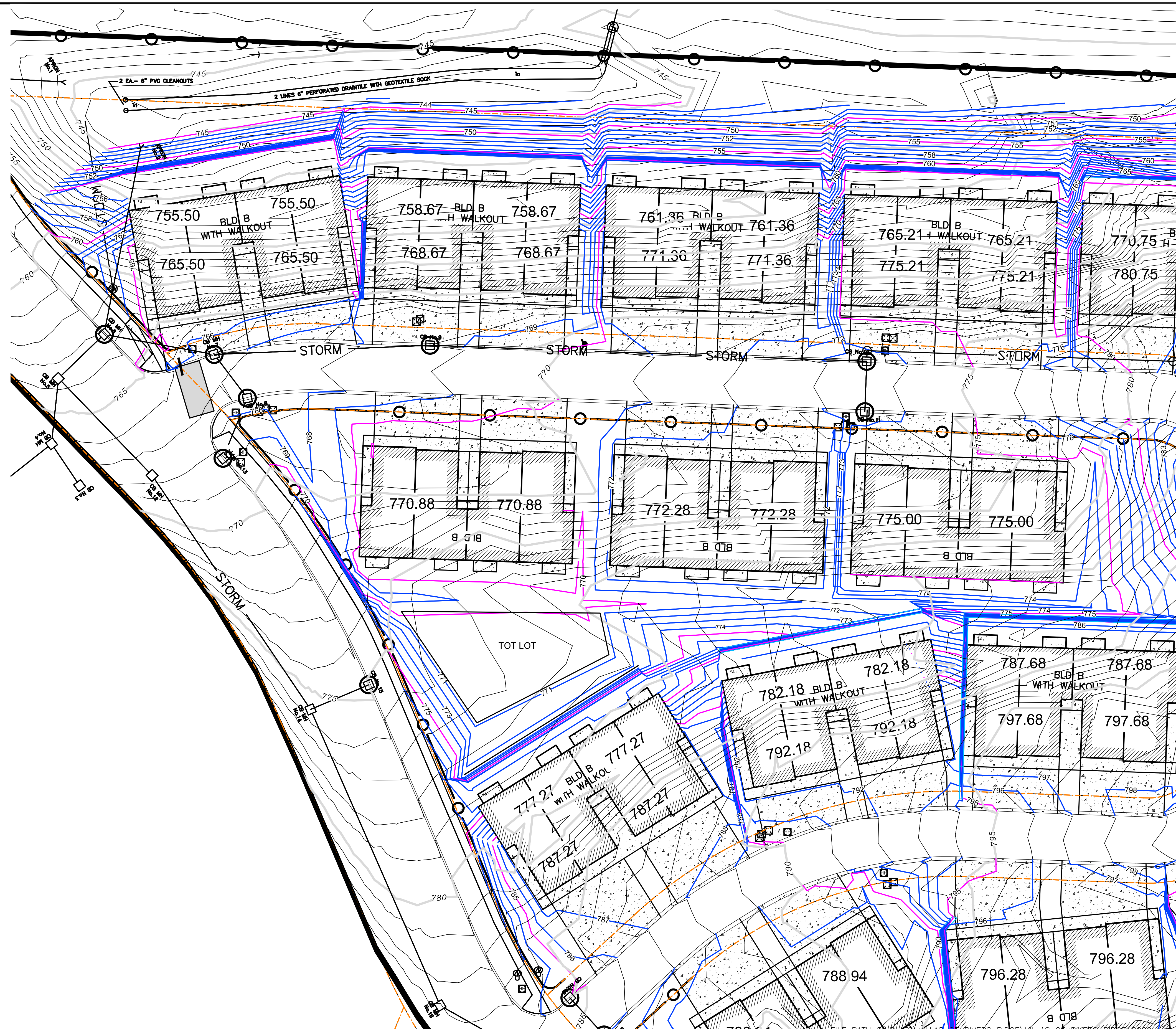
EXCAVATION QUANTITIES

THESE QUANTITIES USE A SHRINK AND SWELL FACTOR OF ONE.

TOTAL CUT : 9,174 CUBIC YARDS
TOTAL FILL : 16,991 CUBIC YARDS
TOTAL IMPORT : 7,817 CUBIC YARDS

RETAINING WALL NOTES

RETAINING WALLS ARE PLACED TO PROVIDE ADEQUATE DRAINAGE BETWEEN THE BUILDINGS. THERE IS NOT ENOUGH ROOM BETWEEN BUILDING TO FORM A DRAINAGE SWALE BETWEEN THE WALL OR BUILDING FOUNDATION RESULTING IN POTENTIAL EROSION, UNDERMINING, AND WATER SEEPAGE.



0 50 100 Feet

NORTH

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

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

[illegible]
Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

GRADING PLAN AND EROSION CONTROL SHEET 1

SEE SHEET 6 FOR GRADING AND EROSION CONTROL NOTES

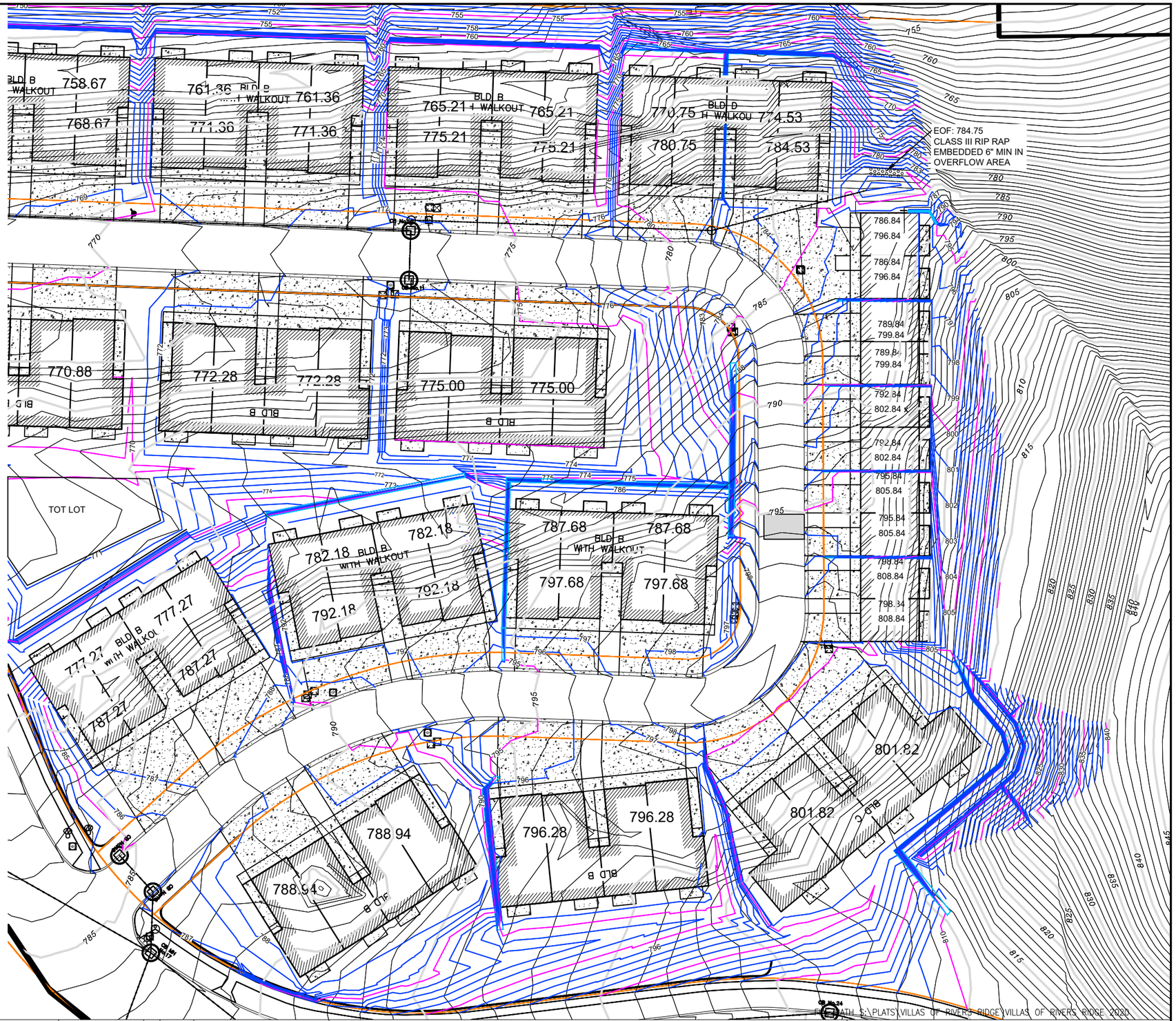
RETAINING WALL NOTES

RETAINING WALLS ARE PLACED TO PROVIDE ADEQUATE DRAINAGE BETWEEN THE BUILDINGS. THERE IS NOT ENOUGH ROOM BETWEEN BUILDING TO FORM A DRAINAGE SWALE BETWEEN THE WALL OR BUILDING FOUNDATION RESULTING IN POTENTIAL EROSION, UNDERMINING, AND WATER SEEPAGE.

0 50 100 Feet

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

NORTH



JOHNSON & SCOFIELD INC.
Surveying & Engineering

1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Volgt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20

Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

GRADING PLAN AND EROSION CONTROL SHEET 2

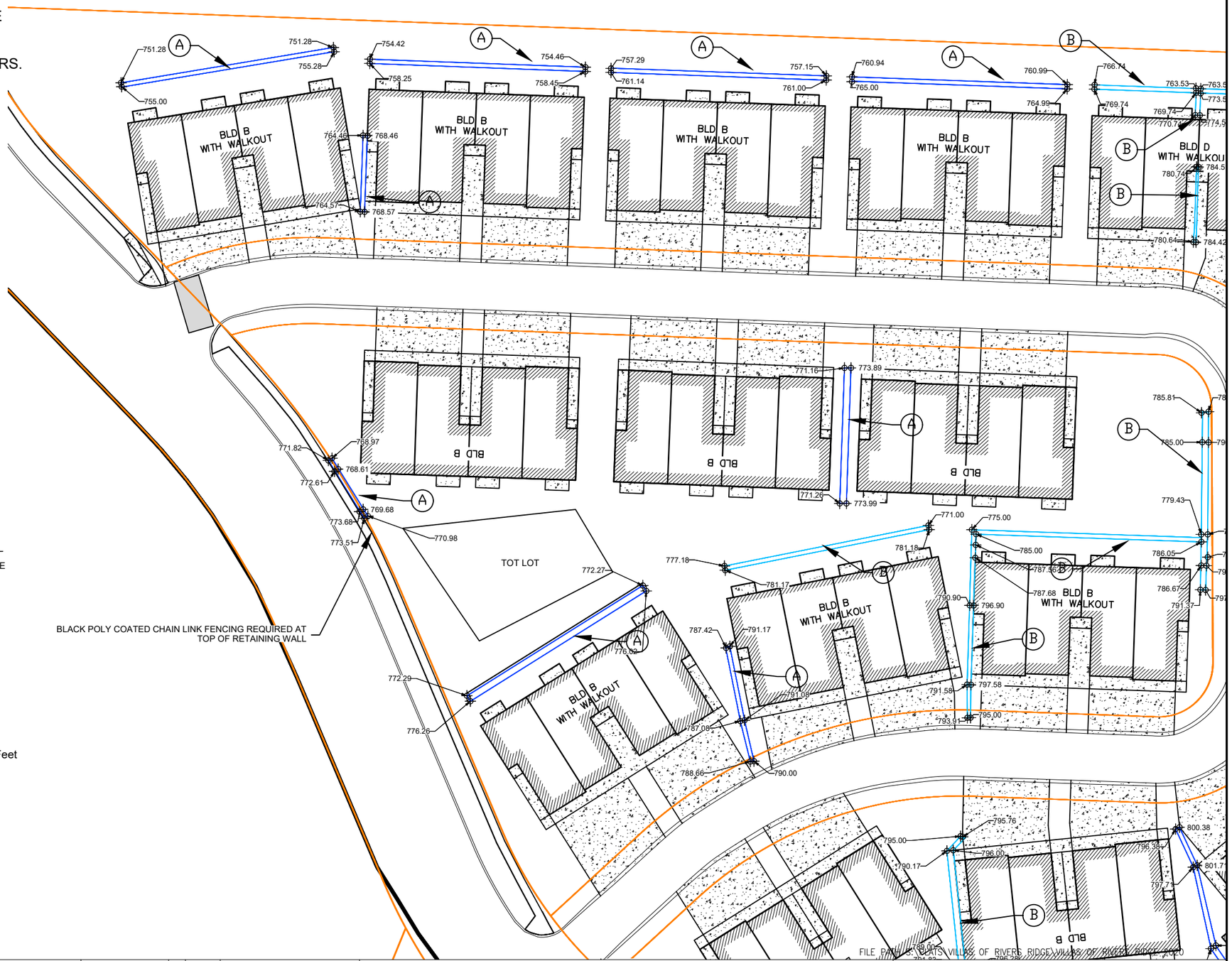
WALL TYPES

(A) PROPOSED MODULAR BLOCK RETAINING WALL - SEE DETAIL SHEET.

(B) PROPOSED ENGINEERED RETAINING WALL BY OTHERS.

RETAINING WALL NOTES

RETAINING WALLS ARE PLACED TO PROVIDE ADEQUATE DRAINAGE BETWEEN THE BUILDINGS. THERE IS NOT ENOUGH ROOM BETWEEN BUILDING TO FORM A DRAINAGE SWALE BETWEEN THE WALL OR BUILDING FOUNDATION RESULTING IN POTENTIAL EROSION, UNDERMINING, AND WATER SEEPAGE.



NORTH

0 50 100 Feet

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

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE
DATE: 06/18/2020 REG NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

RETAINING WALL SHEET 1

FILE PATH: S:\DATA\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE.dwg

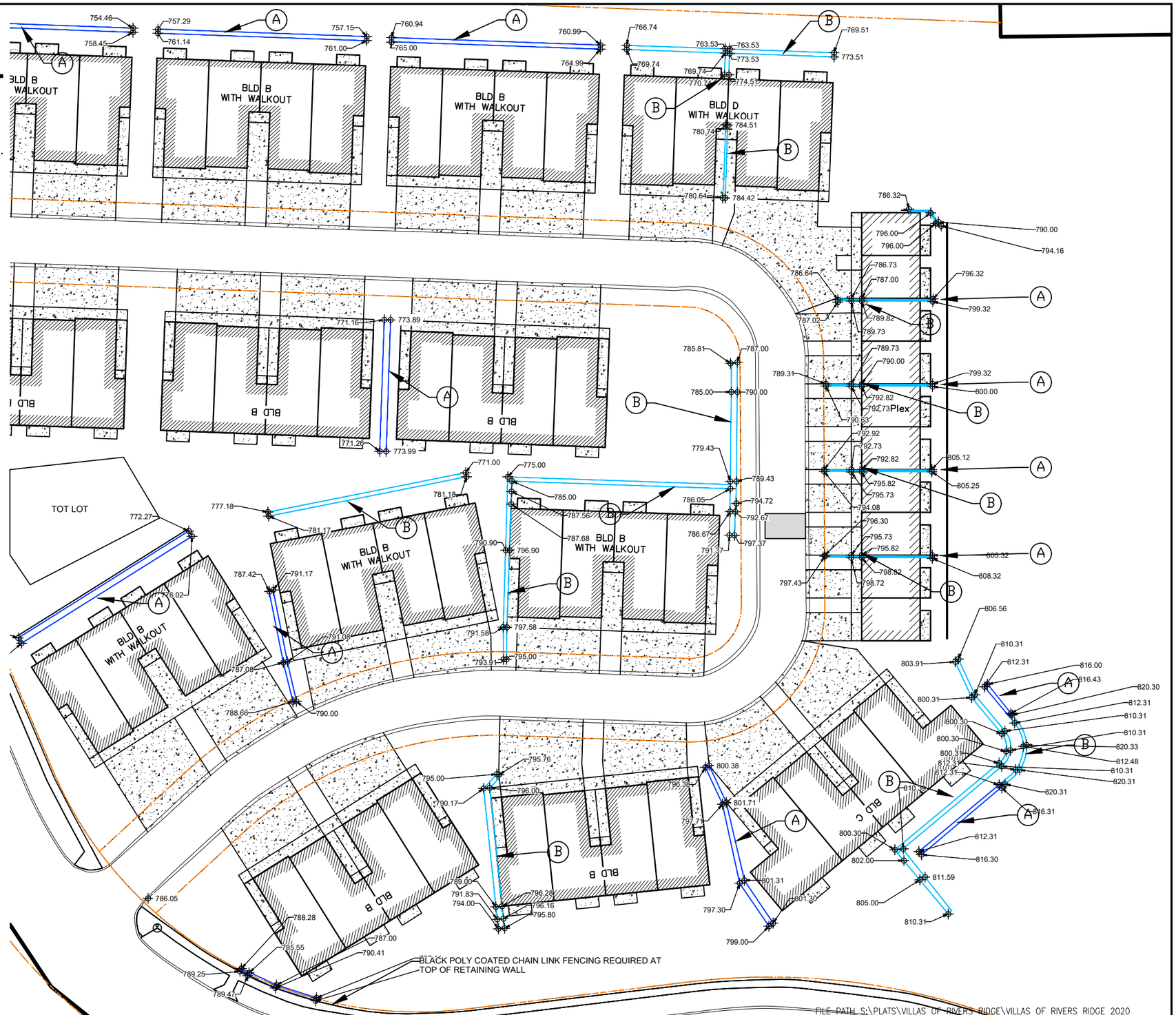
WALL TYPES

(A) PROPOSED MODULAR BLOCK RETAINING WALL - SEE DETAIL SHEET.

(B) PROPOSED ENGINEERED RETAINING WALL BY OTHERS.

RETAINING WALL NOTES

RETAINING WALLS ARE PLACED TO PROVIDE ADEQUATE DRAINAGE BETWEEN THE BUILDINGS. THERE IS NOT ENOUGH ROOM BETWEEN BUILDING TO FORM A DRAINAGE SWALE BETWEEN THE WALL OR BUILDING FOUNDATION RESULTING IN POTENTIAL EROSION, UNDERMINING, AND WATER SEEPAGE.



0 50 100 Feet

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

NORTH

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Volgt, PE
DATE: 06/18/2020 REG NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

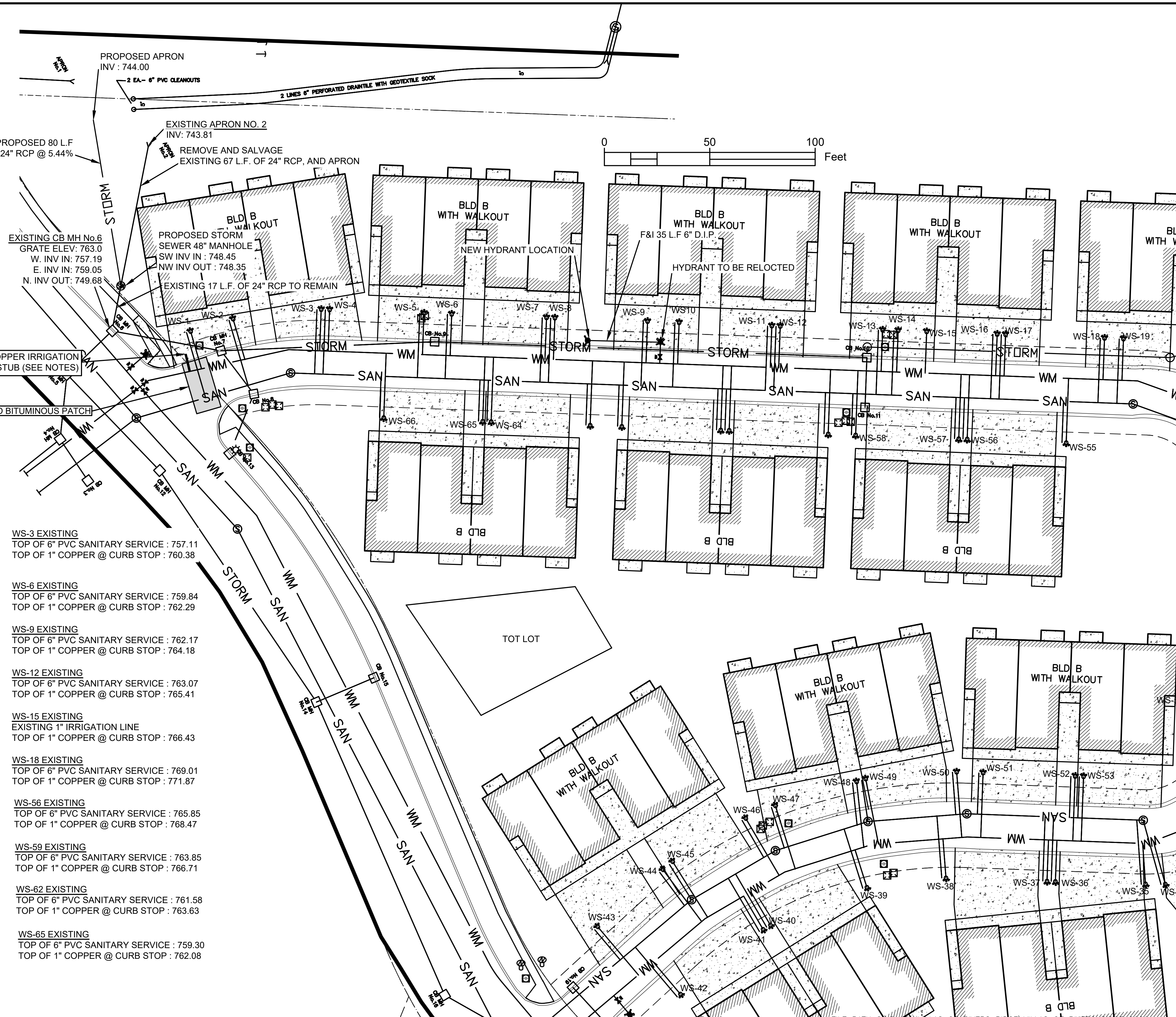
RED WING, MINNESOTA

RETAINING WALL SHEET 2

SHEET 9 OF 18 SHEETS

UTILITY NOTES

- ALL WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PER MINNESOTA RULES, PART 4715.2250 AND AWWA STANDARD C651
- A MINIMUM HORIZONTAL SEPARATION OF 10 FEET MUST BE MAINTAINED BETWEEN WATER SERVICE AND ANY SEWER WHENEVER POSSIBLE. A MINIMUM VERTICAL SEPARATION OF 18 INCHES MUST BE MAINTAINED BETWEEN WATER SERVICE AND ANY SEWER. THE WATER SERVICE SHALL NOT CONTAIN ANY JOINTS OR CONNECTIONS WITHIN 10 FEET OF THE CROSSING.
- SEWERS CROSSING WHICH ARE NOT AT LEAST 12 INCHES BELOW A WATER SERVICE MUST BE CONSTRUCTED OF MATERIALS APPROVED FOR USE WITHIN A BUILDING (SEE SECTIONS 609.2, 720.1, AND TABLE 701.1). THE WATER SERVICE SHOULD NOT CONTAIN ANY JOINTS OR CONNECTIONS WITHIN 10 FEET OF THE CROSSING.
- A MINIMUM 4" OF EXTRUDED POLYSTYRENE BOARD INSULATION SHALL BE INSTALLED ANYTIME WATER LINE CROSSES SANITARY SEWER, STORM SEWER, OR SUB-DRAIN SYSTEM.
- PVC SANITARY AND STORM SEWERS MUST MEET ONE OF THE FOLLOWING ASTM STANDARDS: D1785, D2665, D3034,F789, F794, F891, F949, OR F1488 (SEE TABLE 701.1 AND INSTALLATION STANDARD 1). FITTINGS MUST COMPLY WITH ASTM D1866, D2665, OR F794 RESPECTIVELY. JOINTS MUST BE APPROVED MECHANICAL OR PUSH-ON UTILIZING AN ELASTOMERIC SEAL, OR SOLVENT WELDED USING ASTM F656 PURPLE PRIMER AND ASTM D2564 SOLVENT CEMENT. THE INSTALLATION MUST COMPLY WITH ASTM D2321, WHICH REQUIRES OPEN-TRENCH INSTALLATION ON A CONTINUOUS GRANULAR BED. ASTM F679 PVC MAY BE USED FOR STORM SEWERS IF APPROVED BY THE LOCAL BUILDING OFFICIAL PRIOR TO INSTALLATION (SEE SECTION 301.2).
- CONCRETE MANHOLES AND SEWER LINES SHALL BE TESTED BY NEGATIVE PRESSURE PER ASTM C1214-13, ASTM C1244-11, OR HYDROSTATICALLY PER SECTION 1109.2.2 (SEE SECTION 712.4).
- INLET AND OUTLET CONNECTIONS TO SEWER MANHOLES MUST USE FLEXIBLE COMPRESSION JOINTS LOCATED BETWEEN 12 AND 36 INCHES FROM THE MANHOLE (SEE SECTION 719.6). WHERE PERMITTED BY THE ADMINISTRATIVE AUTHORITY AS AN ALTERNATE INSTALLATION METHOD, APPROVED RESILIENT RUBBER JOINTS MAY BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCH BASINS, AND OTHER STRUCTURES (SEE SECTION 301.2).
- THE PLUMBING SYSTEM AND THE STORM SYSTEM WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED PER SECTIONS 609.4, 712.0, AND 1109.0.
- ADDITIONAL UTILITY DETAILS ARE LOCATED ON THE PLAN SET DETAIL SHEETS.
- NO FLEXIBLE COMPRESSION JOINTS SHALL BE EMBEDDED IN THE MANHOLE BASE.
- ALL CLEANOUTS AND CURB STOPS IN PAVED AREAS SHALL BE PLACED IN A VALVE BOX. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED PAVEMENT SURFACE.



WATER AND SANITARY SERVICE NOTES

WS-1 PROPOSED
F&I 8"X8"X6" PVC WYE : INV. 754.70
F&I 32 L.F. 6" PVC SANITARY SERVICE : INV. 756.0
F&I 1" WET TAP
F&I 1" CORP VALVE
F&I 18 L.F. 1" COPPER WATER SERVICE
F&I 1" CURB STOP
TOP 1" COPPER @ CURB STOP : 760.0

WS-4 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 757.71
TOP OF 1" COPPER @ CURB STOP : 760.58

WS-7 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 760.23
TOP OF COPPER @ CURB STOP : 762.87

WS-10 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 762.17
TOP OF COPPER @ CURB STOP : 764.30

WS-13 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 764.65
TOP OF 1" COPPER @ CURB STOP : NA

WS-16 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 766.58
TOP OF 1" COPPER @ CURB STOP : 768.63

WS-19 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 776.91
TOP OF 1" COPPER @ CURB STOP : 773.02

WS-57 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 765.52
TOP OF 1" COPPER @ CURB STOP : 767.87

WS-60 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 763.20
TOP OF 1" COPPER @ CURB STOP : 765.05

WS-63 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 760.72
TOP OF 1" COPPER @ CURB STOP : 763.32

WS-66 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 758.87
TOP OF 1" COPPER @ CURB STOP : 760.00

IRRIGATION STUB:
F&I 2" WET TAP
F&I 2" CORP VALVE
F&I 18 L.F. 2" COPPER WATER SERVICE
F&I 2" CURB STOP
TOP 2" COPPER @ CURB STOP : 760.0

WS-2 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 756.69
TOP OF 1" COPPER @ CURB STOP : 760.20

WS-5 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 759.79
TOP OF 1" COPPER @ CURB STOP : 762.19

WS-8 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 760.55
TOP OF 1" COPPER @ CURB STOP : 762.87

WS-11 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 763.09
TOP OF 1" COPPER @ CURB STOP : 765.31

WS-14 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 764.86
TOP OF 1" COPPER @ CURB STOP : NA

WS-17 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 766.56
TOP OF 1" COPPER @ CURB STOP : 768.82

WS-55 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 767.92
TOP OF 1" COPPER @ CURB STOP : 771.58

WS-58 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 764.47
TOP OF 1" COPPER @ CURB STOP : 766.70

WS-61 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 762.82
TOP OF 1" COPPER @ CURB STOP : 765.05

WS-64 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 759.37
TOP OF 1" COPPER @ CURB STOP : 762.28

WS-3 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 757.11
TOP OF 1" COPPER @ CURB STOP : 760.38

WS-6 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 759.84
TOP OF 1" COPPER @ CURB STOP : 762.29

WS-9 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 762.17
TOP OF 1" COPPER @ CURB STOP : 764.18

WS-12 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 763.07
TOP OF 1" COPPER @ CURB STOP : 765.41

WS-15 EXISTING
EXISTING 1" IRRIGATION LINE
TOP OF 1" COPPER @ CURB STOP : 766.43

WS-18 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 769.01
TOP OF 1" COPPER @ CURB STOP : 771.87

WS-56 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 765.85
TOP OF 1" COPPER @ CURB STOP : 768.47

WS-59 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 763.85
TOP OF 1" COPPER @ CURB STOP : 766.71

WS-62 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 761.58
TOP OF 1" COPPER @ CURB STOP : 763.63

WS-65 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 759.30
TOP OF 1" COPPER @ CURB STOP : 762.08

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED	JDP & SPV
DRAWN	JDP & SPD
CHECKED	SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

UTILITY PLAN
SHEET 1

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA 651–454–0002
MN. TOLL FREE 1–800–252–1166

NORTH

0 50 100 Feet

SEE SHEET 9 FOR UTILITY NOTES

WATER AND SANITARY SERVICE NOTES

WS-20 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 773.39
TOP OF 1" COPPER @ CURB STOP : 776.17

WS-21 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 774.05
TOP OF 1" COPPER @ CURB STOP : 776.47

WS-22 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 775.68
TOP OF 1" COPPER @ CURB STOP : 775.57

WS-23 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 778.86
TOP OF 1" COPPER @ CURB STOP : 779.14

WS-24 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 778.65
TOP OF 1" COPPER @ CURB STOP : 779.00

WS-25 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 779.84
TOP OF 1" COPPER @ CURB STOP : 780.98

WS-26 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 780.23
TOP OF 1" COPPER @ CURB STOP : 781.33

WS-27 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 785.20
TOP OF 1" COPPER @ CURB STOP : 787.35

WS-28A EXISTING
TOP OF 6" PVC SANITARY SERVICE : 785.50
TOP OF 1" COPPER @ CURB STOP : 787.61

WS-28B PROPOSED
F&I 8"X8"X6" PVC WYE : INV. 754.70
F&I 32 L.F. 6" PVC SANITARY SERVICE : INV. 787.65
F&I 1" WET TAP
F&I 1" CORP VALVE
F&I 18 L.F. 1" COPPER WATER SERVICE
F&I 1" CURB STOP
TOP 1" COPPER @ CURB STOP : 789.0

WS-29 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.80
TOP OF COPPER @ CURB STOP : 790.57

WS-30 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.95
TOP OF 1" COPPER @ CURB STOP : 791.08

WS-31 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.79
TOP OF 1" COPPER @ CURB STOP : 791.76

WS-32 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 790.41
TOP OF 1" COPPER @ CURB STOP : 792.51

WS-33 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 790.38
TOP OF 1" COPPER @ CURB STOP : 792.26

WS-34 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.34
TOP OF 1" COPPER @ CURB STOP : 792.02

WS-35 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.04
TOP OF 1" COPPER @ CURB STOP : 791.77

WS-36 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 787.23
TOP OF 1" COPPER @ CURB STOP : 789.79

WS-37 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 786.87
TOP OF 1" COPPER @ CURB STOP : 789.60

WS-38 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 783.86
TOP OF 1" COPPER @ CURB STOP : 786.88

WS-39 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 781.60
TOP OF 1" COPPER @ CURB STOP : 784.53

WS-40 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 779.39
TOP OF 1" COPPER @ CURB STOP : 782.27

WS-41 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 779.06
TOP OF 1" COPPER @ CURB STOP : 782.05

WS-42 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 777.07
TOP OF 1" COPPER @ CURB STOP : 780.03

WS-43 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 776.74
TOP OF 1" COPPER @ CURB STOP : 779.39

WS-44 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 780.98
TOP OF 1" COPPER @ CURB STOP : 777.92

WS-45 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 777.85
TOP OF 1" COPPER @ CURB STOP : 781.15

WS-46 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 779.28
TOP OF 1" COPPER @ CURB STOP : 782.54

WS-47 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 780.19
TOP OF 1" COPPER @ CURB STOP : 783.34

WS-48 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 781.56
TOP OF 1" COPPER @ CURB STOP : 784.65

WS-49 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 781.93
TOP OF 1" COPPER @ CURB STOP : 785.47

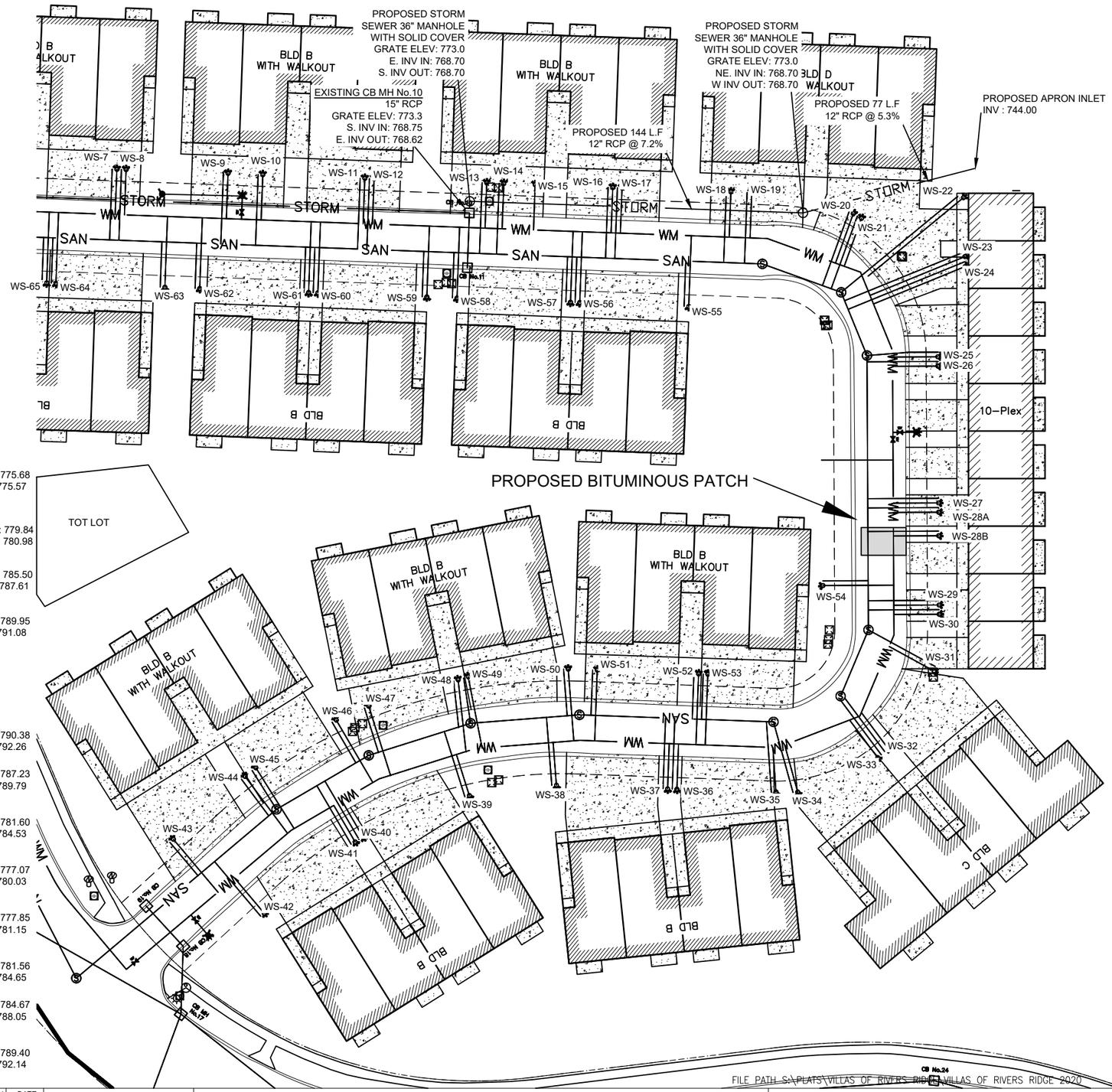
WS-50 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 783.94
TOP OF 1" COPPER @ CURB STOP : 787.14

WS-51 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 784.67
TOP OF 1" COPPER @ CURB STOP : 788.05

WS-52 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 787.48
TOP OF 1" COPPER @ CURB STOP : 789.02

WS-53 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 787.71
TOP OF 1" COPPER @ CURB STOP : 790.25

WS-54 EXISTING
TOP OF 6" PVC SANITARY SERVICE : 789.40
TOP OF 1" COPPER @ CURB STOP : 792.14



FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

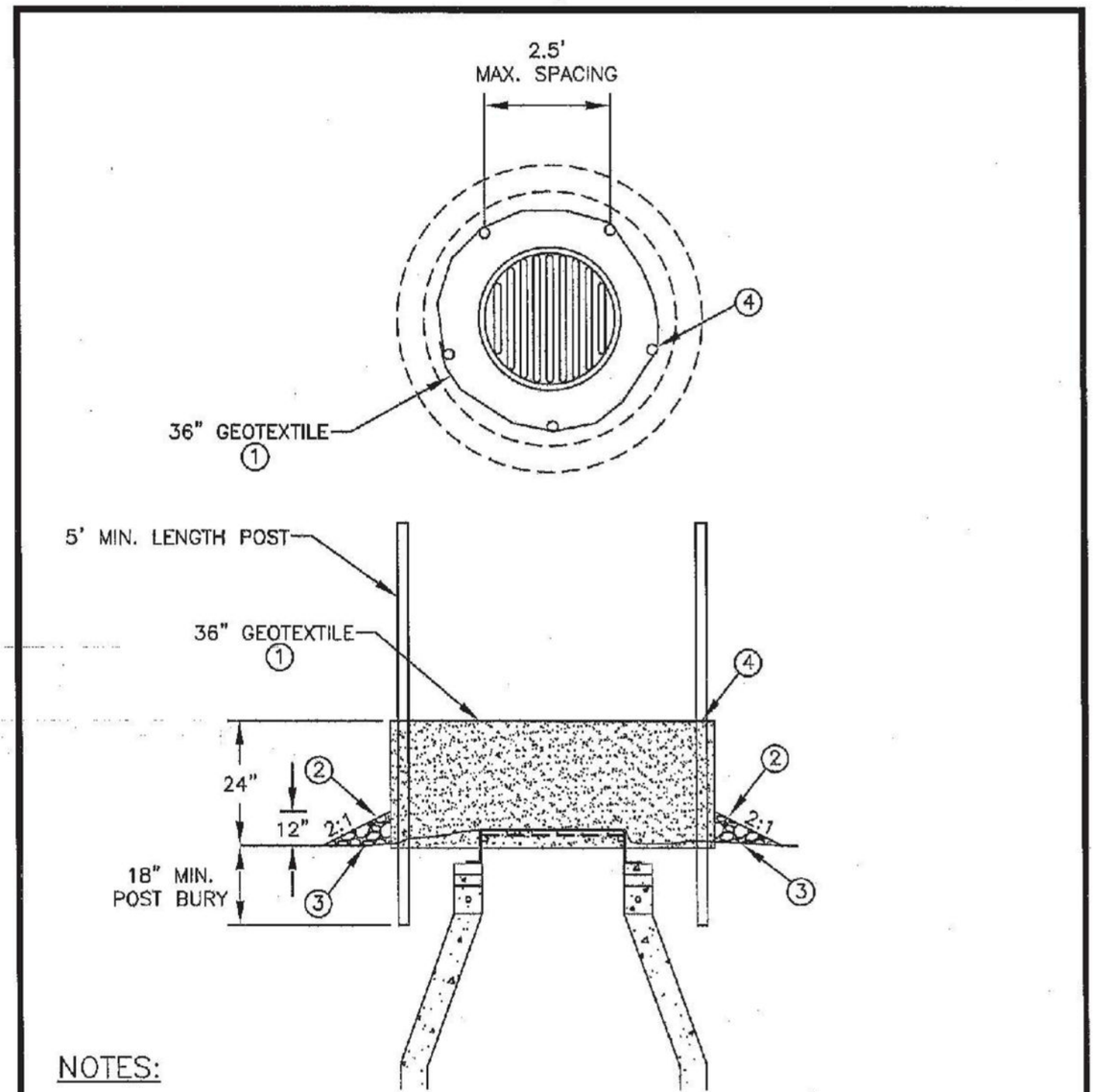
REVISED	BY	DATE
REVISED PER CITY COMMENTS	JDP	7/10/20

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301–5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

UTILITY PLAN
SHEET 2



NOTES:

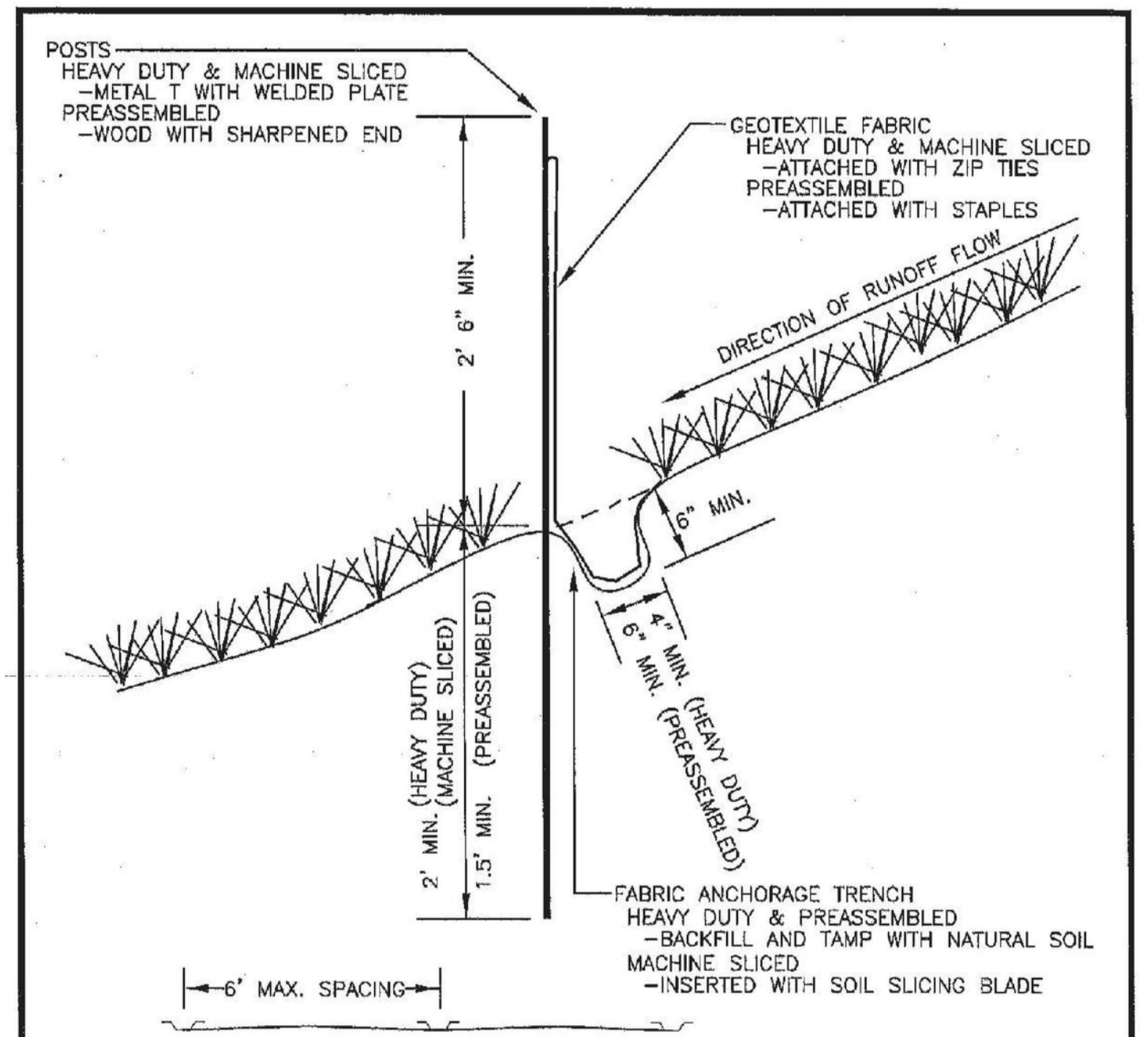
(1) ALL GEOTEXTILE SHALL BE MONOFILAMENT IN BOTH DIRECTIONS MEETING MnDOT SPEC. 3886

(2) TYPE 9 AGGREGATE MULCH MEETING MnDOT SPEC. 3882

(3) GEOTEXTILE SHALL BE ANCHORED WITH 12" LAP UNDER AGGREGATE MULCH

(4) GEOTEXTILE SHALL BE SECURED TO POSTS WITH 50 LB. TENSILE PLASTIC ZIP TIES

DATE REVISED		PLATE NO.
03/01/08	INLET PROTECTION DEVICE	4-02



NOTES:

1. THE CONTRACTOR SHALL INSPECT SILT FENCE AREAS ON A WEEKLY BASIS AND WITHIN 24 HOURS OF EACH 1/2"+ RAIN EVENT FOR ANY DAMAGE AND FILLING OF THE SILT FENCE. ANY REPAIRS OR MAINTENANCE OF THE SILT FENCE SHALL BE ACCOMPLISHED WITHIN 24 HOURS OF THE RAIN EVENT AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL REMOVE SILT FENCE UPON FINAL STABILIZATION, AS DEFINED IN THE MPCA GENERAL STORMWATER PERMIT, OR AS DIRECTED BY THE ENGINEER.

DATE REVISED		PLATE NO.
05/02/11	SILT FENCE	4-03

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

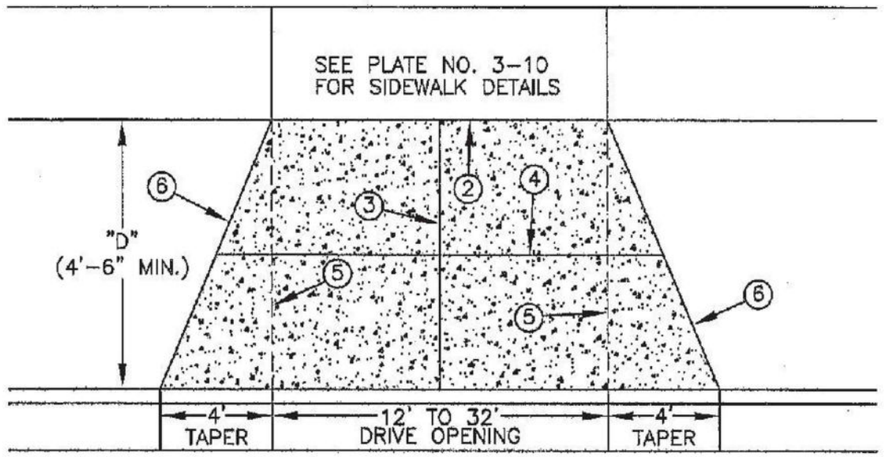
LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

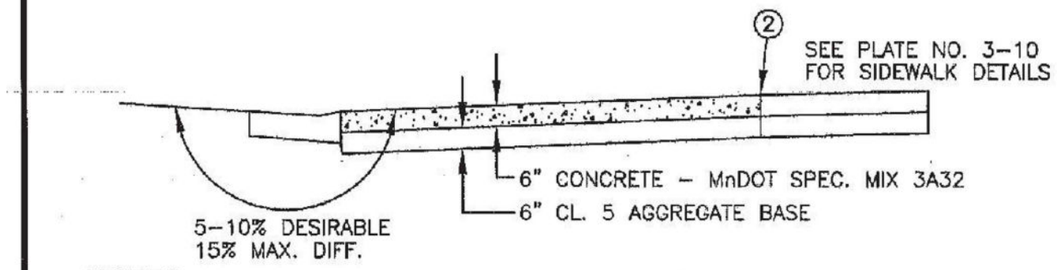
VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

DETAIL SHEET 1

SHEET 12 OF 18 SHEETS

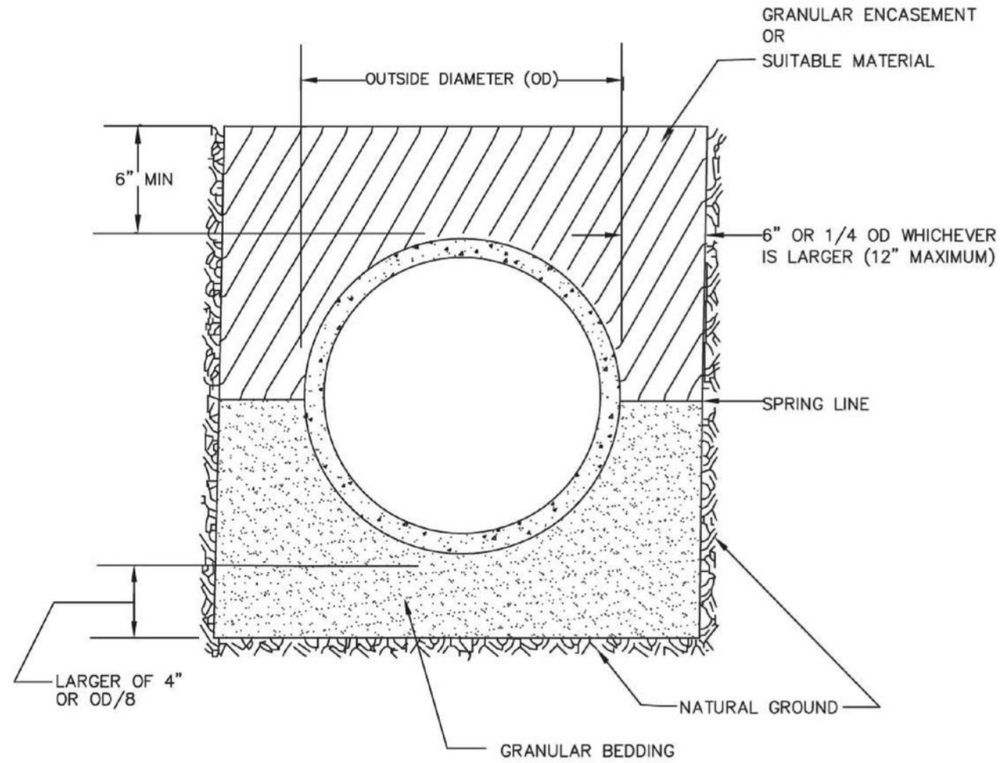




NOTES:

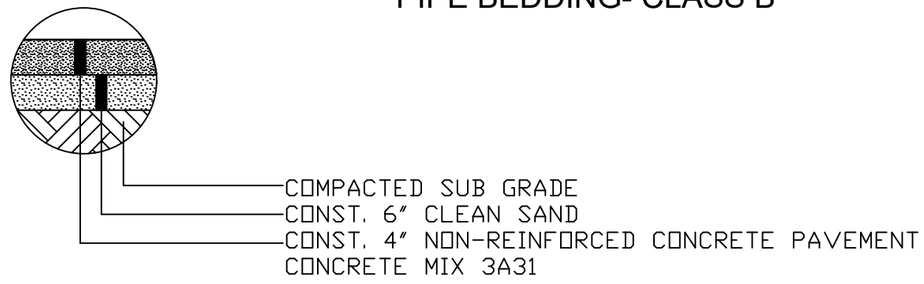
1. TYPE A APPROACH ALLOWED IN ALL AREAS. (RESIDENTIAL, COMMERCIAL AND INDUSTRIAL)
2. PROVIDE 1/2" EXP. JT. UPON APPROVAL BY THE ENGINEER, SIDEWALK MAY BE POURED MONOLITHICALLY WITH THE APPROACH AND 1/2" EXP. JT. WOULD NOT BE REQUIRED. IF NO SIDEWALK IS PRESENT, PROVIDE 1/2" EXP. JT. AT CONNECTION TO IN PLACE CONCRETE DRIVEWAY.
3. CONTRACTION JOINTS SPACED SO THAT THE MAX. SPACING BETWEEN THE JOINTS DOES NOT EXCEED 1.5 "D" OR 12' WHICHEVER IS LESS, AS MEASURED ALONG THE BACK OF CURB.
4. TRANSVERSE CONTRACTION JOINT REQUIRED WHEN "D"=8' OR GREATER, PLACED AT THE CENTER OF THE APPROACH.
5. STRIKE OFF LINE FOR DRIVE APPROACHES CONNECTING TO "B6" CURB, SEE NOTE 3 FOR JOINTING IN THIS DIRECTION.
6. TAPER WING TO SIDEWALK WHEN "D" IS 10' OR LESS, OTHERWISE TAPER TO 1/2 "D".
7. CONCRETE TO BE CONSTRUCTED ON PROPERLY COMPACTED BASE.

DATE REVISED	CONCRETE DRIVE APPROACH TYPE A	PLATE NO.
12/01/08		3-05



NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS, UNLESS SPECIFIC BID QUANTITIES ARE LISTED FOR GRANULAR BEDDING FOR WATERMAIN

PIPE BEDDING- CLASS B



NOT TO SCALE

CONCRETE SIDEWALK SECTION

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

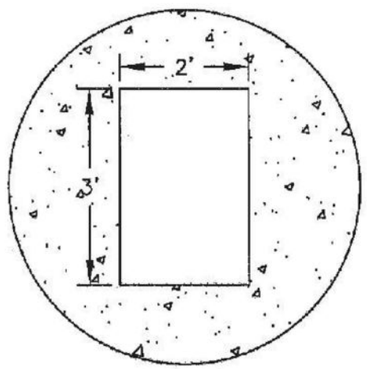
LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

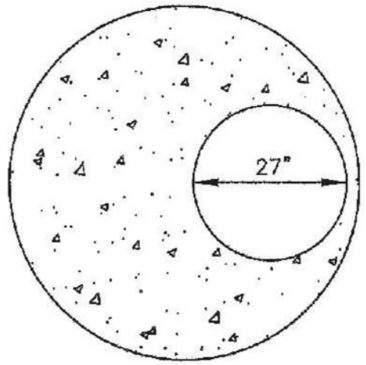
DETAIL SHEET 2

RED WING, MINNESOTA

PRECAST SOLID CONCRETE COVER



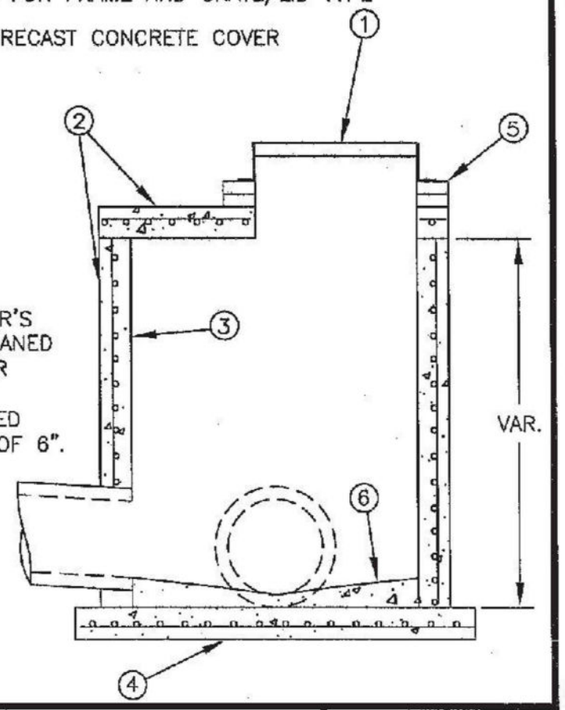
MH-CB
CENTERED
(UNLESS OTHERWISE NOTED IN PLAN)



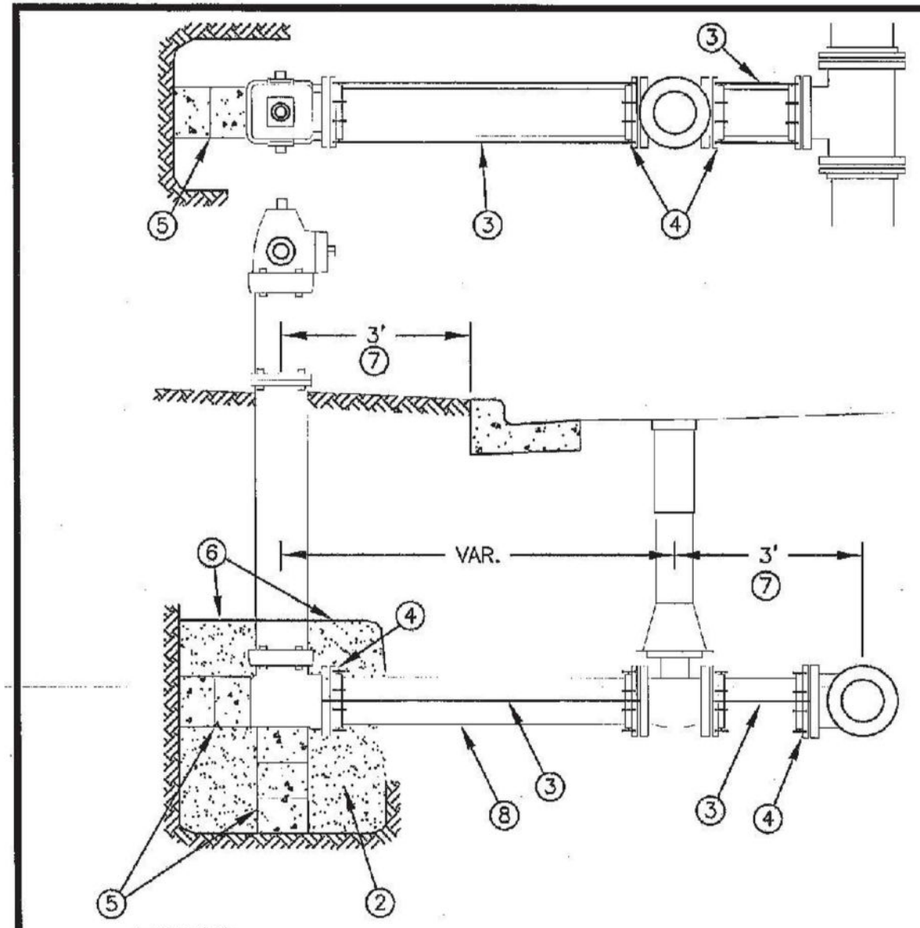
STORM MH
OFFSET
(UNLESS OTHERWISE NOTED IN PLAN)

NOTES:

1. REFER TO PLANS AND/OR SPECIAL PROVISIONS FOR FRAME AND GRATE/LID TYPE
2. SEE MnDOT PLATE NO. 4020 AND 4022 FOR PRECAST CONCRETE COVER AND 4005 FOR MANHOLE BARREL DETAILS
3. MANHOLE BARREL MAY BE CONSTRUCTED UTILIZING SOLID CONCRETE MH BLOCK INCORPORATING 3/16" HEAVY DUROWALL REINFORCEMENT EVERY SECOND COURSE
4. SEE MnDOT PLATE NO. 4011 FOR PRECAST CONCRETE BASE DETAILS
5. HIGH DENSITY POLYETHYLENE ADJUSTING RINGS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION'S STARTING ON A SOLID, CLEANED TOP SECTION OF THE INPLACE STRUCTURE. FOR MANHOLES, THE OUTSIDE OF THE ENTIRE RING SECTION SHALL BE WRAPPED WITH AN APPROVED GEOTEXTILE FABRIC WITH A MINIMUM OVERLAP OF 6". FOR CB & MH-CB ADJUSTMENTS SEE PLATE NO. 1-01
6. ALL CONCRETE INVERTS SHALL HAVE A MINIMUM OF 2" CONCRETE DEPTH WITH A MINIMUM SLOPE OF 1/4" PER FOOT TO OUTLET. FLOW LINES SHALL BE FORMED TO APPROXIMATE SHAPE OF THE LOWER 4" OF THE OUTLET PIPE.



DATE REVISED		PLATE NO.
05/10/13	STORM MH/MH-CB	1-03



NOTES:

1. 9' BURY HYDRANT
2. 3/4" TO 1 1/2" WASHED AGGREGATE DRAINAGE PIT (2'X2'X3' DEEP)
3. 3/4" THREADED RODS, HYDRANT TO VALVE AND VALVE TO MAIN TEE.
4. RETAINER GLANDS ON ALL FITTINGS FROM MAIN TEE TO HYDRANT.
5. BLOCKING SHALL BE SOLID CONCRETE BLOCKS.
6. APPROVED GEOTEXTILE PLACED OVER DRAINAGE PIT.
7. 3' TYPICAL UNLESS OTHERWISE SPECIFIED ON PLAN.
8. RODDING NOT REQUIRED FROM HYDRANT TO VALVE IF OFFSET HYDRANT LEAD IS SPECIFIED.

DATE REVISED		PLATE NO.
10/28/08	STANDARD FIRE HYDRANT	2-02

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Steven P. Volgt, PE
DATE: 06/18/2020 REG. NO. 20034

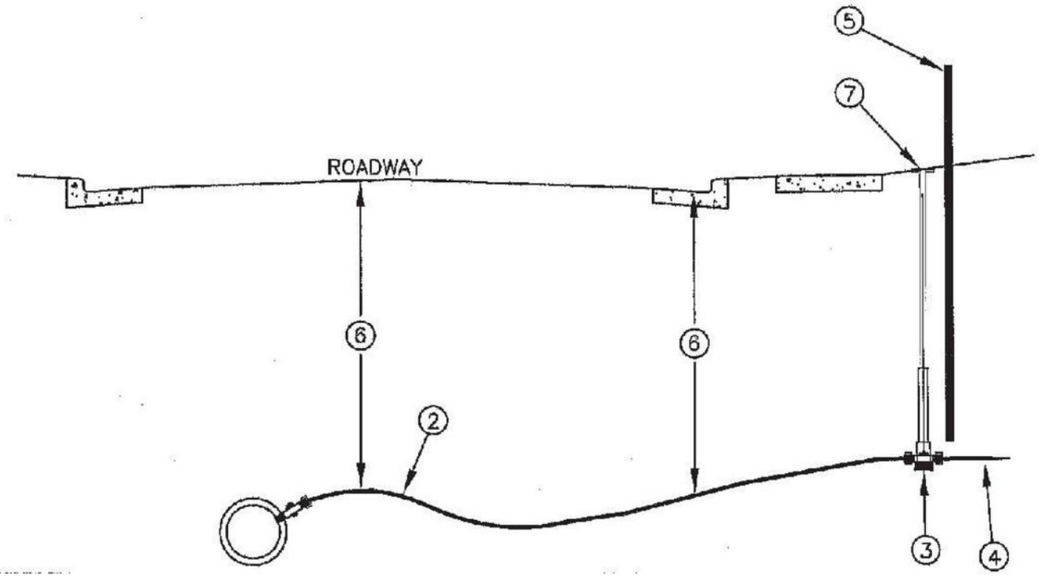
DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE: (651) 301-5103

VILLAS OF RIVER RIDGE
RED WING, MINNESOTA

DETAIL SHEET 3



NOTES:

1 PROVIDE 1' MINIMUM SELECT GRANULAR BORROW AROUND COPPER WATER SERVICE, CORPORATION/MAIN, AND CURB STOP.

(2) CONSTRUCT "GOOSENECK" ADJACENT TO CORPORATION TAP.

(3) SUPPORT CURB STOP BOX WITH SOLID CONCRETE BRICK.

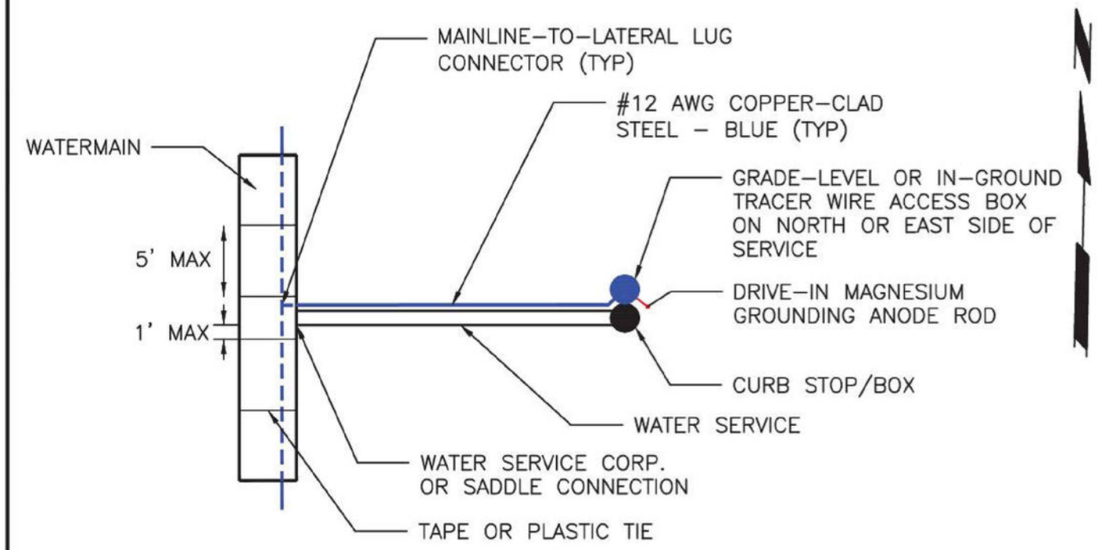
(4) CONNECT TO EXISTING WATER SERVICE OR CAP FOR FUTURE CONNECTION.

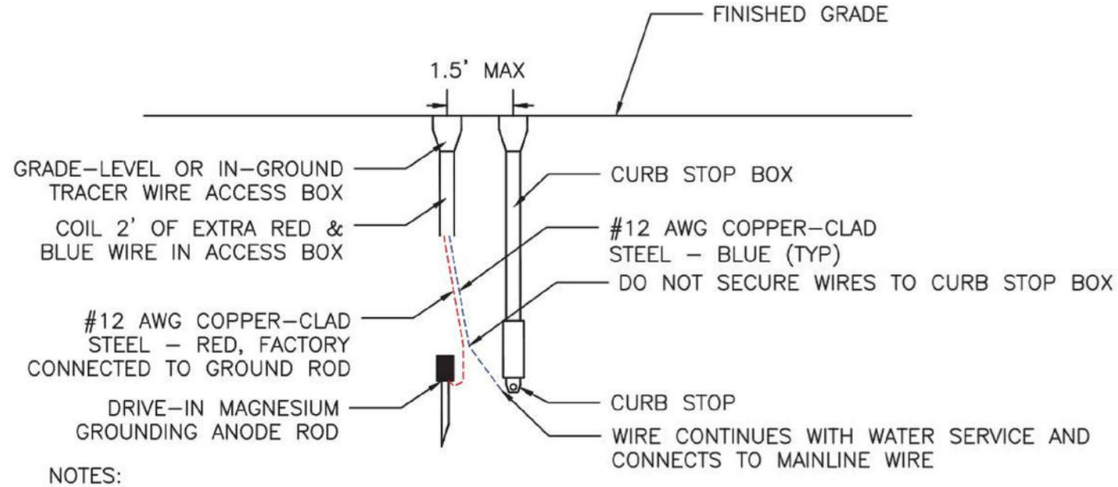
(5) PROVIDE 2"X2" WOOD MARKER POST FOR FUTURE CONNECTION LOCATING.

(6) MAINTAIN 7.5' MINIMUM COVER THROUGH ROADWAY.

(7) ADJUST CURB STOP BOX TO FINISHED GRADE.

DATE REVISED	COPPER WATER SERVICE	PLATE NO.
10/28/08		2-01





NOTES:

1) TRACER WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRES SHALL BE INSTALLED ON THE BOTTOM SIDE OF THE PIPE BELOW THE SPRING LINE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.

2) TRACER WIRE SHALL BE ON THE NORTH OR EAST SIDE OF THE PIPE.

DATE REVISED	WATER SERVICE TRACER WIRE DETAIL	PLATE NO.
03/15/17		5-05

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE

DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20

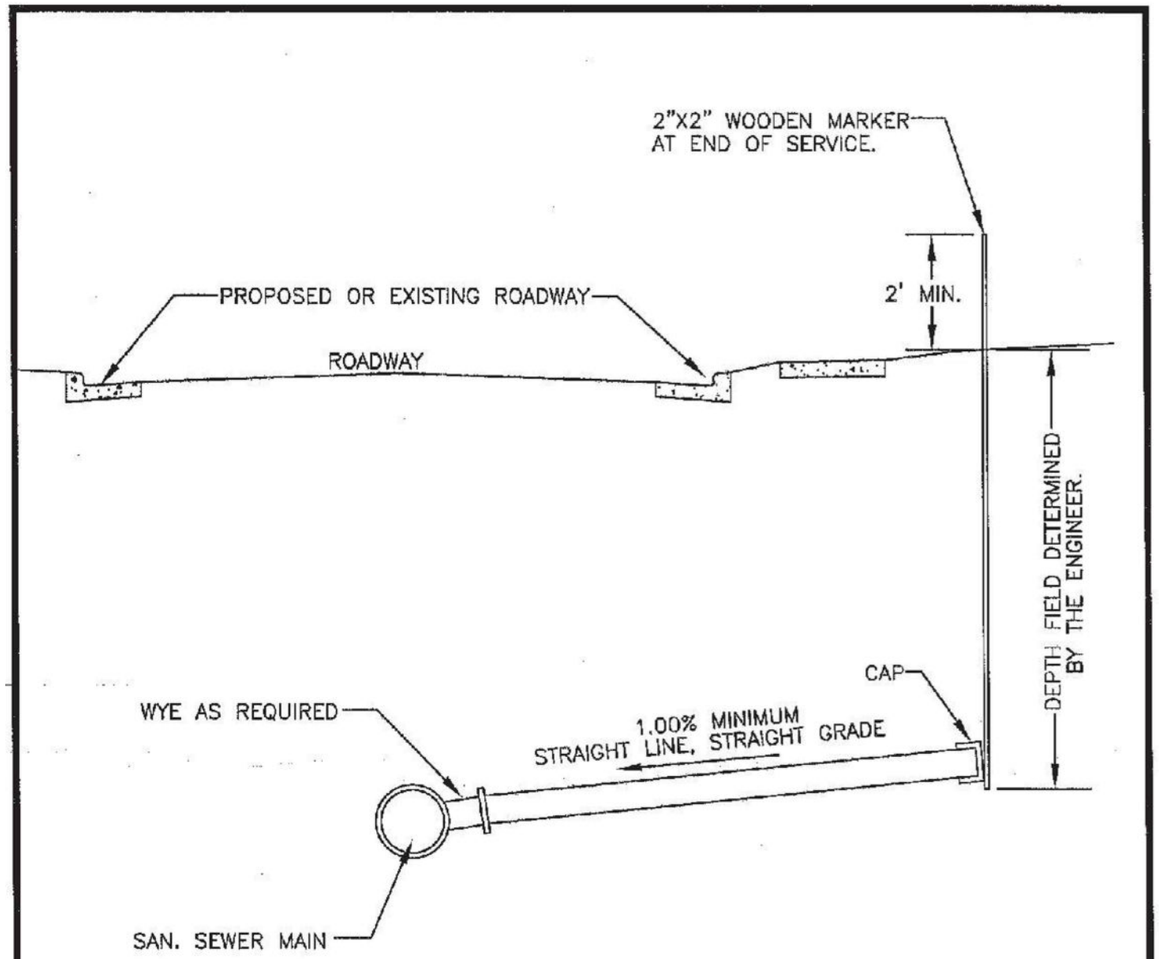
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

DETAIL SHEET 4

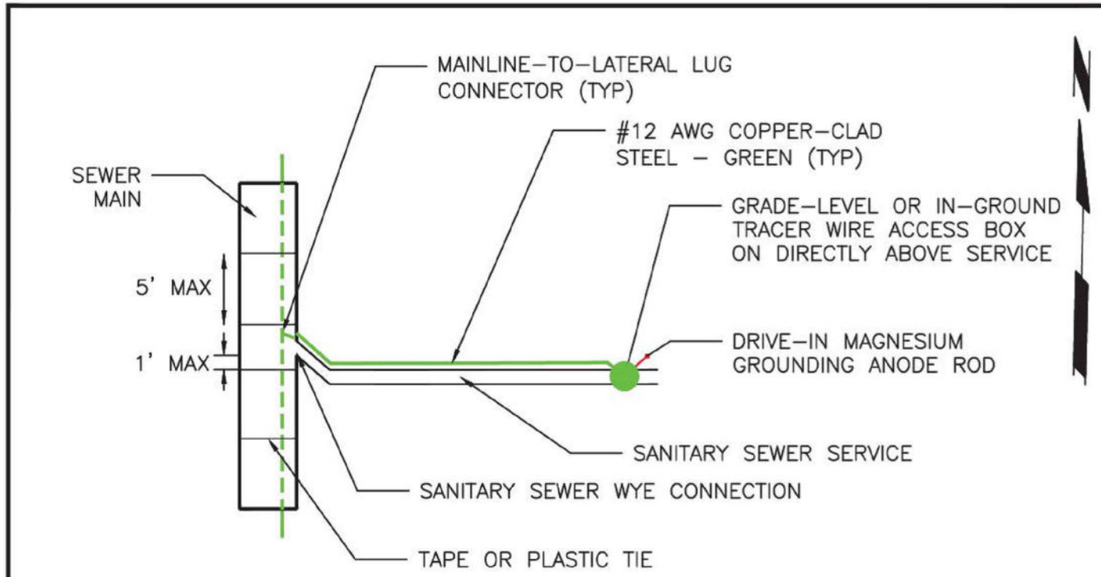
SHEET 15 OF 18 SHEETS

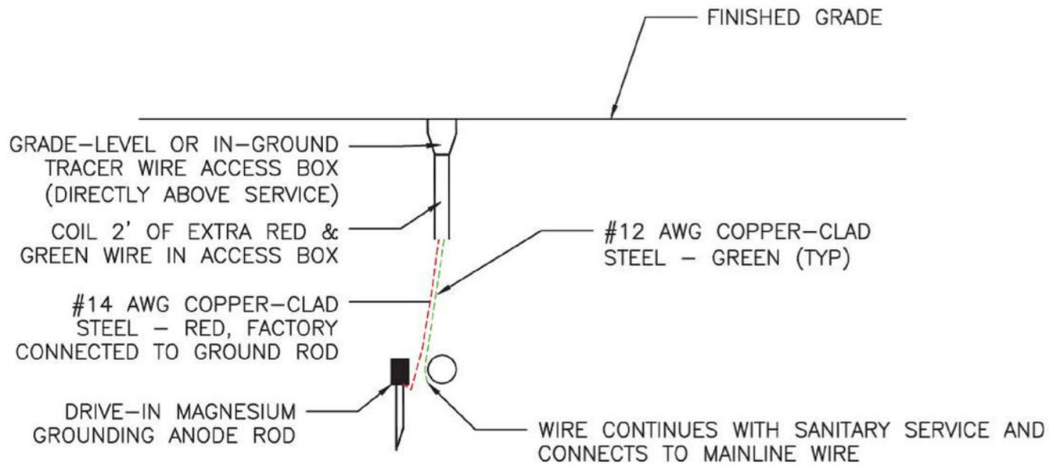


1 ALL PVC PIPE & FITTINGS SHALL INCLUDE A MINIMUM OF 1 FOOT ENCASEMENT WITH SELECT GRANULAR BACKFILL.

2 ALL SERVICE LINE GRADES SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

DATE REVISED	TYPICAL SANITARY SERVICE	PLATE NO.
03/01/08		1-06





NOTES:

1) TRACER WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRES SHALL BE INSTALLED ON THE BOTTOM SIDE OF THE PIPE BELOW THE SPRING LINE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.

2) TRACER WIRE SHALL BE ON THE NORTH OR EAST SIDE OF THE PIPE.

DATE REVISED	SANITARY SERVICE TRACER WIRE DETAIL	PLATE NO.
03/15/17		5-08

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE
DATE: 06/18/2020 REG NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20

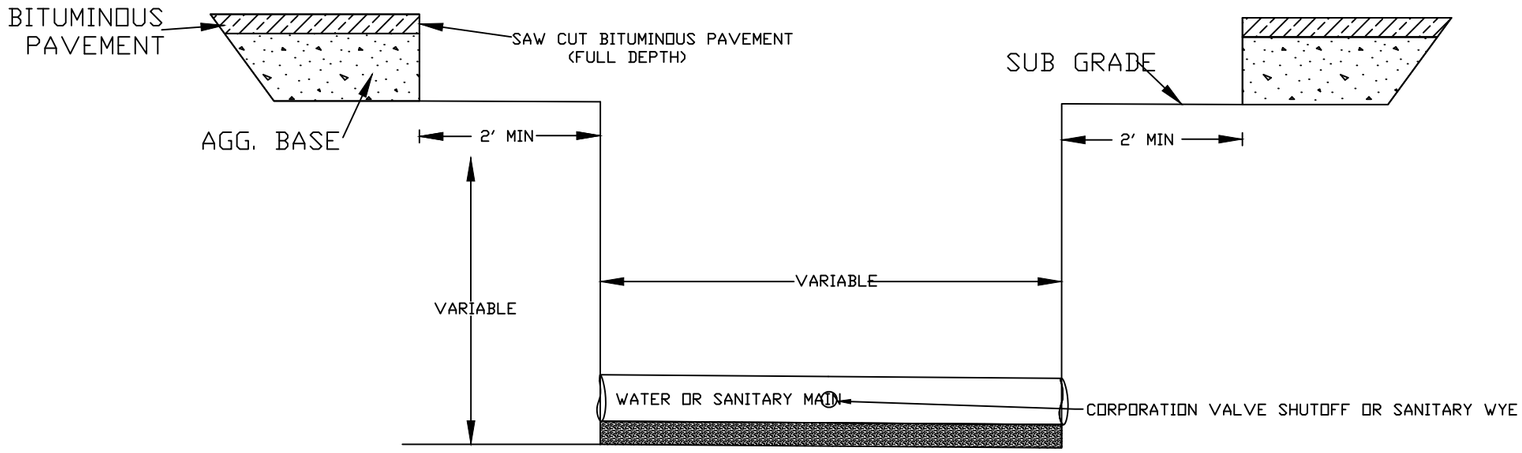
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301–5103

VILLAS OF RIVER RIDGE

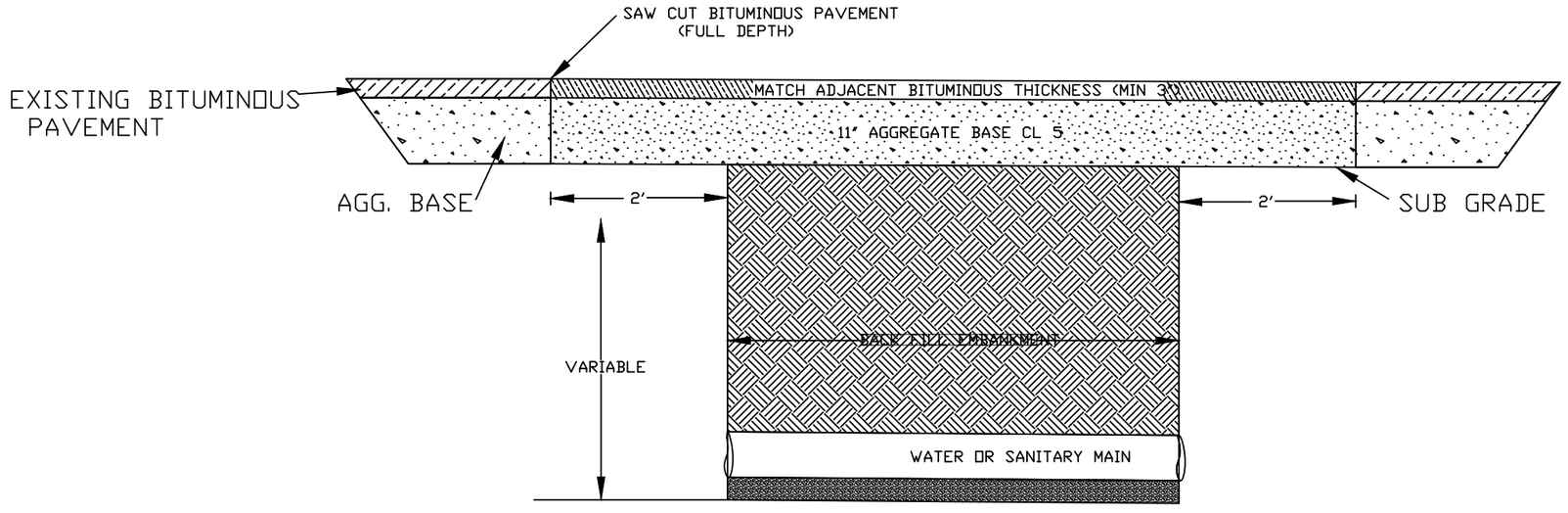
RED WING, MINNESOTA

DETAIL SHEET 5

SHEET 16 OF 18 SHEETS



WATER AND SEWER TRENCH EXCAVATION DETAIL



TRENCH BITUMINOUS PATCH DETAIL

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Volgt, PE

DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20

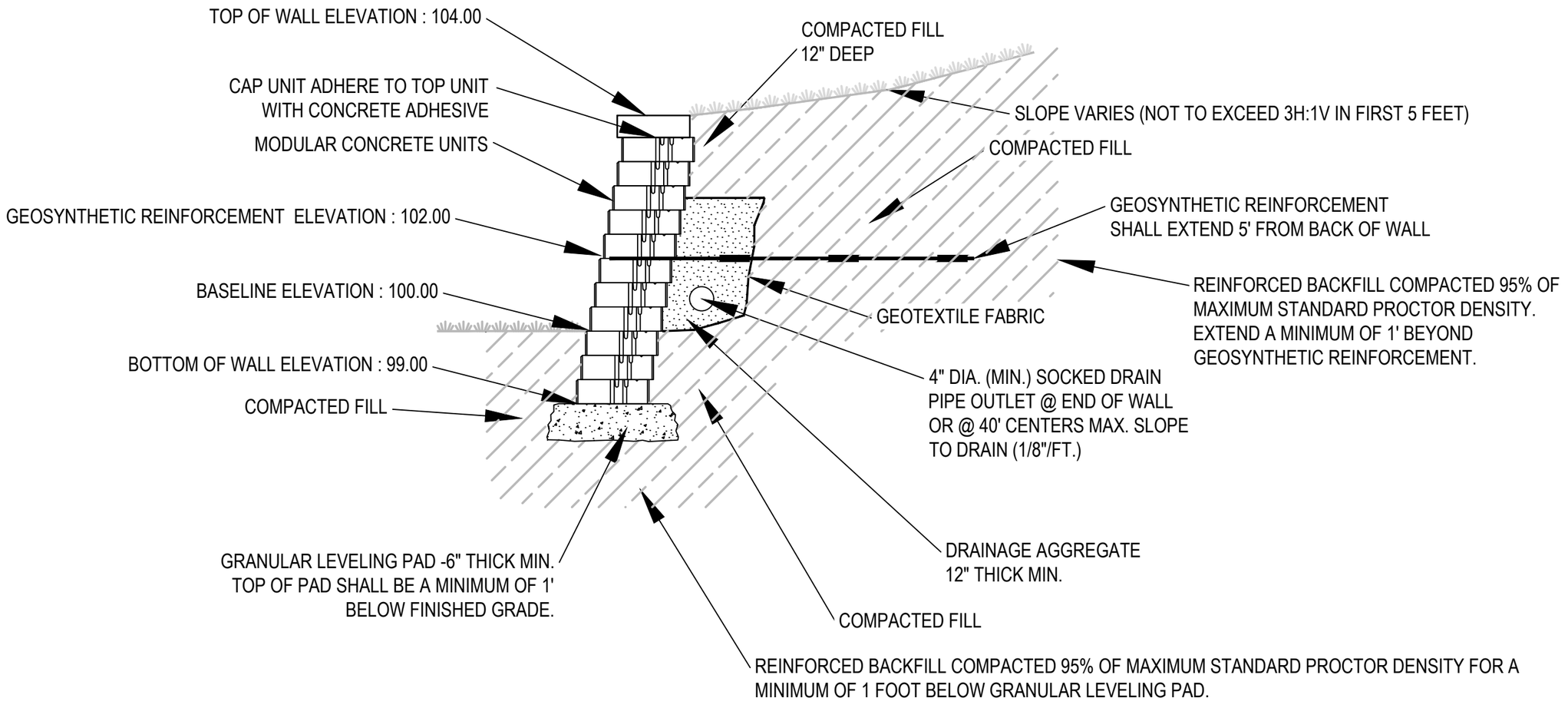
Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE: (651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

DETAIL SHEET 6

SHEET 17 OF 18 SHEETS



NOTES: WALLS SHALL BE SEPARATED BY NOT LESS THAN 1/3 OF THE COMBINED WALL HEIGHT.
FOLLOW MANUFACTURER'S INSTALLATION GUIDES

NOT TO SCALE

REINFORCED RETAINING WALL DETAIL (4 FOOT MAXIMUM HEIGHT)

FILE PATH S:\PLATS\VILLAS OF RIVERS RIDGE\VILLAS OF RIVERS RIDGE 2020

JOHNSON & SCOFIELD INC.
Surveying & Engineering
1203 Main Street Red Wing, MN 55066
ph. 651.388.1558 fax 651.388.1559

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

Steven P. Voigt, PE
DATE: 06/18/2020 REG. NO. 20034

DESIGNED JDP & SPV
DRAWN JDP & SPD
CHECKED SPV

REVISED	BY	DATE

LATEST REVISION: 07/14/20

Prepared For:
ANDY BAARTMAN
PO BOX 31
RED WING, MN 55066
PHONE:(651) 301-5103

VILLAS OF RIVER RIDGE

RED WING, MINNESOTA

DETAIL SHEET 7

SHEET 18 OF 18 SHEETS