

VALLEY VIEW BUSINESS PARK
THIRD ADDITION
SHAKOPEE, MINNESOTA

PROJECT TEAM:

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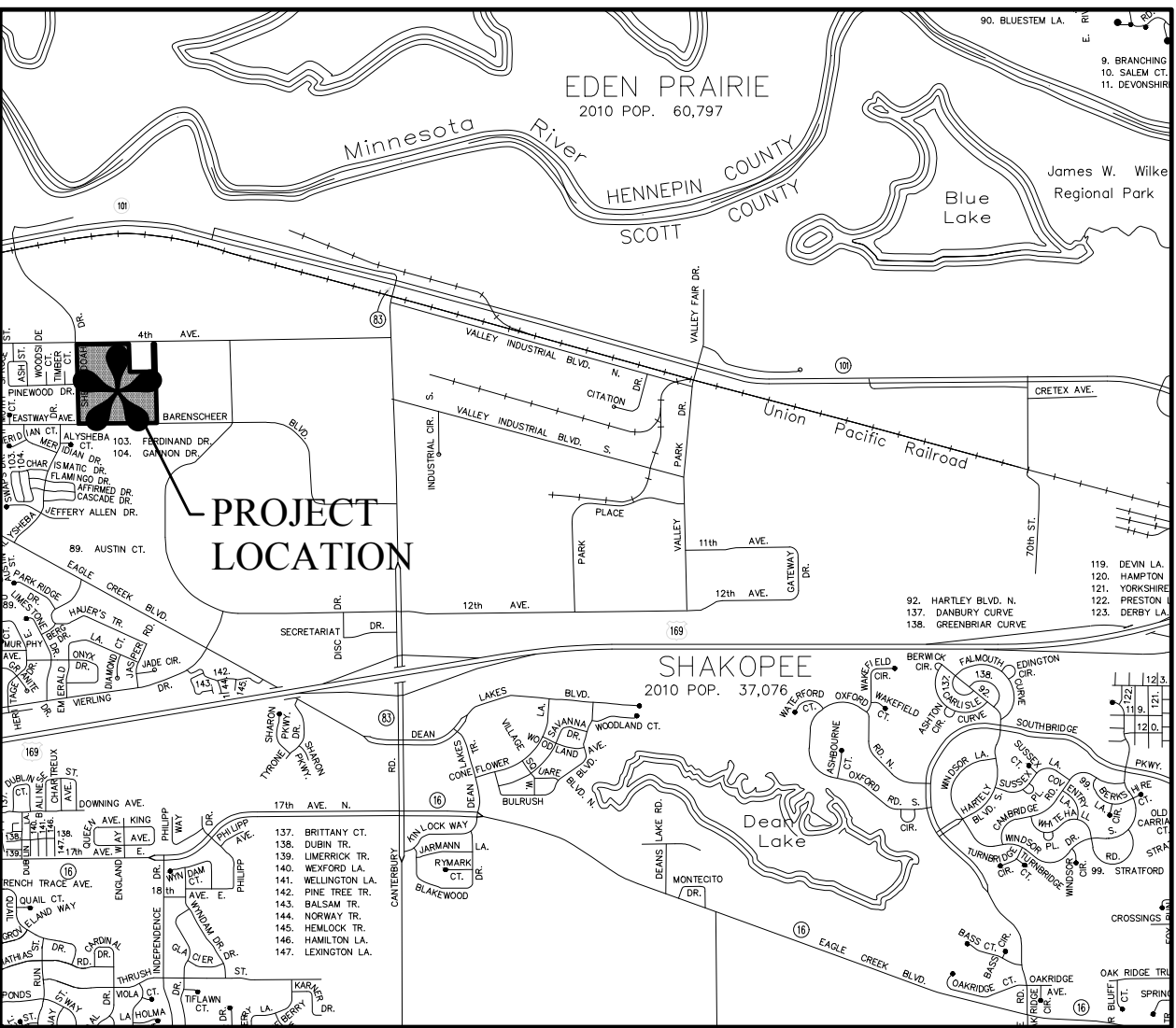
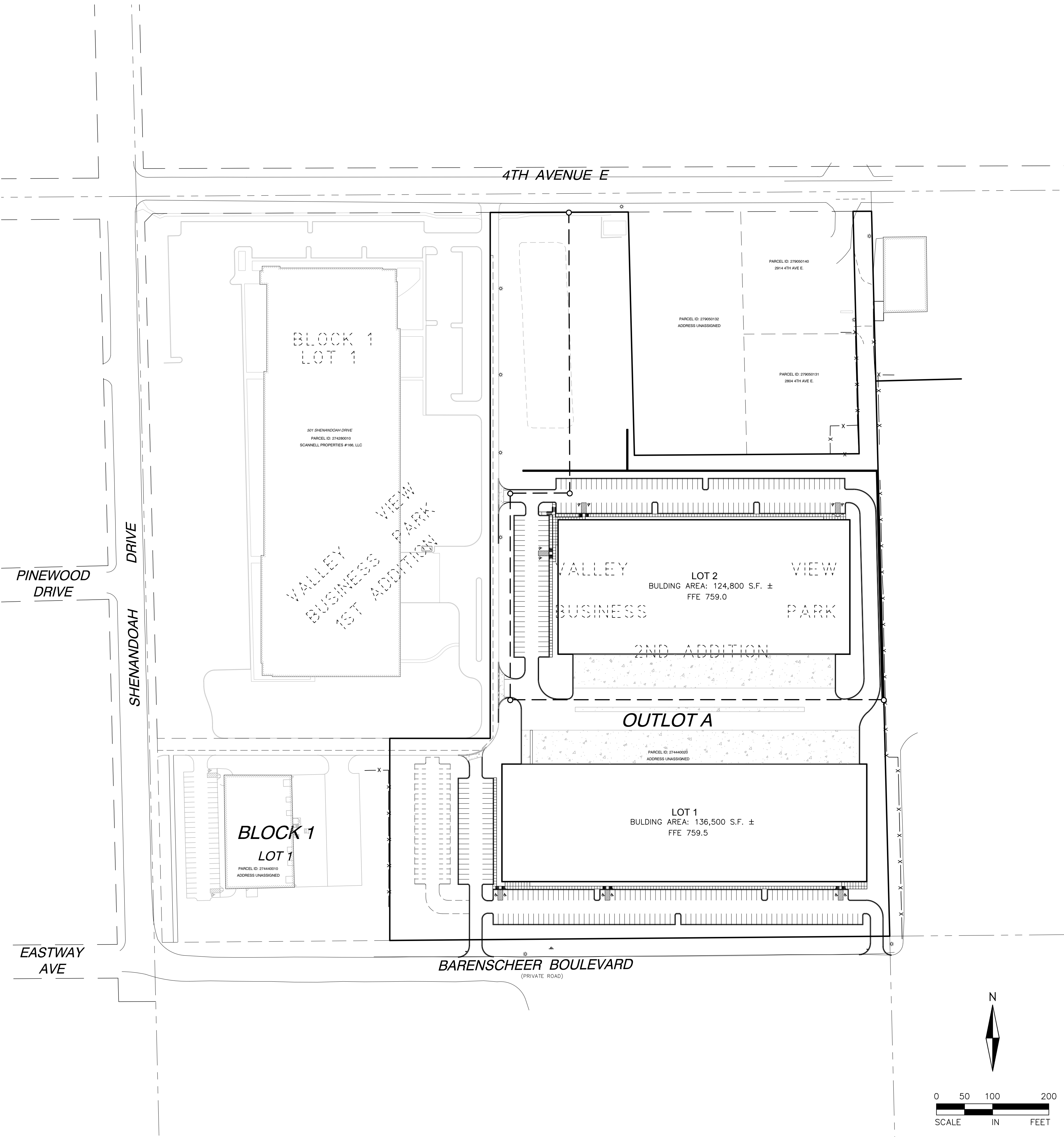
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VICINITY MAP
NOT TO SCALE

SHEET INDEX

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SCANNELL
PROPERTIES

VALLEY VIEW BUSINESS PARK THIRD ADDITION
4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA
PRELIMINARY PLAT AND SITE PLAN REVIEW
COVER SHEET

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

DAVID NASH, PE

Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

DATE	ISSUE
1.4.18	CITY SUBMITTAL
2.16.18	SITE PLAN REVISION

PROJECT TEAM DATA	
DESIGNED:	MM
DRAWN:	MM
PROJECT NO:	213-0024.4

C-0

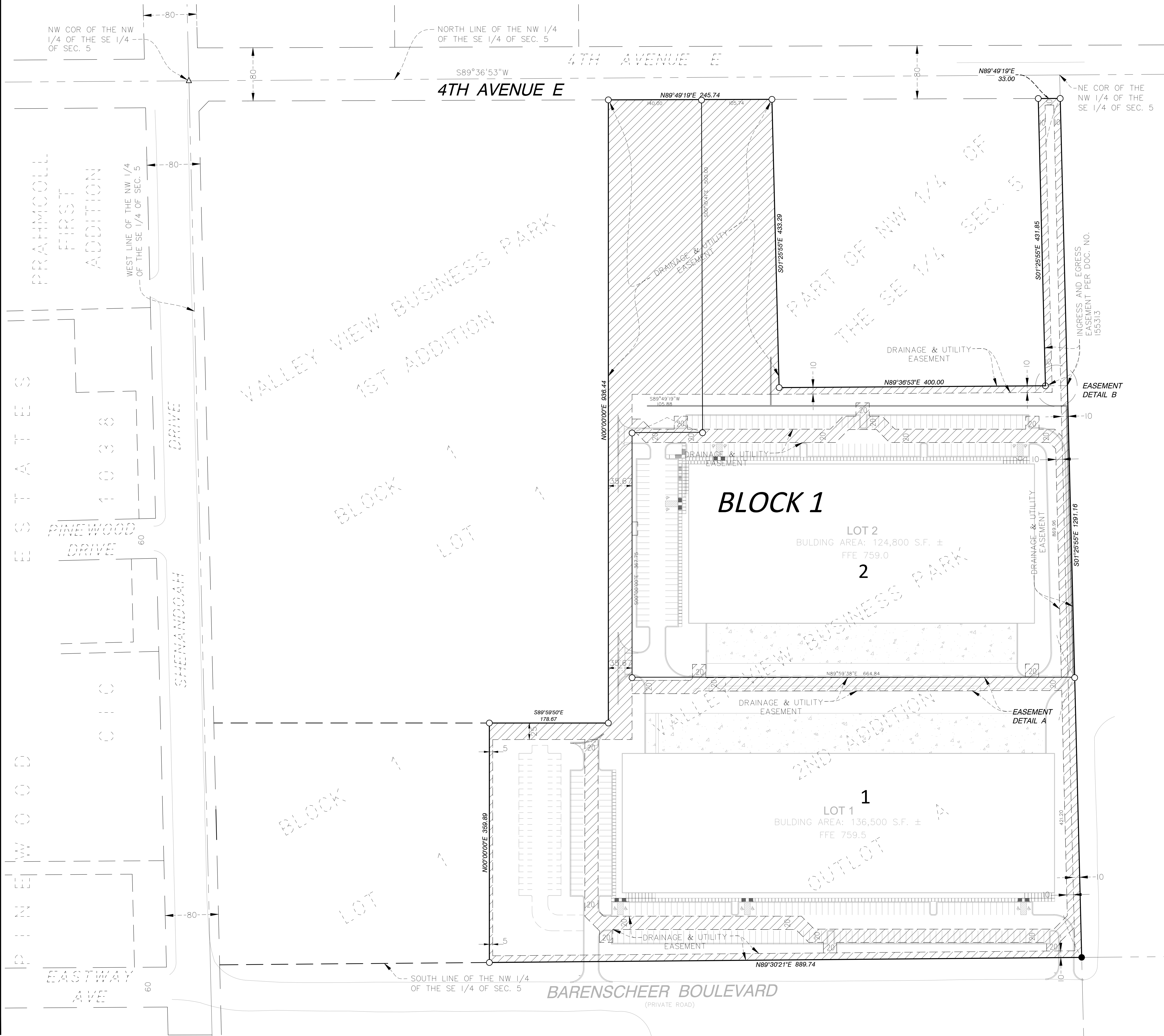
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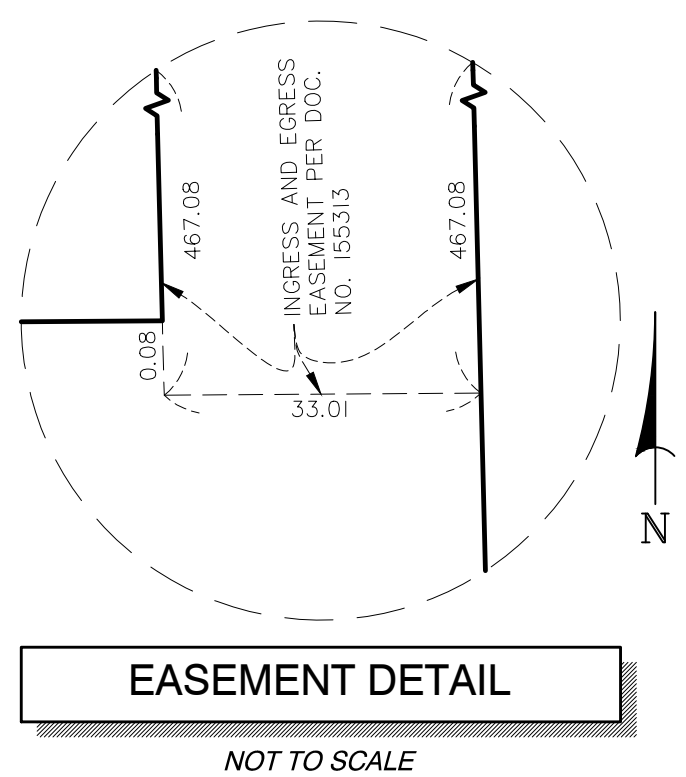
LEGAL DESCRIPTION
Outlot A, Valley View Business Park 2nd Addition, Scott County, Minnesota.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED LOT / R.O.W. LINE
- PROPOSED EASEMENT
- PROPOSED DRAINAGE & UTILITY EASEMENT
- FOUND IRON
- SET IRON

ZONING

CURRENT ZONING DESIGNATION -	LIGHT INDUSTRY (I-1)
LOT 1 AREA -	447,001 S.F.; 10.2 AC
LOT 2 AREA -	342,573 S.F.; 7.9 AC
TOTAL AREA -	789,574 S.F.; 18.1 AC

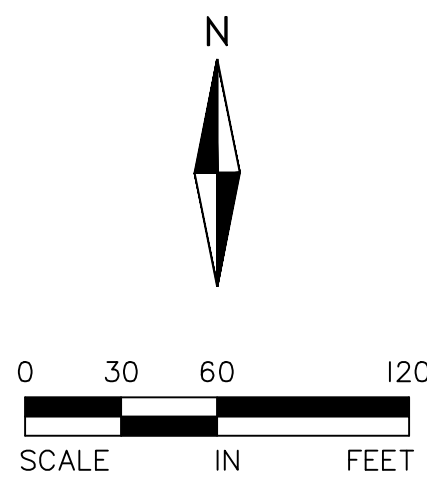


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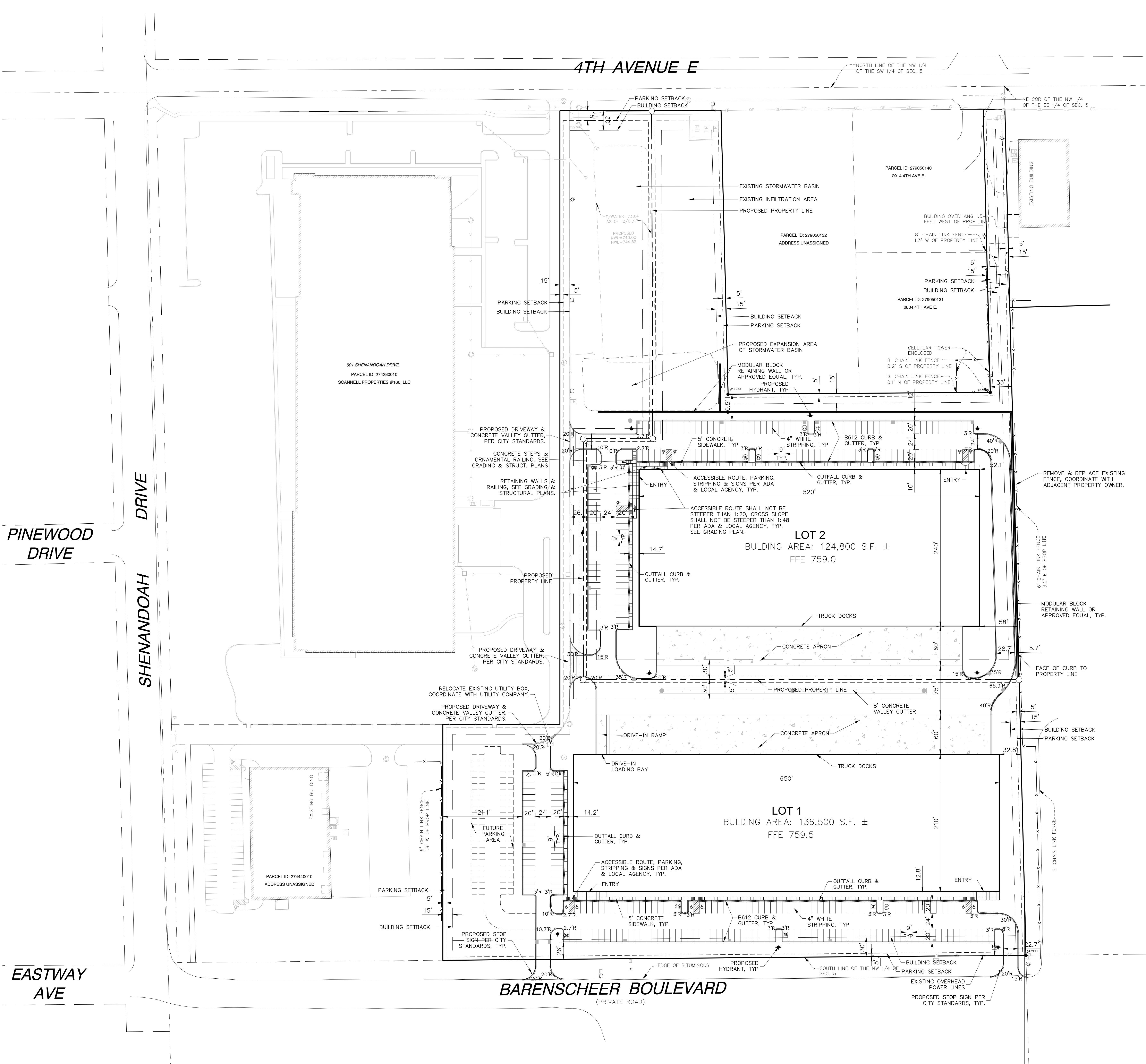
VALLEY VIEW BUSINESS PARK THIRD ADDITION
4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA
PRELIMINARY PLAT AND SITE PLAN REVIEW
PRELIMINARY PLAT

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DAVID NASH, PE	License No.
Date	
QUALITY ASSURANCE/CONTROL	
BY	DATE
DATE	ISSUE
1.4.18	CITY SUBMITTAL
2.16.18	SITE PLAN REVISION
PROJECT TEAM DATA	
DESIGNED: DN	
DRAWN: PLF	
PROJECT NO: 213-0024.4	

C-1
SHEET

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SITE DATA:

ZONING: LIGHT INDUSTRY (I-1)
PROPOSED USE: OFFICE/WAREHOUSE
PID NUMBER: 274440020

LOT DATA:			
LOT 1	447,001 S.F.	10.2 AC	
LOT 2	342,573 S.F.	7.9 AC	
GROSS LOT AREA:	789,574 S.F.	18.1 AC	

LOT SPECIFICATIONS:	REQUIRED:	LOT 1	LOT 2
DENSITY:	1 ACRE	10.2 AC	7.9 AC
MINIMUM LOT DEPTH:	N/A	N/A	N/A
MINIMUM LOT WIDTH:	100'	140'	106.74'
MAXIMUM BUILDING HEIGHT:	45'	45'	45'

(*BUILDING HEIGHT UNKNOWN AT THIS TIME.)

MAXIMUM IMPERVIOUS SURFACE: 75%
PROPOSED IMPERVIOUS SURFACE: 74.6%
(INCLUDING PARKING EXPANSION AREA)

SETBACKS:	BUILDING:	PARKING:
FRONT: (4TH AVENUE)	30'	15'
SIDE:(EAST)	15'	5'
SIDE:(WEST-COMMON DRIVE)	15'	5'
REAR: (SOUTH-BARENSCHER BLVD)	30'	5'

LOT 2	BUILDING:	PARKING:
FRONT: (4TH AVENUE)	30'	15'
SIDE:(EAST)	15'	5'
SIDE:(WEST-COMMON DRIVE)	15'	5'
REAR: (NORTH)	30'	5'

PARKING DATA:
REQUIRED (SEC. 151.143 TABLE 2)
OFFICE: 1 SPACE PER 250 GFA
WAREHOUSE: 1 PER EMPLOYEE ON LARGEST SHIFT.

PARKING CALCULATIONS:	REQUIRED:	PROVIDED:
LOT 1 BUILDING AREA: 136,500 S.F.		
OFFICE: 34,125 S.F./250 = 137	167	179 (6 ACCESSIBLE)
WAREHOUSE: ESTIMATED EMPLOYEES=30		48 FUTURE PARKING
LOT 2 BUILDING AREA: (124,800 S.F.)	150	162 (6 ACCESSIBLE)
OFFICE: 31,200 S.F./250 = 125		
WAREHOUSE: ESTIMATED EMPLOYEES=25		

TOTAL REQUIRED PARKING: 317 389

NOTE: BUILDING LAYOUTS ARE SUBJECT TO CHANGE IN THE FUTURE.

SITE PLAN NOTES:

- ALL DIMENSIONS ARE TO FACE OF BUILDING AND/OR BACK OF CURB.
- REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE STOOPS ADJACENT TO PROPOSED BUILDING.
- CONTINUOUS CONCRETE CURB & GUTTER WHICH CHANGES TYPE SHALL HAVE A FIVE FOOT TRANSITION.
- ALL CONCRETE CURB AND GUTTER ADJACENT TO CONCRETE WALK BE SEPARATED BY A 1/2 INCH EXPANSION JOINT.
- ALL EXISTING CURB CUTS TO BE REPLACED WITH CONCRETE CURB AND GUTTER EQUIVALENT TO THAT WHICH CURRENTLY EXISTS.
- ALL CURB AND GUTTER AND SIDEWALK WITHIN R.O.W. TO BE PER CITY STANDARDS.
- ALL STRIPING SHALL BE PAINTED 4 INCH WHITE PER GOVERNING AGENCY STANDARDS.
- ALL WORK WITHIN THE R.O.W. SHALL COMPLY WITH THE CITY AND REVIEWING AGENCY ENGINEERING DESIGN STANDARDS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED PERMITS.
- ALL CURB AND GUTTER TO BE CONCRETE B612 CURB UNLESS NOTED OTHERWISE, PER CITY STANDARDS.
- BUILDING DIMENSIONS REFER TO OUTSIDE OF BUILDING FACE (TYP.) UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES, SUCH AS EXISTING GUTTER GRADES AT THE PROPOSED DRIVEWAYS, PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OF VARIATIONS FROM THE PLANS.
- ACCESSIBLE ROUTE SHALL BE PROVIDED FROM ACCESSIBLE STALLS TO BUILDING ENTRANCE. (SEE MN ACCESSIBILITY CODE). POLE MOUNT APPROVED SIGNS, ONE VAN ACCESSIBLE, CENTER ON STALL LOCATION BY GENERAL CONTRACTOR. PAINT INTERNATIONAL SYMBOL OF ACCESSIBILITY WHITE ON BLUE BACKGROUND, G.C. TO ENSURE SLOPE OF PAVEMENT AT ACCESSIBLE PARKING STALLS & ACCESS ANGLE DOES NOT EXCEED 2% IN ALL DIRECTIONS.
- ALL CONCRETE PADS TO BE 3000 PSI AIR ENTRAINED 6" CONCRETE WITH #4 BARS @ 12" O.C. AND BROOM FINISHED. REFER TO SOILS REPORT.
- BITUMINOUS AND CONCRETE PAVEMENT SECTION DESIGN TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT. DRIVE AISLES SHALL BE HEAVY DUTY PAVEMENT AND PARKING STALLS SHALL BE LIGHT DUTY PAVEMENT SECTION.
- CONTRACTOR SHALL COORDINATE WITH THE FIRE MARSHAL FOR POSTING OF FIRE LANES, CURB MARKING AND SIGNAGE.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL TRENCHING AND PVC SLEEVING UNDER ANY PAVEMENT AS REQUIRED FOR IRRIGATION, LIGHTING, SIGNS ETC. AS NEEDED PRIOR TO PAVING.
- A 42" CHAIN LINK RAILING/GUARDRAIL IS REQUIRED ATOP ALL WALLS 30" IN HEIGHT OR GREATER.

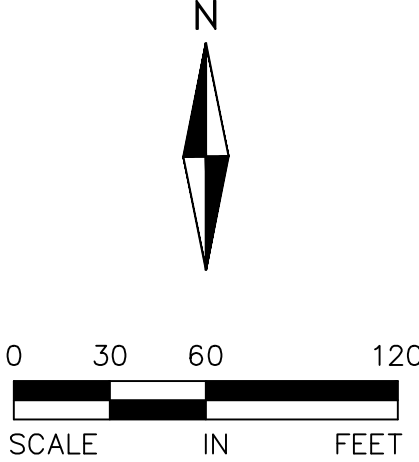
GENERAL NOTES:

- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION & REMOVAL OF ALL EXISTING STRUCTURES WHICH INTERFERE WITH NEW WORK AS SHOWN.
- ALL DIMENSIONS, GRADES, EXISTING AND PROPOSED INFORMATION SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- ALL CONCRETE SIDEWALK ADJACENT TO BUILDING SHALL BE SEPARATED BY A 1/2" EXPANSION JOINT.
- CONTRACTOR SHALL PROTECT ADJOINING PROPERTIES & STRUCTURES FROM HAZARDS ASSOCIATED WITH HIS CONSTRUCTION ACTIVITIES & SHALL BE RESPONSIBLE FOR ALL DAMAGES TO PROPERTIES & STRUCTURES THAT OCCUR AS A RESULT OF THESE ACTIVITIES.
- CONTRACTOR SHALL NOT IMPEDE EXISTING TRAFFIC CIRCULATION TO ADJACENT BUSINESSES.
- CONTRACTOR SHALL PERFORM SWEEPING ON PRIVATE PARKING AREAS AND PUBLIC STREETS AT LEAST ONCE A WEEK, ONCE A DAY IF NEEDED.
- CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE TO PREVENT AND ELIMINATE ANY DUST NUISANCE OCCASIONED BY AND DURING CONSTRUCTION, UNTIL THE PROJECT HAS BEEN COMPLETED AND HANDED OVER.

SITE LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- EXISTING CURB AND GUTTER
- PROPOSED B612 CURB AND GUTTER
- PROPOSED OUTFALL CURB AND GUTTER
- PROPOSED BUILDING SETBACK
- PROPOSED PARKING SETBACKS
- PROPOSED EASEMENTS
- CONCRETE PAVEMENT

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SCANNELL
PROPERTIES

VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA

PRELIMINARY PLAT AND SITE PLAN REVIEW

SITE PLAN

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DAVID NASH, PE

Date License No.

QUALITY ASSURANCE/CONTROL

DATE	ISSUE
1.4.18	CITY SUBMITTAL
2.16.18	SITE PLAN REVISION

PROJECT TEAM DATA
DESIGNED: MMW
DRAWN: MMW
PROJECT NO: 213-0024.4

C-2

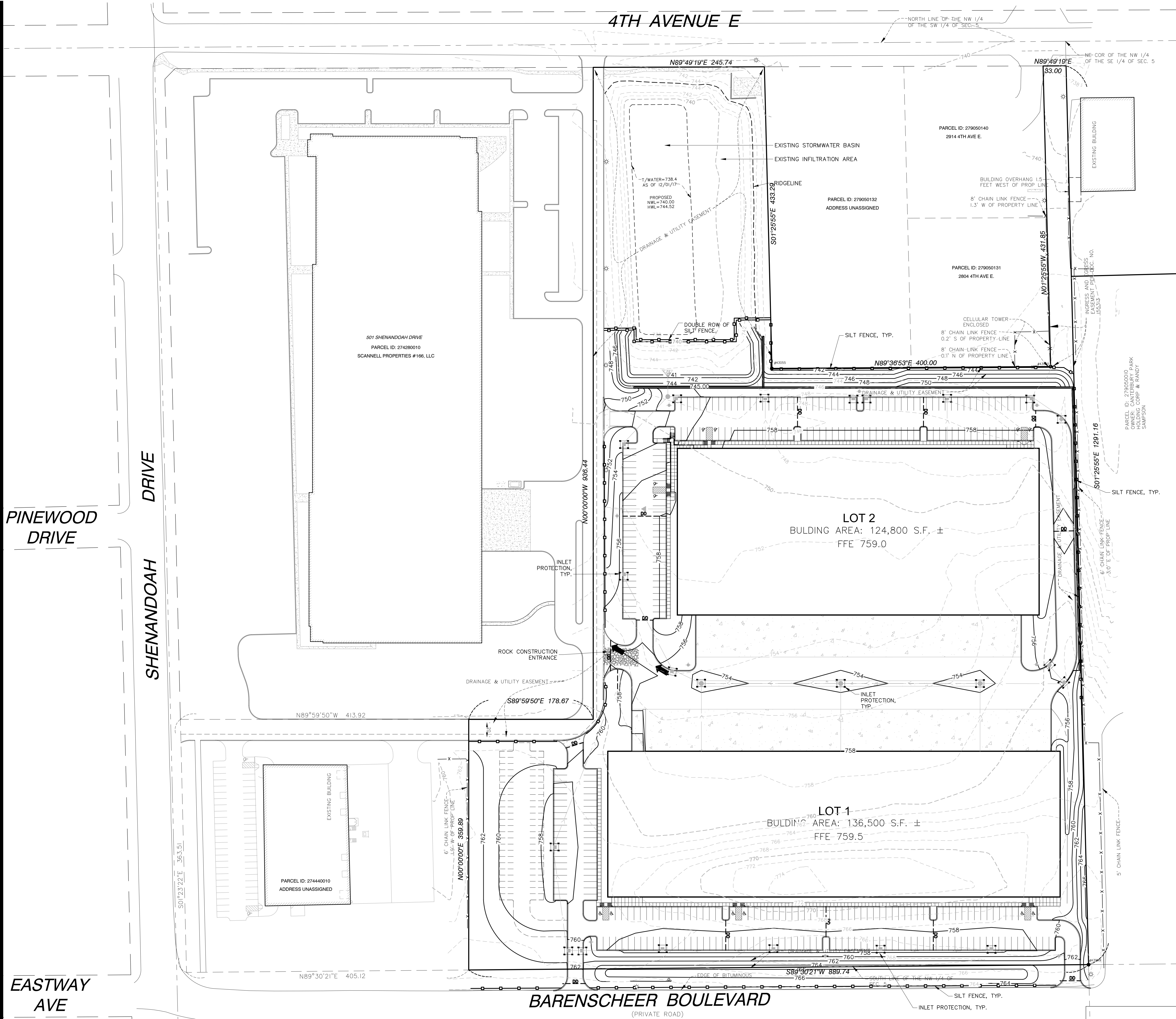
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SWPPP BMP QUANTITIES (PER PLAN):
(PER PLAN):

SILT FENCE=	2,845 LF
INLET PROTECTION=	22 EA
ROCK CONSTRUCTION ENTRANCE =	1 EACH

EROSION CONTROL RESPONSIBLE PARTIES:

OWNER/DEVELOPER:	SWPPP INSPECTION:
SCANNELL PROPERTIES	TBD
TIM MCCARY	
294 GROVE LANE EAST, SUITE 140	
WAYZATA, MN 55391	
ENGINEER:	CONTRACTOR:
DAVE NASH, PE	TBD
ALLIANT ENGINEERING, INC.	
233 PARK AVE S, STE 300	
MINNEAPOLIS, MN 55415	

LEGEND

---	EXISTING CONTOUR
---	FUTURE HOFFMAN & CR12 GRADING CONTOUR
---	PROPOSED CONTOUR
756.5	PROPOSED SPOT ELEVATION
756.0	TOP OF WALL ELEVATION
756	BOTTOM OF WALL ELEVATION
---	DRAINAGE DIVIDE
FF	FINISH FLOOR ELEVATION
---	SILT FENCE
---	INLET PROTECTION
---	ROCK CONSTRUCTION ENTRANCE
---	EMERGENCY OVERFLOW ROUTING
---	PROPOSED STORM SEWER
---	PROPOSED CATCH BASINS
---	RETAINING WALL

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ACTIVE SWPPP LEGEND

CONSTRUCTION SEQUENCE	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
MULCH BERM													
FIBER ROLLS / MULCH SOCKS													
SILT FENCE													
TEMPORARY MULCH COVER													
TEMPORARY HYDROMULCH													
EROSION CONTROL BLANKET													
ROCK DRIVEWAY / ROCK PADS													
INLET PROTECTION DEVICES													
PAVEMENT (DRIVEWAY/ROADS)													
SOD													
STOCKPILES													
NOTE: CONTRACTOR, GENERAL CONTRACTOR OR SWPPP INSPECTOR TO COMPLETE TABLE AS GRADING PROGRESSES													

- GRADING ACTIVITY
1. CONCRETE WASHOUT IS DONE TRUCK BY TRUCK WITH A MOBILE WASHOUT SYSTEM PROVIDED AND COMPLETED BY THE CONCRETE CONTRACTOR.
- SEDIMENT BARRIERS
1. SILT FENCE (MnDOT 3886)
 2. CURB LOG
 3. ROCK WEEPER
 4. SEDIMENT LOGS
- INLET PROTECTION DEVICES
1. WMCO (MnDOT TYPE A & C)
 2. INFRASAFE STORM DRAIN/CULVERT

- ANTI-TRACKING CONTROL
1. 2" CRUSHED CLEAR ROCK (LAND DEVELOPMENT)
- TEMPORARY SEED MIX
1. MN STATE SEED MIX 21-112 (WINTER WHEAT COVER CROP)
 2. MN STATE SEED MIX 22-111 (OATS COVER CROP)
- PERMANENT SEED MIX/STABILIZATION
1. MN STATE SEED MIX 25-151 (RESIDENTIAL TURF)
 2. SOD
- STABILIZATION BMP'S
1. EROSION CONTROL BLANKET MnDOT CATEGORY 5



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VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA

PRELIMINARY PLAT AND SITE PLAN REVIEW

STORMWATER POLLUTION PREVENTION PLAN

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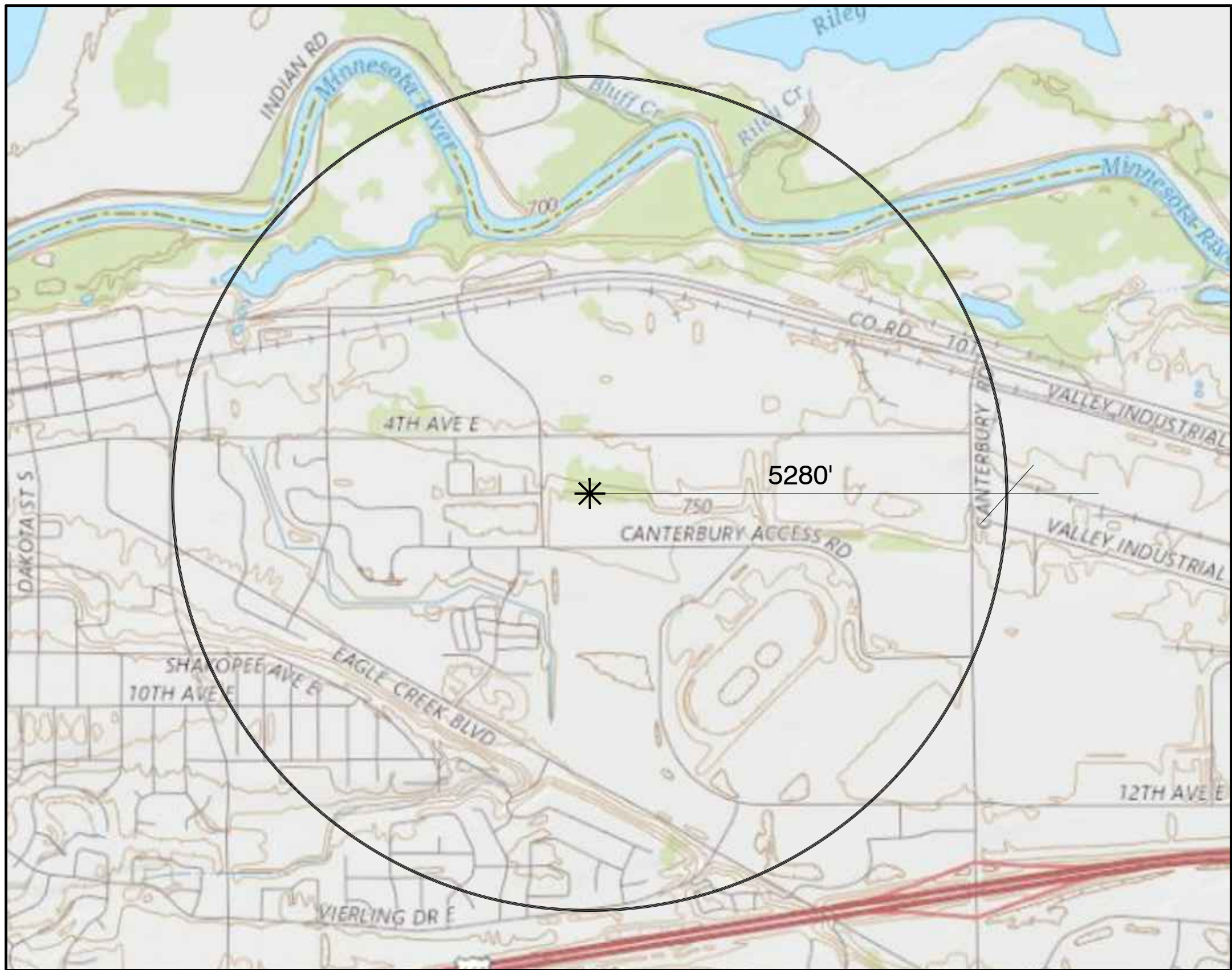
DESIGNED: MMW

DRAWN: MMW

PROJECT NO: 213-0024.4

C-4

SHEET



USGS TOPOGRAPHIC MAP

EROSION CONTROL GENERAL NOTES:

1. NO LAND DISTURBING ACTIVITY SHALL OCCUR UNTIL A GRADING PERMIT HAS BEEN ISSUED FROM THE CITY OF EXCELOR AND THE WATERSHED DISTRICT.
2. BEST MANAGEMENT PRACTICES (BMPs) REFER TO EROSION AND SEDIMENT CONTROL PRACTICES DEFINED IN THE MPCA PROTECTING WATER QUALITY IN URBAN AREAS AND THE MINNESOTA CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PLANNING HANDBOOK.
3. ALL BMP'S SELECTED SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND ESTIMATED DURATION OF USE.
4. ALL WORK AND MATERIALS SHALL BE CONSTRUCTED ACCORDING TO THE APPROVED PLANS. ANY DEVIATION FROM THE APPROVED PLANS SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
5. A COPY OF THESE PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
6. THE BOUNDARIES OF THE LAND DISTURBANCE LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION, NO DISTURBANCE BEYOND THE DISTURBED LIMITS.
7. WHENEVER POSSIBLE PRESERVE THE EXISTING TREES, GRASS AND OTHER VEGETATIVE COVER TO HELP FILTER RUNOFF.
8. ESTABLISH A PERMANENT VEGETATIVE COVER ON ALL EXPOSED SOILS WHERE LAND IS COMING OUT OF AGRICULTURAL PRODUCTION, PLANT AS SOON AS POSSIBLE TO ESTABLISH DENSE GRASS FILTER PRIOR TO CONSTRUCTION AND TO MINIMIZE WEED GROWTH.
9. ALL TREES NOT TO BE REMOVED SHALL BE PROTECTED, DO NOT OPERATE EQUIPMENT WITHIN THE LIRPEL, ROOT ZONES OR WITHIN TREE PROTECTION FENCE AREAS.
10. ALL EROSION AND SEDIMENT CONTROL FACILITIES (BMPs) SHALL BE INSTALLED AND IN OPERATION PRIOR TO LAND DISTURBANCE ACTIVITIES AND THEY SHALL BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR EROSION HAS PASSED.
11. SILT FENCE IS REQUIRED AT DOWNGRAD PERIMETER OF DISTURBED AREAS AND STOCKPILES. PROTECT ADJACENT WATERBODIES AND ADJACENT PROPERTIES FROM SEDIMENTATION AND STORMWATER RUNOFF.
12. THE BMP'S SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, THE PERMITTEE/CONTRACTOR SHALL ANTICIPATE THAT MORE BMP'S WILL BE NECESSARY TO ENSURE EROSION AND SEDIMENT CONTROL ON THE SITE DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY CONSTRUCTION ACTIVITIES AND/OR CLIMATIC EVENTS AND TO PROVIDE ADDITIONAL BMP'S OVER AND ABOVE THE MINIMUM REQUIREMENTS SHOWN ON THE PLANS AS MAY BE NEEDED TO PROVIDE EFFECTIVE PROTECTION OF WATER AND SOIL RESOURCES.
13. THE BMP'S SHALL BE INSPECTED DAILY BY THE PERMITTEE/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. SILT FENCES CLEANED OR REPLACED AT SEDIMENT BUILDUP OF 1/3 OF THE FENCE HEIGHT.
14. LAND DISTURBING ACTIVITIES SHALL OCCUR IN INCREMENTS OF WORKABLE SIZE SUCH THAT ADEQUATE BMP CONTROL CAN BE PROVIDED THROUGHOUT ALL PHASES OF CONSTRUCTION, THE SMALLEST PRACTICAL AREA SHALL BE EXPOSED OR OTHERWISE DISTURBED AT ANY ONE TIME.
15. OPERATE TRACK EQUIPMENT (DOZER) UP AND DOWN EXPOSED SOIL SLOPES ON FINAL PASS, LEAVING TRACK GROOVES PERPENDICULAR TO THE SLOPES, DO NOT BACK-BLAD, LEAVE A SURFACE ROUGH TO MINIMIZE EROSION.
16. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED FROM EROSION WITHIN 7 DAYS OF SUBSTANTIAL COMPLETION OF GRADING IN THAT AREA. TEMPORARY SEED AND MULCH SHALL COVER ALL EXPOSED SOILS IF GRADING COMPLETION IS DELAYED LONGER THAN 7 DAYS. PERMANENT SEED AND MULCH OR SOD IS REQUIRED WITHIN 3 DAYS OF COMPLETION OF FINAL GRADING.
17. GENERAL TEMPORARY SEED SHALL BE MN STATE SEED MIX 22-112 @ 40 LBS. PER ACRE OR APPROVED EQUAL. PERMANENT SEED SHALL BE MN STATE SEED MIX 25-151 @ 120 LBS. PER ACRE OR APPROVED EQUAL. (PLANTING DATES PER MINOT SEED MIX MANUAL). MULCH SHALL BE MINOT TYPE 1 (CLEAN DIRT STRAW) @ 2 TONS PER ACRE AND DISK ANCHORED IN PLACE OR APPROVED EQUAL. EXTERIOR MULCH SHALL BE 10-10-10 NPK PER ACRE (unless P RESTRICTIONS APPLY) AND INCORPORATED INTO THE SEED BED.
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR LATER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
19. ALL CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE, TRUCK WASHOUT, CHEMICALS, LITTER, AND SANITARY WASTE MUST BE PROPERLY MAINTAINED AND COMPLY WITH THE MPCA, CITY OF SHAKOPEE, AND THE MINNESOTA RIVER WATERSHED DISTRICT RULES AND REQUIREMENTS.

DEWATERING:

1. IF UTILITY INSTALLATION WORK ENCOUNTERS GROUNDWATER, THE CONTRACTOR SHALL PREPARE A PLAN AND PROVIDE A REVIEW. THE PLAN MUST BE SUBMITTED TO THE CITY FOR APPROVAL AT LEAST 10 DAYS PRIOR TO DISCHARGING. THE PLAN SHALL INCLUDE: LOCATION, DEPTH, LOCATION, DEWATERING SYSTEM, WATER ROUTING, STORAGE, AND DISCHARGE. LOCATION, DEWATERING PLAN MUST INCLUDE: THE PLANT, MINIMUM FLOW RATE OF TEMPORARY AND TURBID WATER IN ACCORDANCE WITH STATE AND LOCAL PERMIT REQUIREMENTS.
2. IF ANY TEMPORARY DEWATERING IS REQUIRED ON SITE THE CONTRACTOR SHALL DISPOSE OF STORMWATER OR GROUND WATER BY USE OF PUMPS AND HOSES TO ACCEPTABLE DISCHARGE POINTS APPROVED BY THE CITY AND PROJECT ENGINEER.
3. ANY ACCUMULATED SEDIMENT ALONG EXISTING CURBS AND GUTTERS THAT HAS COLLECTED AS A RESULT OF DISCHARGING DEWATERING HOSES SHALL BE IMMEDIATELY REMOVED AND PROPERLY DISPOSED OF AFTER EACH DISCHARGING EVENT.

SEDIMENT CONTROL PRACTICES

1. THE CONTRACTOR MUST EMPLOY SEDIMENT CONTROL PRACTICES AS NECESSARY TO MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURBS AND CUTTER SYSTEMS, AND STORM SEWER INLETS.
 - a. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS THAT ARE 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.
 - b. IF THE DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENT), THE CONTRACTOR MUST INSTALL ADDITIONAL UPGRADED SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN PART II.B.1-3.
2. SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS AND BE LOCATED UPGRADENT OF ANY BUFFER ZONES. THE PERMITTER SEDIMENT CONTROL PRACTICE MUST BE IN PLACE BEFORE ANY UPGRADED LAND-DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PART IV.C. A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY PERMITTER CONTROL REQUIREMENTS IN THIS PART EXCEPT WHEN WORKING ON A SHORELINE AND BELOW THE WATERLINE. IN THOSE CASES, A FLOATING SILT CURTAIN CAN BE USED AS A PERMITTER CONTROL PRACTICE IF THE FLOATING SILT CURTAIN IS INSTALLED AS CLOSE TO SHORE AS POSSIBLE, IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, AN UPGRADED PERMITTER CONTROL PRACTICE MUST BE INSTALLED IF EXPOSED SOILS STILL DRAIN TO THE SURFACE WATER.
3. THE CONTRACTOR SHALL RE-INSTALL ALL SEDIMENT CONTROL PRACTICES THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. THE CONTRACTOR SHALL COMPLETE ANY SHORT-TERM ACTIVITY THAT REQUIRES REMOVAL OF SEDIMENT CONTROL PRACTICES AS QUICKLY AS POSSIBLE. THE CONTRACTOR MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
4. ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPs DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE CONTRACTOR OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP AND/OR ENGINEER). THE CONTRACTOR MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.
5. TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN ANY NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURBS AND GUTTER SYSTEMS, OR CONDUITS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.
6. WHERE VEHICLE TRAFFIC LEAVES ANY PART OF THE SITE (OR ONTO PAVED ROADS WITHIN THE SITE):
 - a. THE CONTRACTOR MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE. EXAMPLES OF VEHICLE TRACKING BMPs INCLUDE (BUT ARE NOT LIMITED TO) ROCK PADS, MUD MATS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS.
 - b. THE CONTRACTOR MUST USE STREET SWEEPING IF SUCH VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET (SEE PART IV.E.5.D.).
7. THE CONTRACTOR MUST INSTALL TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN PART II.C. OF THIS PERMIT.
8. THE CONTRACTOR MUST SPECIFY SOIL COMPACTION AND, UNLESS INFEASIBLE, PERMANENT TOPSOIL. MULCH SHALL BE MINOT TYPE 1 (CLEAN DIRT STRAW) @ 2 TONS PER ACRE AND DISK ANCHORED IN PLACE OR APPROVED EQUAL. EXTERIOR MULCH SHALL BE 10-10-10 NPK PER ACRE (unless P RESTRICTIONS APPLY) AND INCORPORATED INTO THE SEED BED.
9. THE CONTRACTOR MUST PRESERVE A 50 FOOT NATURAL BUFFER IF (A) A BUFFER IS INFEASIBLE ON THE SITE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER WASHES TO THE SURFACE WATER. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, EXISTING DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. THE CONTRACTOR IS/ARE NOT REQUIRED TO ENHANCE THE QUALITY OF THE VEGETATION THAT ALREADY EXISTS IN THE BUFFER OR PROVIDE VEGETATION IF NONE EXISTS. HOWEVER, CONTRACTOR CAN IMPROVE THE NATURAL BUFFER WITH VEGETATION.
10. IF THE CONTRACTOR INTEND TO USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ON THE PROJECT SITE, THE CONTRACTOR MUST COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:
 - a. THE CONTRACTOR MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION TO ENSURE EFFECTIVE TREATMENT. CHEMICALS MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A SEDIMENT CONTROL SYSTEM WHICH ALLOWS FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.
 - b. CHEMICALS MUST BE SELECTED THAT ARE APPROPRIATELY SUITED TO THE TYPES OF SOILS LIKELY TO BE EXPOSED DURING CONSTRUCTION, AND TO THE EXISTING TURBIDITY, PH, AND FLOW RATE OF STORMWATER FLOWING INTO THE CHEMICAL TREATMENT SYSTEM OR AREA.
 - c. CHEMICALS MUST BE USED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, AND WITH DESIGN SPECIFICATIONS AND SEDIMENTATION DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR PROVIDER/SUPPLIER OF THE APPLICABLE CHEMICALS.



WEB SOIL SURVEY MAP

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CdA	Copeland silt loam, 0 to 2 percent slopes	0.1	0.3%
HdA	HdA silt loam, 0 to 2 percent slopes	38.3	83.9%
HdC2	Sparta fine sand, 8 to 12 percent slopes	6.2	13.5%
TcB	Terril loam, 2 to 6 percent slopes	1.1	2.4%
Totals for Area of Interest		45.7	100.0%

WEB SOIL SURVEY LEGEND

POLLUTION PREVENTION MANAGEMENT MEASURES

THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:

1. STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTES: THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING TO MINIMIZE THE EXPOSURE TO STORMWATER OF ANY OF THE PRODUCTS, MATERIALS, OR WASTES. PRODUCTS OR WASTES WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER ARE NOT HELD TO THIS REQUIREMENT.
 - a. BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
 - b. PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
 - c. HAZARDOUS MATERIALS, TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ADDS) MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM, STORAGE AND DISPOSAL OF HAZARDOUS WASTE OR HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
 - d. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY IN COMPLIANCE WITH MINN. R. CH. 7038.
 - e. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R. CH. 7041.
 - f. FUELING AND MAINTENANCE OF EQUIPMENT OR VEHICLES: SPILL PREVENTION AND RESPONSE: THE CONTRACTOR SHALL 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 DRAIN PANS OR ABSORBENTS UNLESS INFEASIBLE. THE CONTRACTOR MUST CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE. THE CONTRACTOR 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. THE CONTRACTOR MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. § 115.091, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
2. FUELING AND EQUIPMENT WASHING: IF THE CONTRACTOR WASH THE EXTERIOR OF VEHICLES OR EQUIPMENT ON THE PROJECT SITE, WASHING MUST BE LIMITED TO A DESIGNATED AREA OF THE SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROL AND WASTE FROM THE WASHING ACTIVITY MUST BE PROPERLY DISPOSED OF. THE CONTRACTOR MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS. NO ENGINE DEGREASING IS ALLOWED ON SITE.
3. CONCRETE AND OTHER WASHOUTS WASTE: THE CONTRACTOR MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. THE LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND, AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN DESIRED TEMPORARY OR PERMANENT SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS. WASTE MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A DRAINAGE FACILITY OR ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.

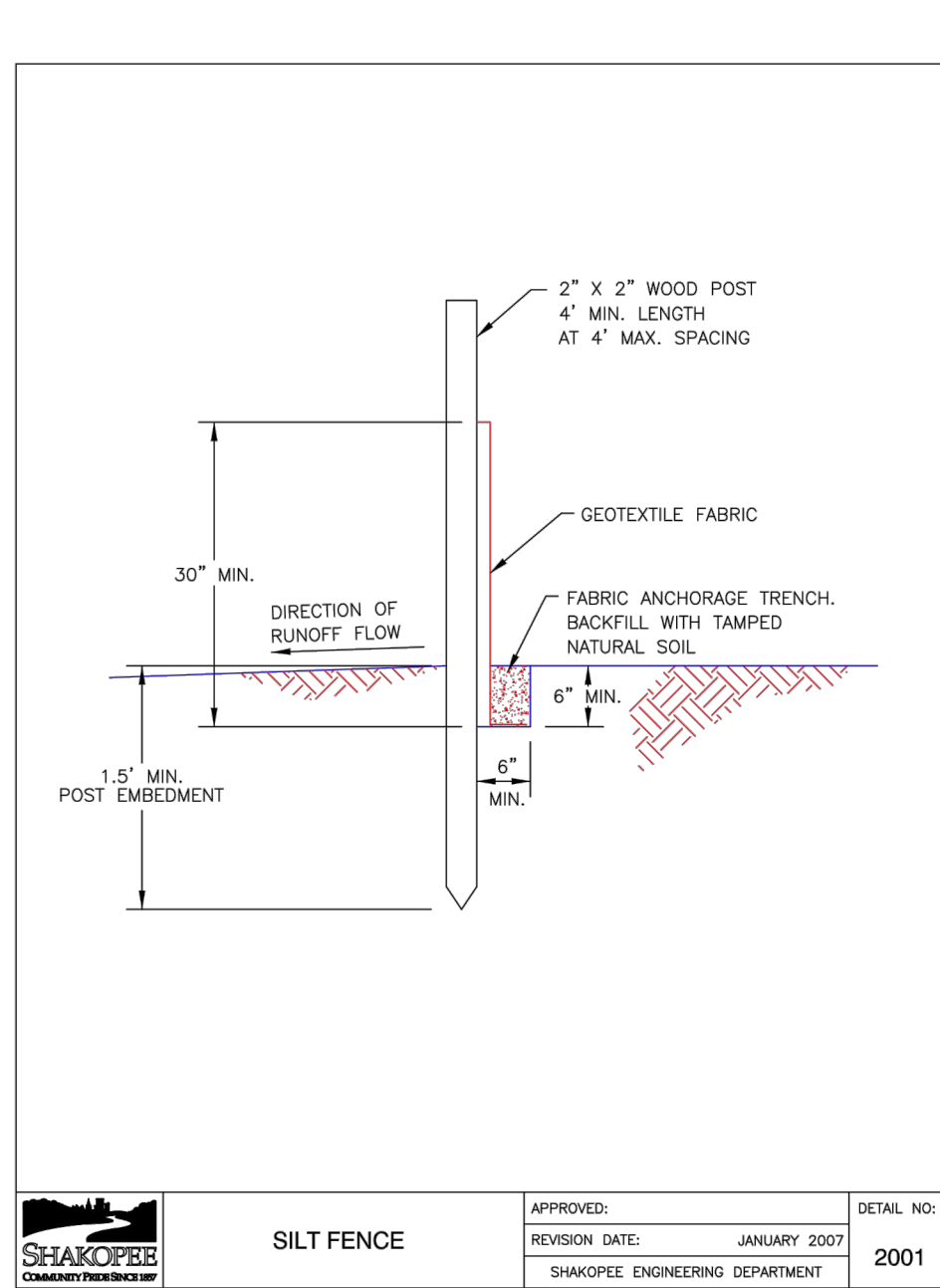
FINAL STABILIZATION

THE CONTRACTOR MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL REQUIREMENTS OF PARTS IV.G-1-5 ARE COMPLETE:

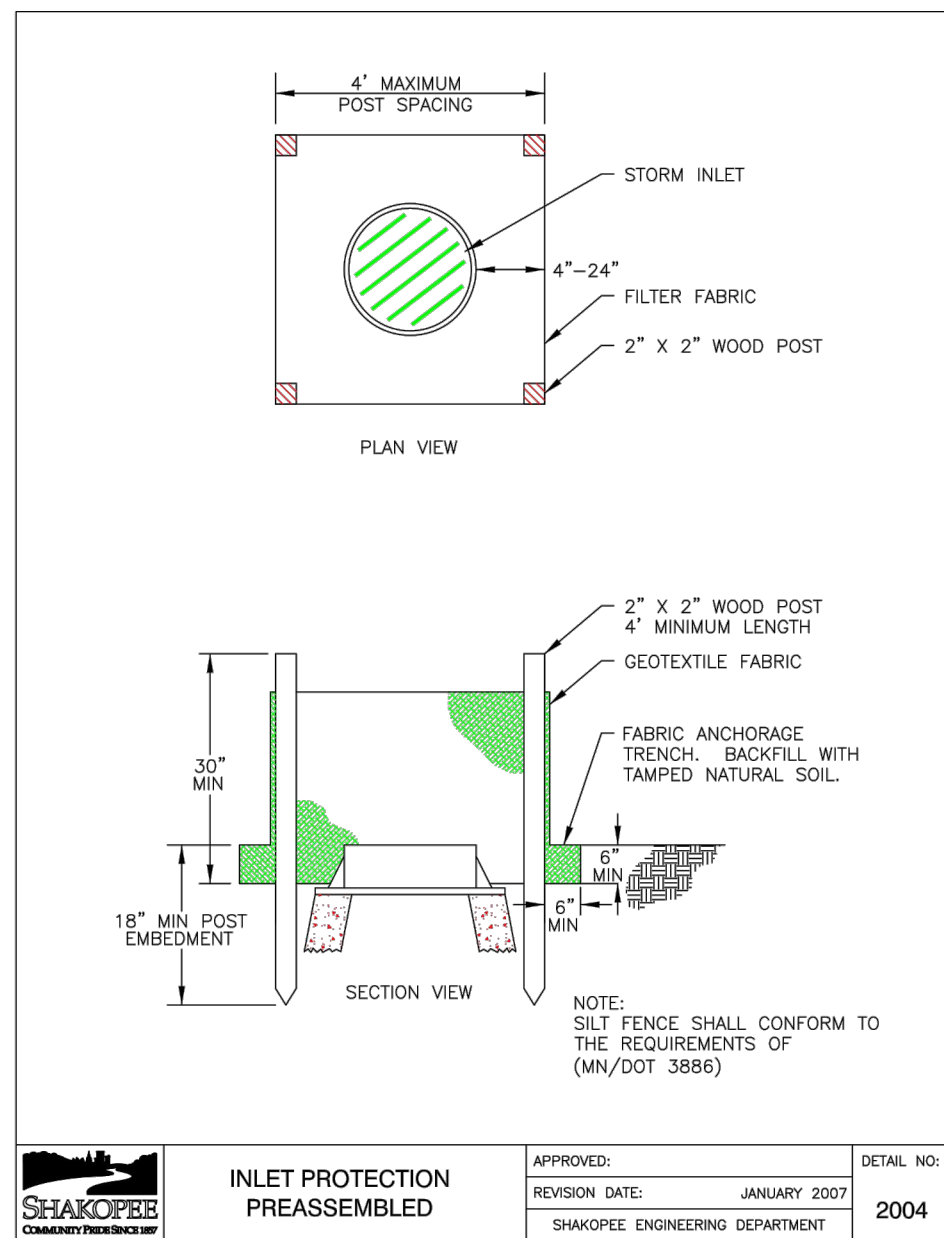
1. ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH DENSITY OVER THE ENTIRE PEROUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS.
2. THE PERMANENT STORMWATER MANAGEMENT SYSTEM IS CONSTRUCTED, MEETS ALL REQUIREMENTS IN PART II.D. AND IS OPERATING AS DESIGNED. TEMPORARY OR PERMANENT SEDIMENTATION BASINS ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS HAVE BEEN CLEARED OF ANY ACCUMULATED SEDIMENT. ALL SEDIMENT HAS BEEN REMOVED FROM CONVEYANCE SYSTEMS AND DITCHES ARE STABILIZED WITH PERMANENT COVER.
3. ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL TEMPS (SUCH AS SILT FENCES) HAVE BEEN REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE CONTRACTOR IS/ARE RESPONSIBLE. BMPs DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.



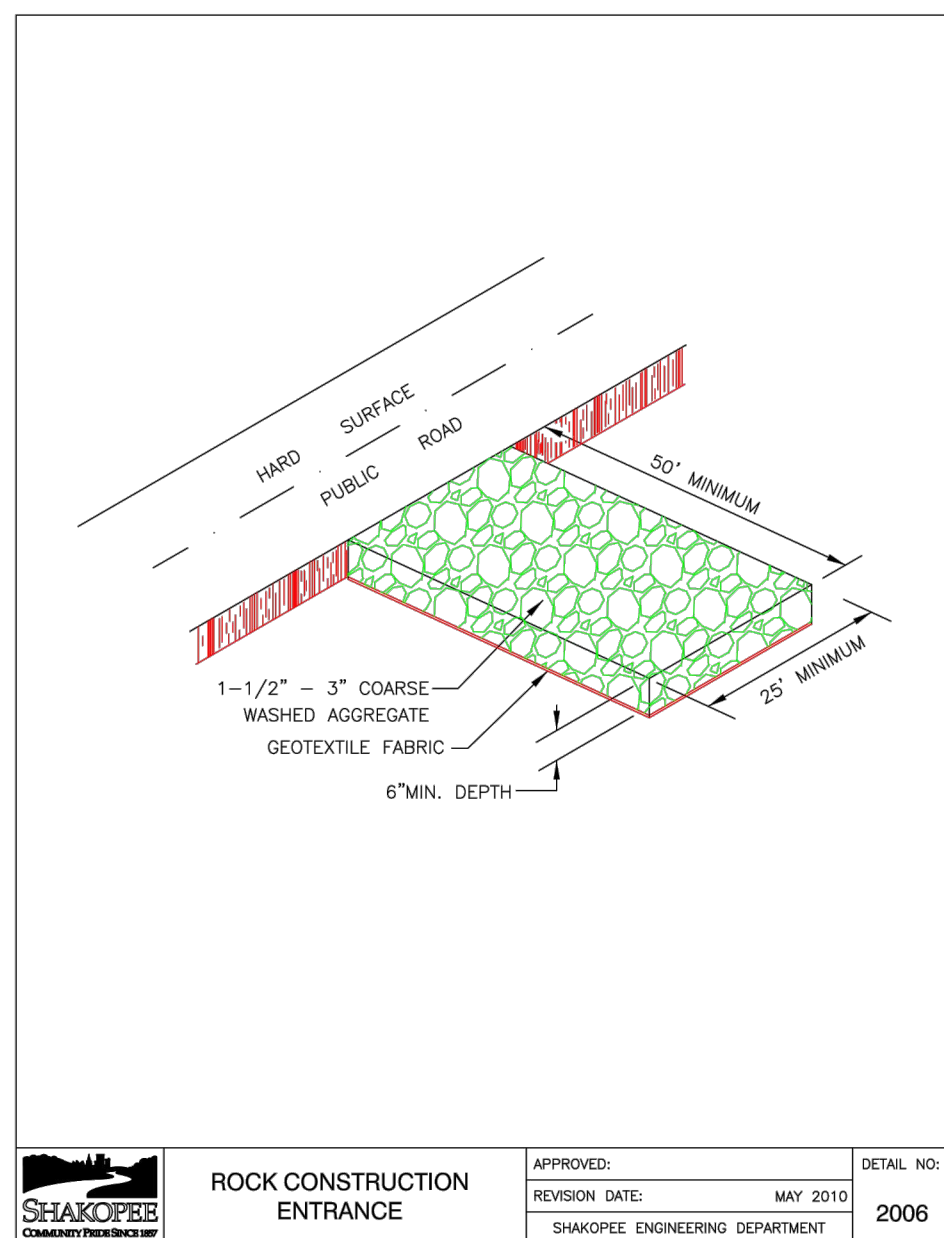
Know what's below.
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Dial 811



SILT FENCE

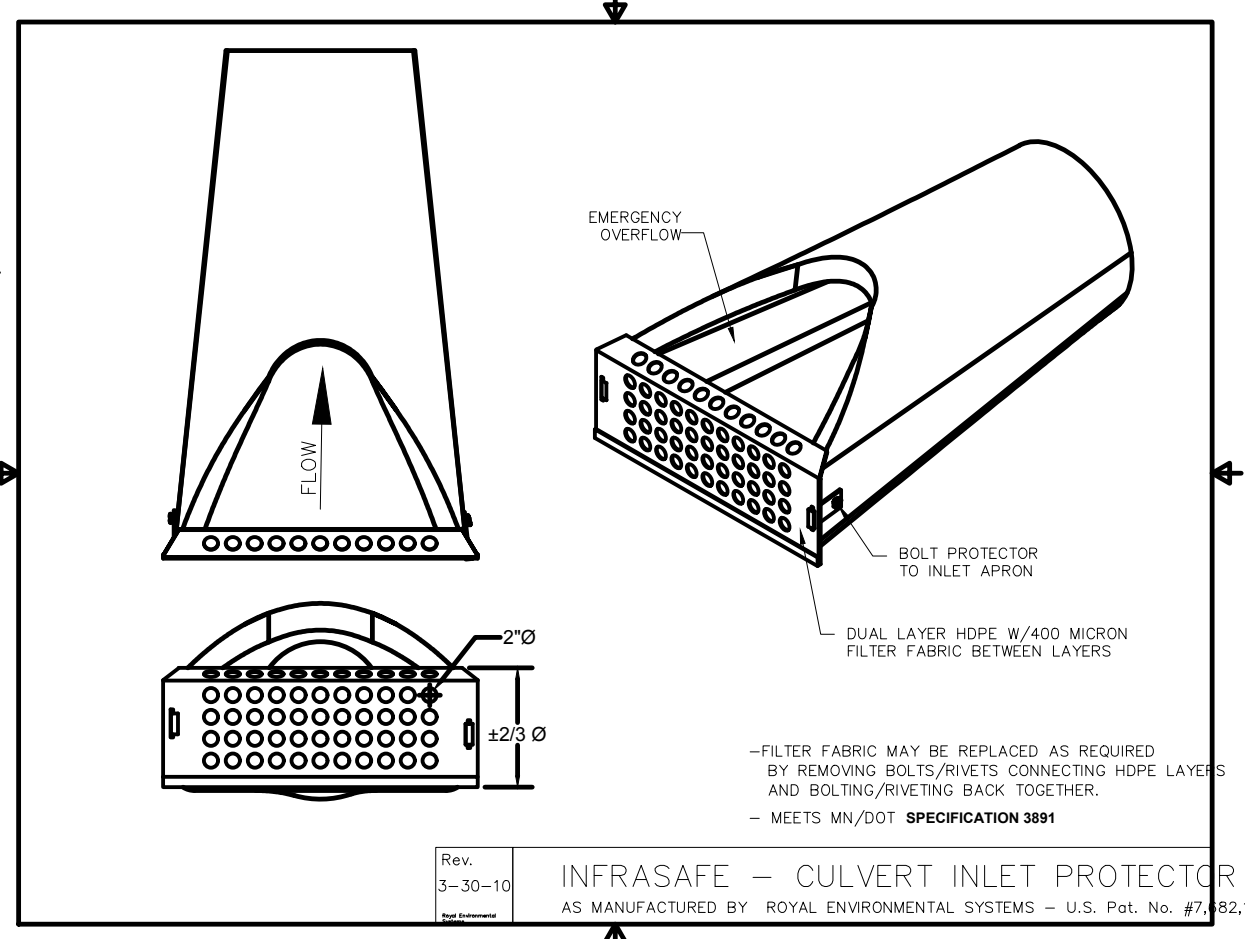


INLET PROTECTION PREASSEMBLED

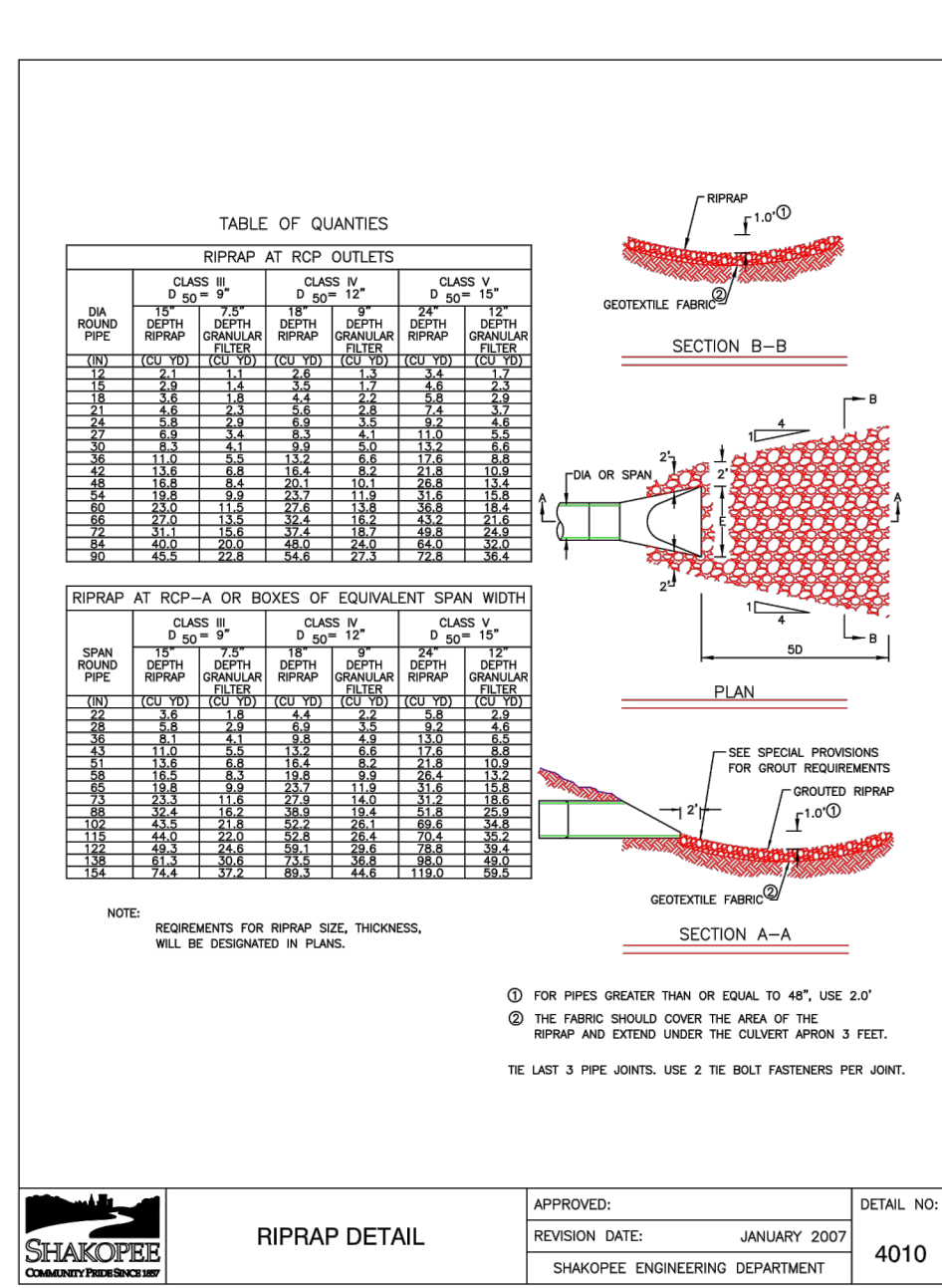


ROCK CONSTRUCTION ENTRANCE

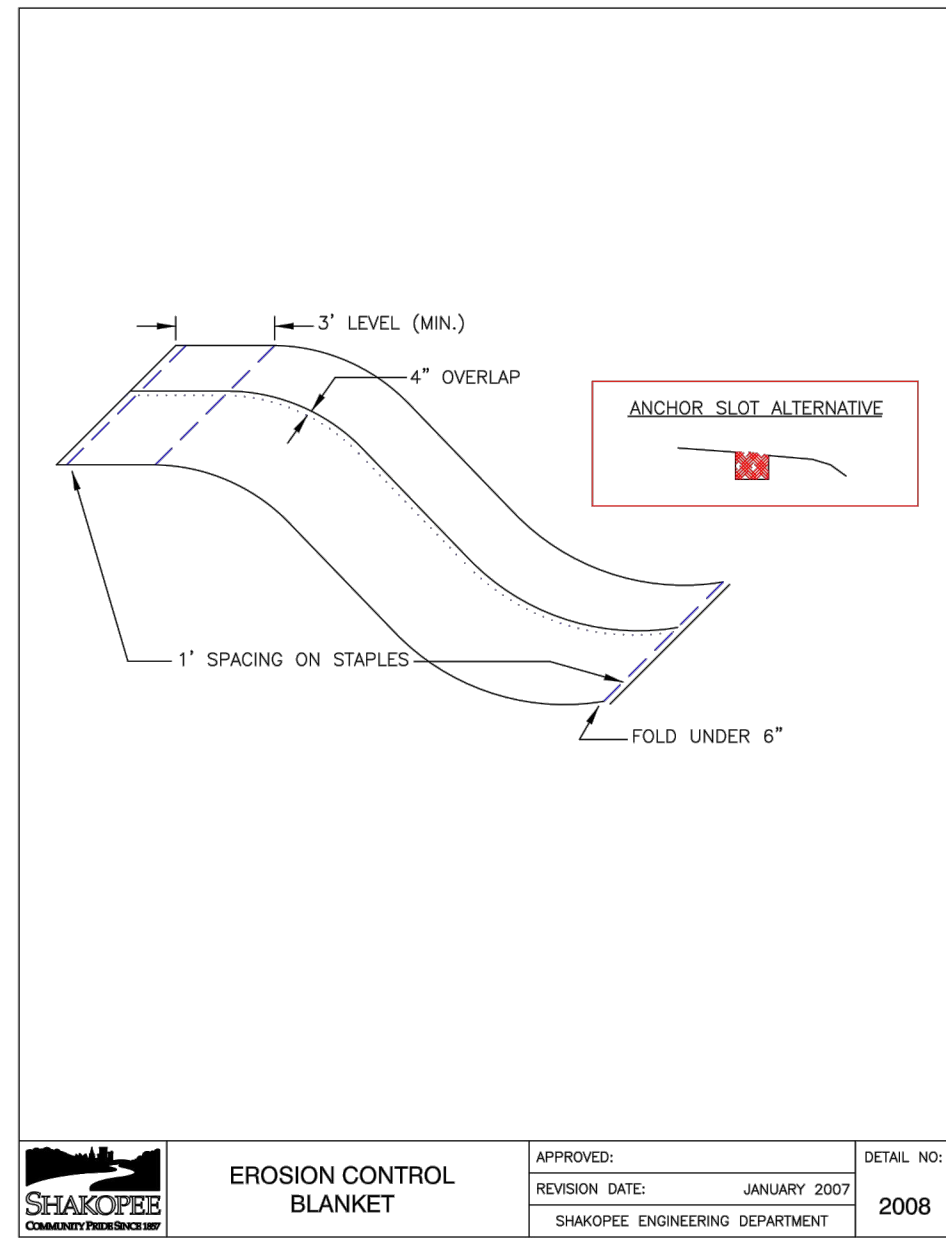
1. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE AROUND SITE, AS SHOWN ON PLAN.
3. INSTALL ORANGE CONSTRUCTION FENCE AROUND EXISTING TREES TO BE PROTECTED.
4. CLEAR AND GRUB SITE.
5. STRIP AND STOCKPILE TOPSOIL.
6. ROUGH GRADING OF SITE.
7. STABILIZE DEWATERED AREAS AND STOCKPILES.
8. INSTALL SANITARY SEWER, WATER MAIN, STORM SEWER AND SERVICES.
9. INSTALL SILT FENCE/INLET PROTECTION AROUND CATCH BASINS.
10. INSTALL STREET SECTION.
11. INSTALL CURB AND GUTTER.
12. BITUMINOUS ON STREETS.
13. INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.)
14. FINE GRADE BOULEVARD, LANDSCAPE AREAS, SEED AND MULCH.
15. REMOVE ACCUMULATED SEDIMENT.
16. FINAL GRADE.
17. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD AND LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.



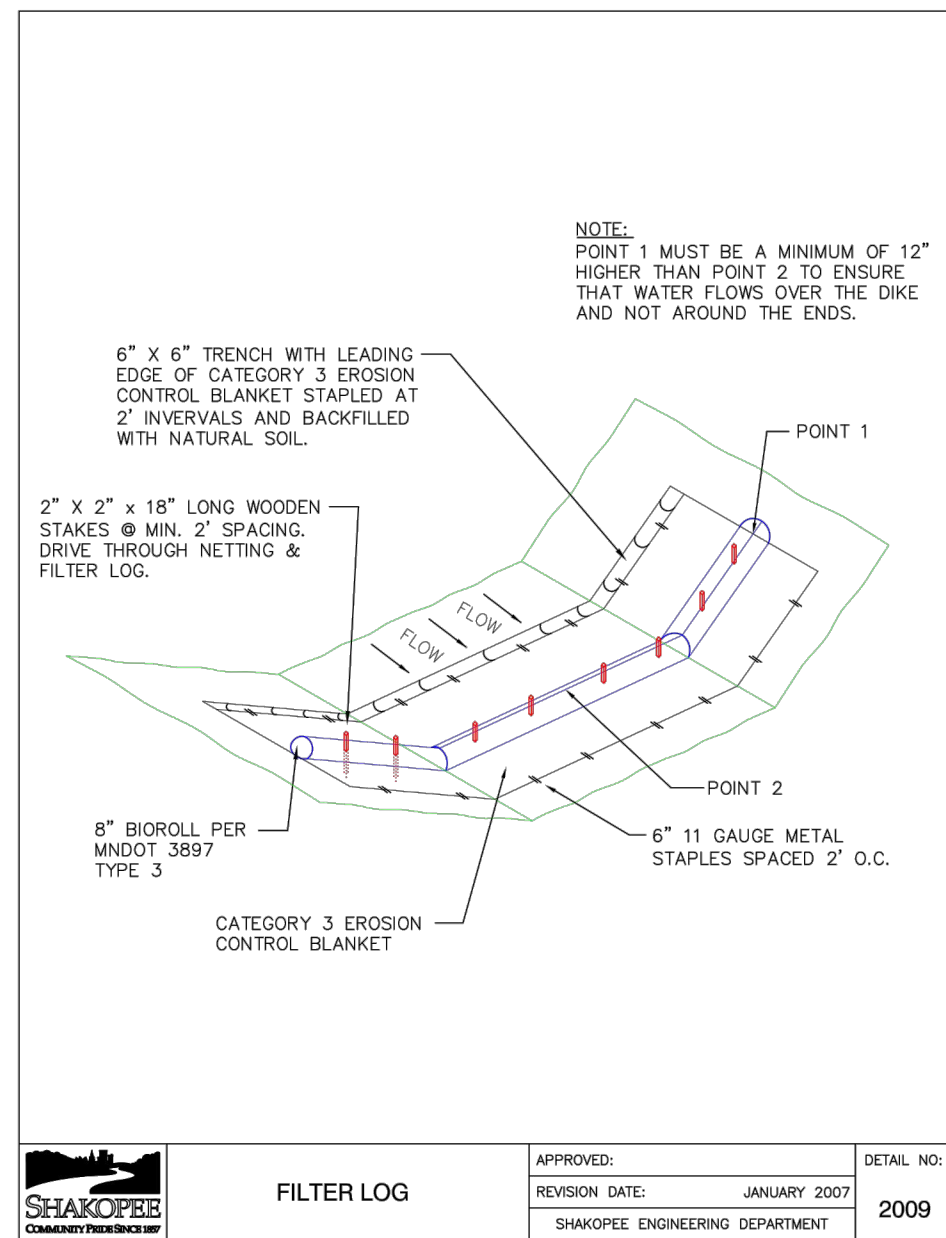
INFRASAFE - CULVERT INLET PROTECTOR



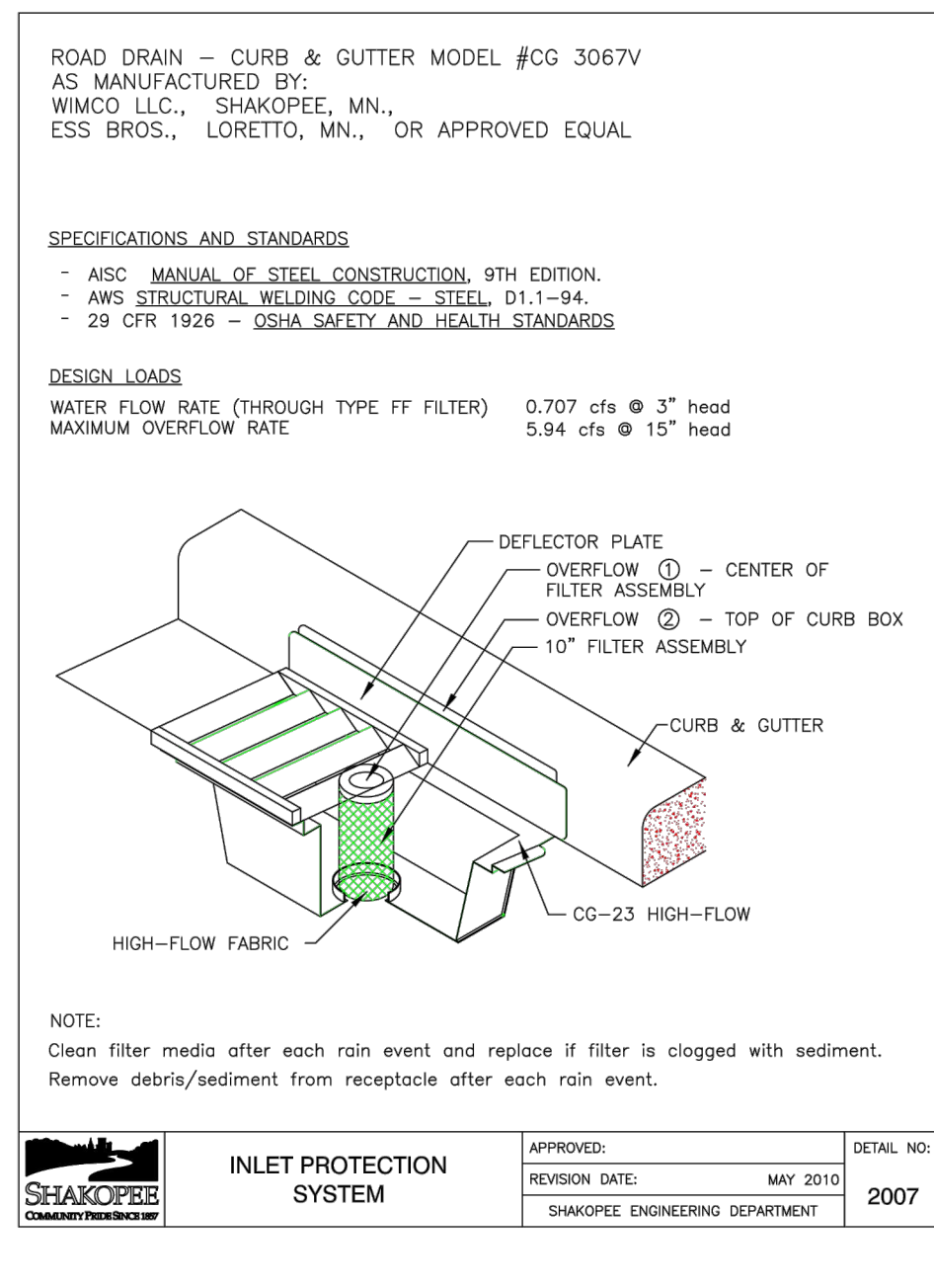
RIPRAP DETAIL



EROSION CONTROL BLANKET



FILTER LOG

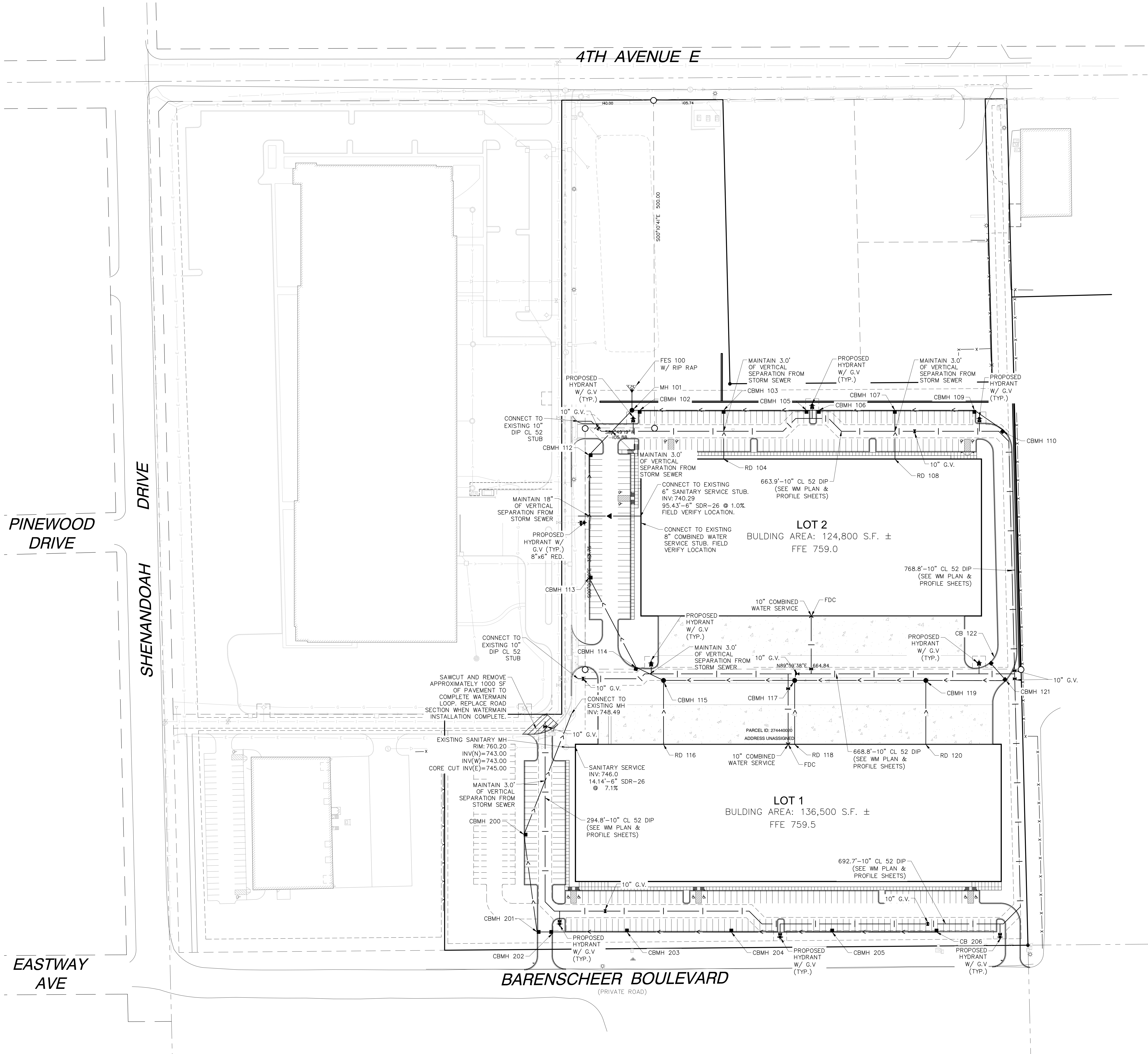


INLET PROTECTION SYSTEM

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

Date	License No.
2/16/18	213-0024.4
BY	DATE
DATE	ISSUE
1.4.18	CITY SUBMITTAL
2.16.18	SITE PLAN REVISION
PROJECT TEAM DATA	
DESIGNED:	MMW
DRAWN:	MMW
PROJECT NO:	213-0024.4

Drawing name: X:\2013\130024\plan sheets\2017 - PH2\130024.dwg Feb 16, 2018 - 9:11am



UTILITY NOTES:

- EXISTING UTILITIES, SERVICE LOCATIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.
- MAINTAIN A MIN 18" VERTICAL SEPARATION AT ALL PIPE CROSSINGS.
- ALL UTILITY WORK WITHIN PUBLIC ROAD ROW SHALL COMPLY WITH THE CITY ENGINEERING DESIGN STANDARDS.
- CONTRACTOR TO PROVIDE COORDINATION FOR TELEPHONE, GAS, AND ELECTRIC SERVICE CONNECTION WITH THE RESPECTIVE SERVICE COMPANY.
- IF DEWATERING IS REQUIRED DURING CONSTRUCTION CONTRACTOR SHOULD CONSULT WITH EROSION CONTROL INSPECTOR AND ENGINEER TO DETERMINE APPROPRIATE METHOD.
- ALL UTILITY INSTALLATIONS SHALL COMPLY WITH SHAKOPEE STANDARD DETAILS AND ENGINEERING GUIDELINES.
- ALL UTILITY INSTALLATION BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SOIL TESTING AGENCY REQUIREMENTS AND/OR SPECIFICATIONS. SOILS REPORT RECOMMENDATIONS INCLUDE PLACING BACKFILL AND FILL IN LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS. THE COMPACTED DENSITY OF THE FILL SHALL BE THE FOLLOWING PERCENTAGES OF STANDARD PROCTOR:
 - BELOW FOUNDATIONS AND INTERIOR SLABS = 98%
 - BELOW EXTERIOR SLABS = 95%
 - WITHIN 3 FEET OF PAVEMENT = 100%
 - BELOW 3 FEET OF PAVEMENT = 95%
 - BELOW LANDSCAPE SURFACES = 75%-80%FILL SHOULD BE WITHIN 3 PERCENTAGE POINTS OF ITS OPTIMUM MOISTURE CONTENT. HOWEVER, CLAYEY FILL SHOULD BE PLACED WITHIN 3 PERCENTAGE POINTS ABOVE AND 1 PERCENT BELOW ITS OPTIMUM MOISTURE CONTENT.
- ALL HDPE PIPE SHALL BE ADS N-12 SMOOTH INTERIOR PIPE OR EQUIVALENT.
- STORM SEWER CASTINGS SHALL BE NEENAH OR EQUIVALENT. CATCH BASINS IN CURB TO BE 3067-V, CATCH BASINS IN PAVEMENT TO BE 2501, AND MANHOLES IN PAVEMENT TO BE 1642-B.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF RIP RAP (AND GEOTEXTILE FABRIC).
- ALL FLARED END SECTIONS IN CITY R.O.W. SHALL HAVE A MNDOT SPEC. 3022C PRECAST CONCRETE SAFETY APRON WITH SAFETY GRATE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A RIGHT-OF-WAY PERMIT FOR ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AT A MINIMUM, THIS WORK INCLUDES ADJUSTMENT OF SANITARY SEWER MANHOLES AND WATERMAIN ASSOCIATED WORK IN 4TH AVENUE. CONTACT JIM HENDERSON AT (952) 233-9368.

NOTE:
BEDROCK REMOVAL MAYBE NECESSARY FOR POND GRADING AND UTILITIES INSTALLATION. REFER TO GEOTECHNICAL REPORT.

SPUC NOTES:

- WATER MAIN, SANITARY SEWER & STORM SEWER CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA AND SHAKOPEE PUBLIC UTILITIES COMMISSION POLICY MANUAL.
- ALL WATER PIPE TO BE DUCTILE IRON PIPE (D.I.P.) CLASS 52
- ALL FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 7.5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
- A MINIMUM OF 7.5 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM VERTICAL SEPARATION OF 36 INCHES TO STORM SEWER LINES AND 18 INCHES TO SANITARY SEWER LINES.
- A MINIMUM OF 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
- JOINT RESTRAINTS SHALL BE INSTALLED AS REQUIRED AT ALL BENDS, VALVES, TEES AND WATERMAIN DIPS.
- CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
- CONTRACTOR TO VERIFY EXISTING WATER VALVE LOCATIONS TO DETERMINE NECESSARY SHUT-OFF LOCATIONS AND ASSOCIATED DEWATERING PRIOR TO WORK.
- ALL WATERMAIN VALVES SHALL ONLY BE OPERATED BY SPUC PERSONNEL.
- NOTIFY SHAKOPEE PUBLIC UTILITIES COMMISSION (SPUC) AT LEAST 24 HOURS PRIOR TO UTILITY INSTALLATION. ALL WATERMAIN INSTALLATION TO BE INSPECTED BY SHAKOPEE PUBLIC UTILITIES PERSONNEL TO ENSURE CONSTRUCTION TO SPUC STANDARDS.

STORMSEWER SCHEDULE

MH/CB		P. DIA.	P. SLOPE	P. TYPE	FROM	TO	RIM	STR.	CAST	BUILD
FROM	TO	D [IN]	S [FT/FT]		INVERT	INVERT	ELEV	TYPE	TYPE	[FT]
CB 122	CBMH 121	12	0.015	HDPE	752.40	751.84	756.00	48	R-3067-V	3.60
CBMH 121	CBMH 119	12	0.0044	HDPE	749.67	749.13	756.00	48	R-3067-V	6.33
RD 120	CBMH 119	18	0.0232	HDPE	751.67	749.40	758.00	RD	0	6.33
CBMH 119	CBMH 117	21	0.0046	HDPE	749.03	748.11	753.66	48	R-2501	4.63
RD 118	CBMH 117	18	0.0217	HDPE	751.67	749.55	758.00	RD	0	6.33
CBMH 117	CBMH 115	27	0.0042	HDPE	747.86	747.02	753.66	48	R-2501	5.80
RD 116	CBMH 115	18	0.0217	HDPE	751.67	749.55	758.00	RD	0	6.33
CBMH 115	CBMH 114	30	0.0048	HDPE	746.52	746.30	753.66	48	R-2501	7.14
CBMH 114	CBMH 113	30	0.0052	HDPE	746.20	745.39	754.83	60	R-3067-V	8.63
CBMH 113	CBMH 112	30	0.0055	HDPE	745.29	744.27	756.18	60	R-3067-V	10.89
CBMH 112	MH 101	30	0.0056	HDPE	744.17	743.64	752.88	60	R-3067-V	8.71
CBMH 110	CBMH 109	12	0.0044	HDPE	751.52	751.28	755.12	48	R-3067-V	3.60
CBMH 109	CBMH 107	12	0.0044	HDPE	751.18	750.65	756.49	48	R-3067-V	5.31
RD 108	CBMH 107	18	0.0049	HDPE	750.22	749.85	756.50	RD	0	6.28
CBMH 107	CBMH 106	24	0.0019	HDPE	749.75	749.53	756.91	48	R-3067-V	7.16
CBMH 106	CBMH 105	24	0.0019	HDPE	749.43	749.40	756.57	48	R-3067-V	7.14
CBMH 105	CBMH 103	24	0.0022	HDPE	749.30	749.02	756.57	48	R-3067-V	7.27
RD 104	CBMH 103	18	0.0049	HDPE	749.91	749.54	756.50	RD	0	6.59
CBMH 103	CBMH 102	27	0.0031	HDPE	749.28	748.89	756.77	48	R-3067-V	7.49
CBMH 102	MH 101	27	0.0034	HDPE	748.79	748.75	754.31	48	R-3067-V	5.52
MH 101	FES 100	42	0.0023	RCP	741.07	741.00	754.38	72	R-1642	13.31
CB 206	CBMH 205	15	0.0033	HDPE	753.25	752.72	757.10	2x3	R-3067-V	3.85
CBMH 205	CBMH 204	18	0.0029	HDPE	752.47	752.03	757.10	48	R-3067-V	4.63
CBMH 204	CBMH 203	18	0.0029	HDPE	751.93	751.47	757.19	48	R-3067-V	5.26
CBMH 203	CBMH 202	18	0.0041	HDPE	751.37	750.90	756.67	48	R-3067-V	5.30
CBMH 202	CBMH 201	18	0.0041	HDPE	750.80	750.70	760.67	48	R-3067-V	9.87
CBMH 201	CBMH 200	18	0.0042	HDPE	750.60	749.98	760.67	48	R-3067-V	10.07
CBMH 200	EX MH 22	18	0.007	HDPE	749.88	748.49	757.07	48	R-3067-V	7.19

APPROVED FOR ONE YEAR FROM THIS DATE

SHAKOPEE PUBLIC UTILITIES COMMISSION

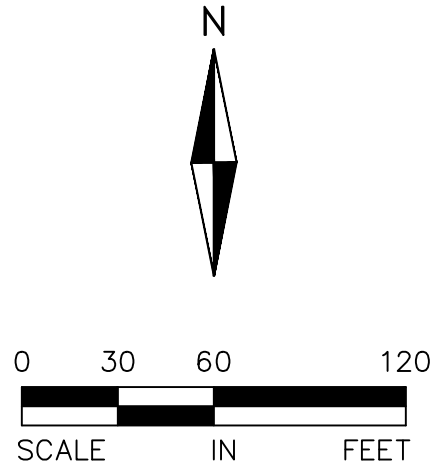
DATE

THIS MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH SHAKOPEE PUBLIC UTILITIES COMMISSION POLICY MANUAL, EDITION 04, 2004.

PROPOSED UTILITY LEGEND:

- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED CATCH BASIN
- PROPOSED SANITARY/STORM MANHOLE
- PROPOSED FIRE HYDRANT

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233 Park Ave S, Ste 300
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SCANNELL
PROPERTIES

VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA

PRELIMINARY PLAT AND SITE PLAN REVIEW

UTILITY PLAN

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

DAVE NASH, PE

Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

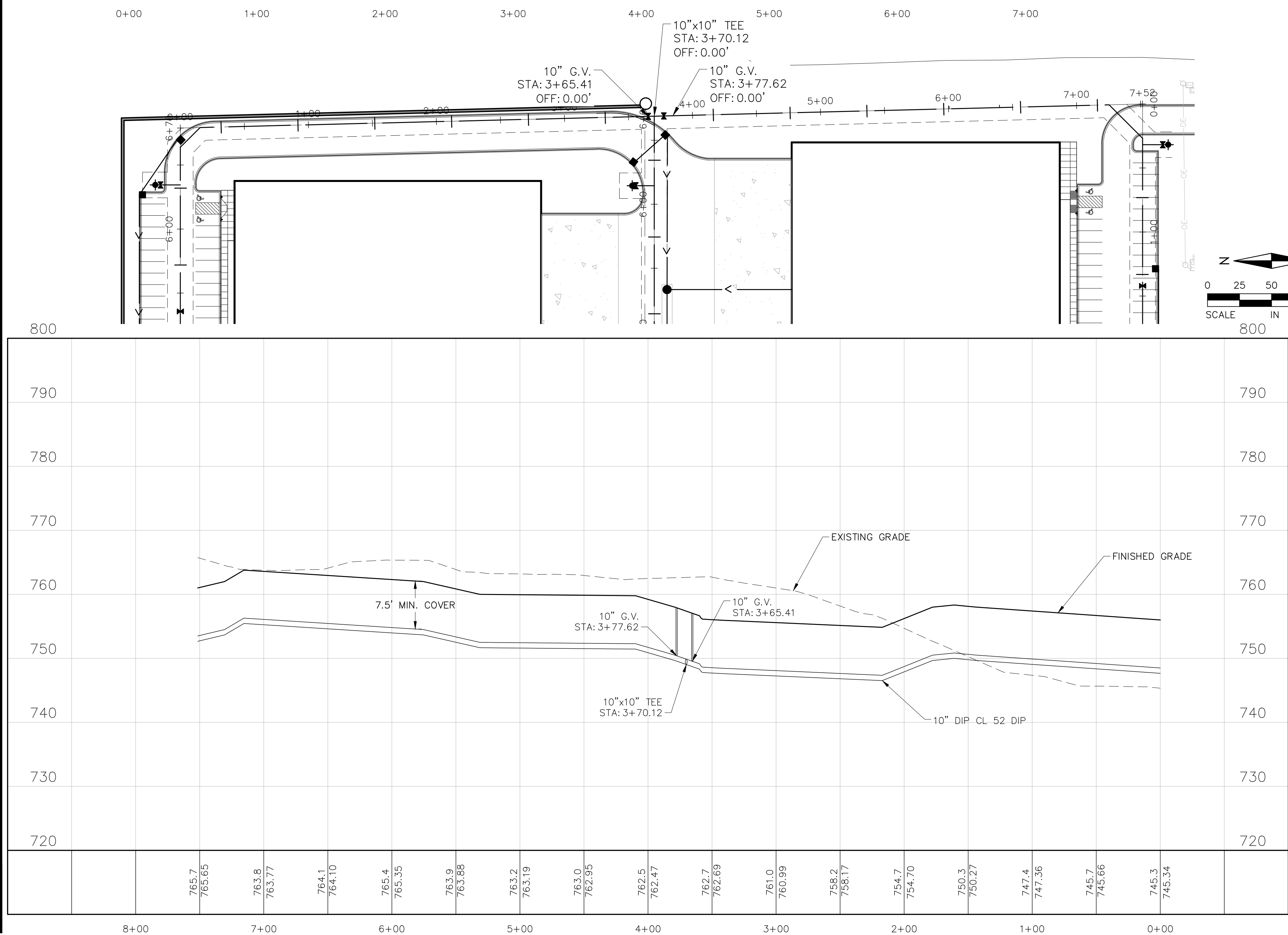
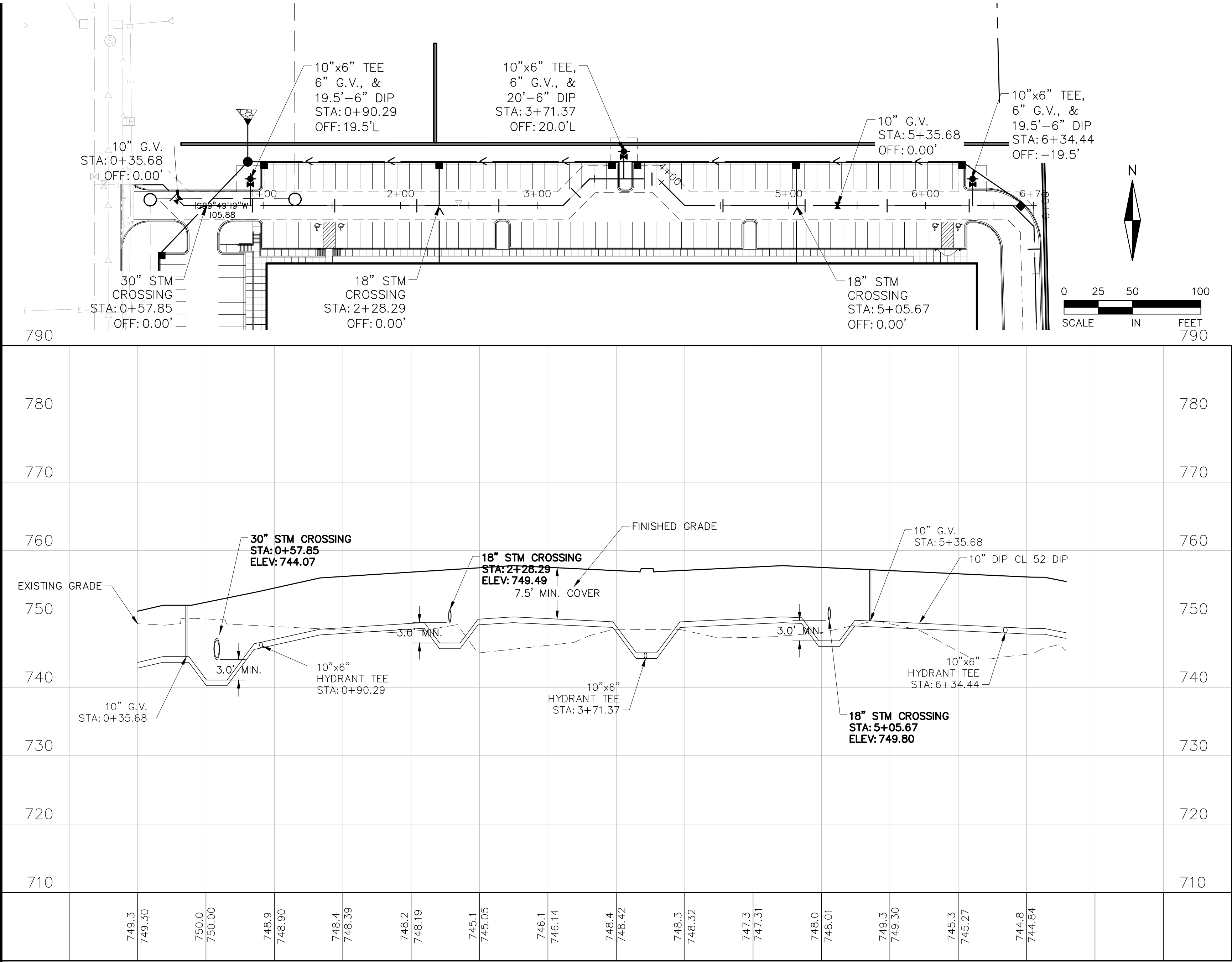
DATE	ISSUE
1.4.18	CITY SUBMITTAL
2.16.18	SITE PLAN REVISION

PROJECT TEAM DATA
DESIGNED: CM
DRAWN: CM
PROJECT NO: 213-0024.4

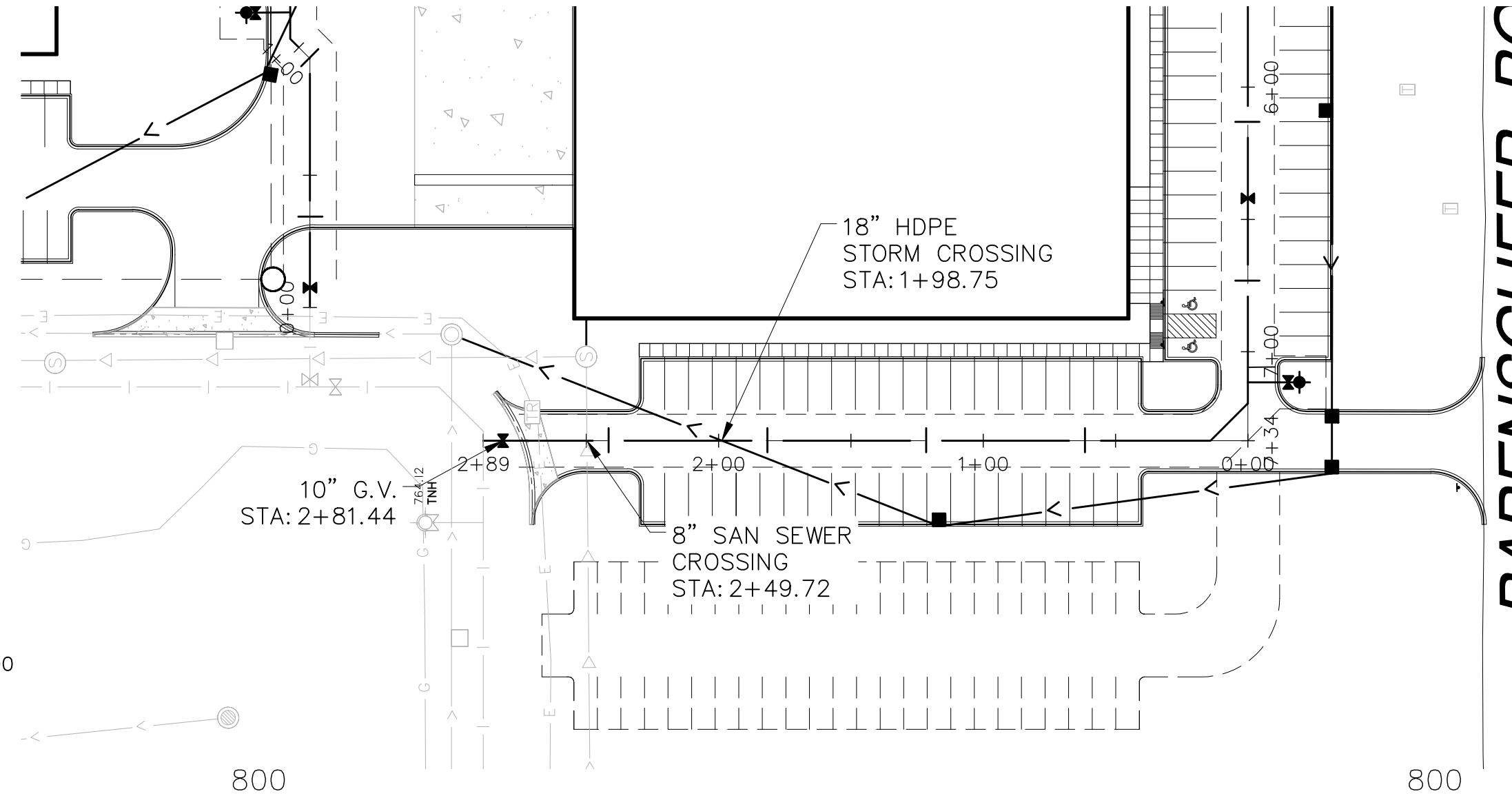
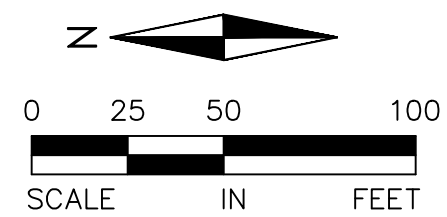
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SHEET

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SPUC NOTES:

1. WATER MAIN, SANITARY SEWER & STORM SEWER CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA AND SHAKOPEE PUBLIC UTILITIES COMMISSION POLICY MANUAL.
2. ALL WATER PIPE TO BE DUCTILE IRON PIPE (D.I.P.) CLASS 52
3. ALL FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 7.5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
4. A MINIMUM OF 7.5 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM VERTICAL SEPARATION OF 36 INCHES TO STORM SEWER LINES AND 18 INCHES TO SANITARY SEWER LINES.
5. A MINIMUM OF 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
6. JOINT RESTRAINTS SHALL BE INSTALLED AS REQUIRED AT ALL BENDS, VALVES, TEES AND WATERMAIN DIPS.
7. CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
8. CONTRACTOR TO VERIFY EXISTING WATER VALVE LOCATIONS TO DETERMINE NECESSARY SHUT-OFF LOCATIONS AND ASSOCIATED DEWATERING PRIOR TO WORK.
9. ALL WATERMAIN VALVES SHALL ONLY BE OPERATED BY SPUC PERSONNEL.
10. NOTIFY SHAKOPEE PUBLIC UTILITIES COMMISSION (SPUC) AT LEAST 24 HOURS PRIOR TO UTILITY INSTALLATION. ALL WATERMAIN INSTALLATION TO BE INSPECTED BY SHAKOPEE PUBLIC UTILITIES PERSONNEL TO ENSURE CONSTRUCTION TO SPUC STANDARDS.

VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE
SHAKOPEE, MINNESOTA

PRELIMINARY PLAT AND SITE PLAN REVIEW

WATERMAIN PROFILES (SHEET 1)

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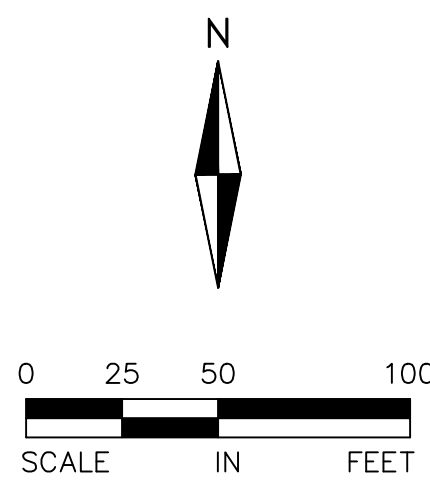
PROJECT TEAM DATA
DESIGNED: DN
DRAWN: SIL
PROJECT NO: 213-0024.4

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SHEET

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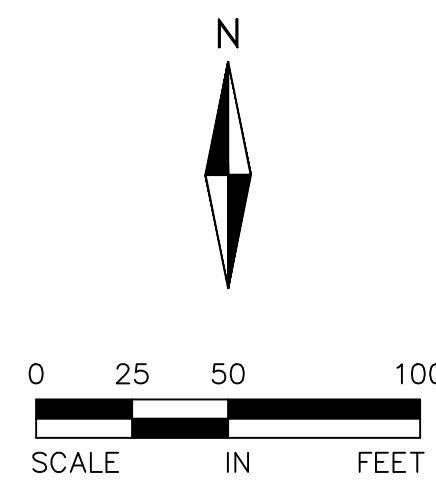
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Profile view of a sewer line. The vertical axis shows elevation in feet from 720 to 800. The horizontal axis shows stationing from 763.1 to 765.7. The profile includes the following features:

- EXISTING GRADE:** Represented by a dashed line.
- FINISHED GRADE:** Represented by a solid line.
- 10" DIP CL 52 DIP:** A label indicating the dip of the sewer line.
- 7.5' MIN. COVER:** A label indicating the minimum cover depth.
- 10" G.V. STA: 1+42.04:** A label indicating the location of a 10-inch gas vent.
- 10"x6" HYDRANT TEE STA: 7+11.57:** A label indicating the location of a 10-inch by 6-inch hydrant tee.
- 10"x6" HYDRANT TEE STA: 6+42.04:** A label indicating the location of a 10-inch by 6-inch hydrant tee.
- 10"x6" HYDRANT TEE STA: 3+67.16:** A label indicating the location of a 10-inch by 6-inch hydrant tee.
- 10"x6" HYDRANT TEE STA: 0+31.82:** A label indicating the location of a 10-inch by 6-inch hydrant tee.

Station	Elevation (ft)	Feature
763.1	763.1	10"x6" HYDRANT TEE STA: 7+11.57
763.13	763.13	10" G.V. STA: 6+42.04
763.4	763.4	10" G.V. STA: 6+42.04
763.42	763.42	10" G.V. STA: 6+42.04
763.9	763.9	10" G.V. STA: 6+42.04
763.89	763.89	10" G.V. STA: 6+42.04
764.6	764.6	10" G.V. STA: 6+42.04
764.59	764.59	10" G.V. STA: 6+42.04
765.5	765.5	10" G.V. STA: 6+42.04
765.46	765.46	10" G.V. STA: 6+42.04
766.0	766.0	10" G.V. STA: 6+42.04
766.01	766.01	10" G.V. STA: 6+42.04
766.2	766.2	10" G.V. STA: 6+42.04
766.22	766.22	10" G.V. STA: 6+42.04
766.3	766.3	10" G.V. STA: 6+42.04
766.26	766.26	10" G.V. STA: 6+42.04
766.1	766.1	10" G.V. STA: 6+42.04
766.10	766.10	10" G.V. STA: 6+42.04
765.9	765.9	10" G.V. STA: 6+42.04
765.87	765.87	10" G.V. STA: 6+42.04
765.6	765.6	10" G.V. STA: 6+42.04
765.62	765.62	10" G.V. STA: 6+42.04
765.3	765.3	10" G.V. STA: 6+42.04
765.33	765.33	10" G.V. STA: 6+42.04
765.2	765.2	10" G.V. STA: 6+42.04
765.16	765.16	10" G.V. STA: 6+42.04
764.8	764.8	10" G.V. STA: 6+42.04
764.76	764.76	10" G.V. STA: 6+42.04
765.7	765.7	10" G.V. STA: 6+42.04
765.74	765.74	10" G.V. STA: 6+42.04



	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED WATERMAIN
	PROPOSED CATCH BASIN
	PROPOSED SANITARY/STORM MANHOLE
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE

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SCANNELL
PROPERTIES

VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE

PRELIMINARY PLAT AND SITE PLAN REVIEW

WATERMAIN PROFILES (SHEET 2)

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DAVE NASH, PE

Date	License No
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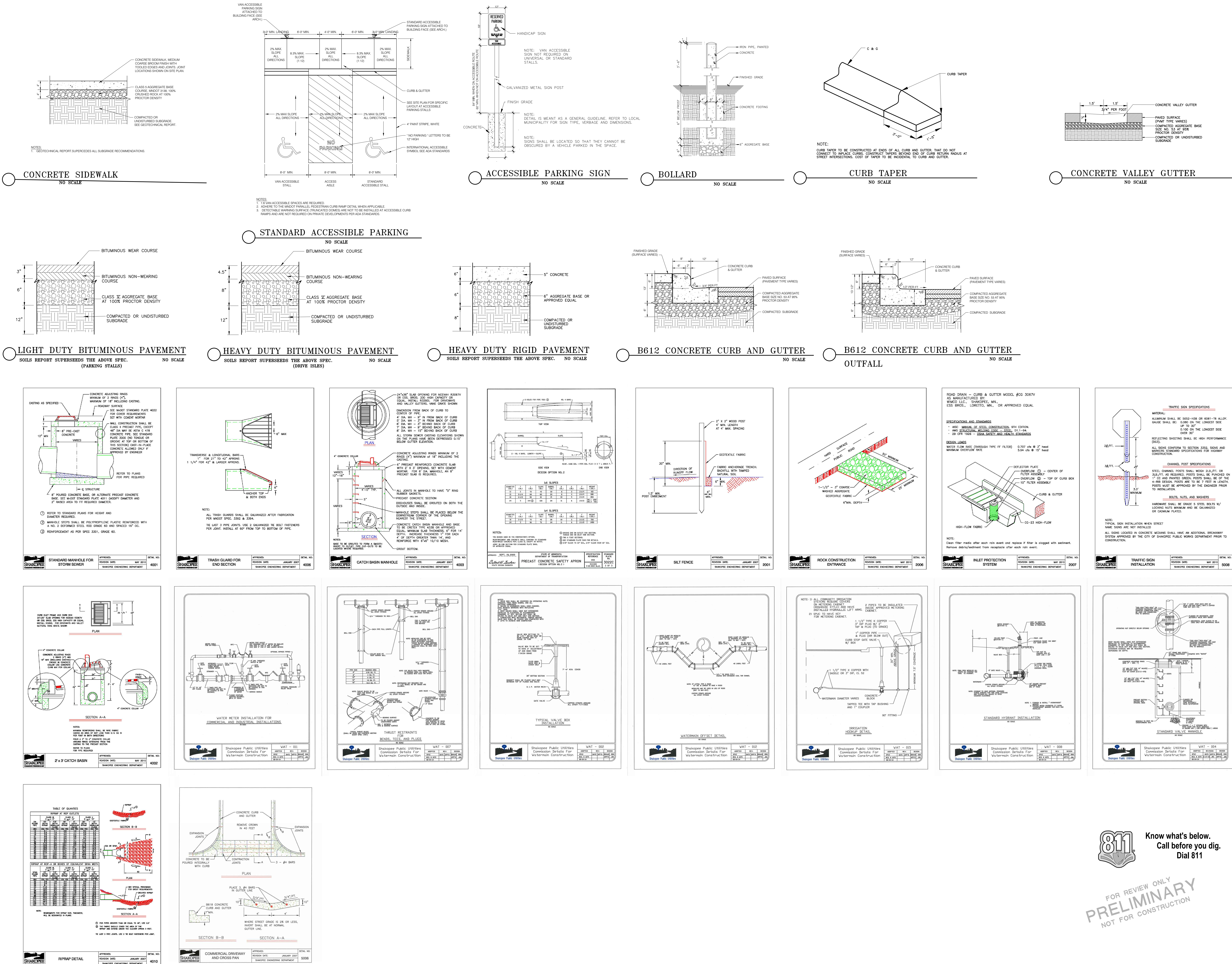
PROJECT TEAM DATA

DESIGNED: DN
DRAWN: SIL
PROJECT NO: 213-0024.4

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SHEET

Drawing name: X:\2013\130024\plan sheets\2017 - PH2\130024-4.dwg Date: Feb 16, 2018 9:12am



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DATE License No.

QUALITY ASSURANCE/CONTROL

BY DATE
DATE ISSUE
1.4.18 CITY SUBMITTAL
2.16.18 SITE PLAN REVISION

PROJECT TEAM DATA
DESIGNED: MMW
DRAWN: MMW
PROJECT NO: 213-0024.4

Drawing name: X:\2013\30024\Valley streets\2017 - PH2\30024\land.dwg, Feb. 16, 2018 9:12am

LANDSCAPE SCHEDULE:

Phase 1 Quantity	Phase 2 Quantity	Total	KEY	COMMON NAME / SCIENTIFIC NAME	SIZE	REMARKS
Overstory Trees						
8	19	27	AM	Valley Forge Elm / Ulmus americana 'Valley Forge'	2" Cal. B&B	Straight Trunk, No V-Crotch
2	8	10	BE	Autumn Splendor Buckeye / Aesculus 'Autumn Splendor'	2" Cal. B&B	Straight Trunk, No V-Crotch
30	17	47	CH	Common Hackberry / Celtis occidentalis	2" Cal. B&B	Straight Trunk, No V-Crotch
20	7	27	HL	Norther Aclam Honeylocust / Gleditsia triacanthos- inermis 'Haven'	2" Cal. B&B	Straight Trunk, No V-Crotch
11	14	25	RB	River Birch / Betula nigra	2" Cal. B&B	Clump Form
29	15	44	RL	Greenspire Linden / Tilia cordata 'Greenspire'	2" Cal. B&B	Straight Trunk, No V-Crotch
33	23	56	SO	Swamp White Oak / Quercus bicolor	2" Cal. B&B	Straight Trunk, No V-Crotch
Coniferous Trees						
9	9	9	BA	Blue Arrow Juniper / Juniperus virginiana 'Blue Arrow'	6" ht. B&B	Full Form
19	14	33	BS	Blackhills Spruce / Picea glauca densata	6" ht. B&B	Full Form
57	40	97	NP	Norway Pine / Pinus resinosa	6" ht. B&B	Full Form
28	56	84	SP	Scotch Pine / Pinus sylvestris	6" ht. B&B	Full Form
58	58	TA	TA	Techny Arborvitae / Thuja occidentalis	6" ht. B&B	Full Form
30	27	57	WF	White Fir / Abies concolor	6" ht. B&B	Full Form
6	7	13	WP	White Pine / Pinus strobus	6" ht. B&B	Full Form
Understory Trees						
7	8	15	JL	Japanese Tree Lilac / Syringa reticulata	1.5" Cal. B&B	Straight Trunk, No V-Crotch
10	10	20	FC	Amur Maackia / Maackia amurensis	1.5" Cal. B&B	Straight Trunk, No V-Crotch
4	56	60	SB	Autumn Brilliance Serviceberry / Amelanchier x grandiflora 'Autumn Brilliance'	6" ht. B&B	Clump Form
3	24	27	TH	Thornless Cockspur Hawthorn / Crataegus crus-galli 'Inermis'	1.5" Cal. B&B	Straight Trunk, No V-Crotch
Shrubs						
39	18	57	AH	Annabelle Hydrangea / Hydrangea arborescens 'Annabelle'	5 Gal. Pot	Min. 5 canes at ht. specified.
40		40	AW	Anthony Waterer Spirea / Spiraea japonica 'Anthony Waterer'	3 Gal. Pot	Min. 5 canes at ht. specified.
69	69	BH	BH	Dwarf Bush Honeyuckle / Diervilla lonicera	3 Gal. Pot	Min. 5 canes at ht. specified.
29	29	CD	CD	Alleman's Compact Red Twig Dogwood / Cornus sericea ' Alleman's'	3 Gal. Pot	Min. 5 canes at ht. specified.
40	40	DG	DG	Dart's Gold / Physocarpus opulifolius 'Dart's Gold'	5 Gal. Pot	Min. 5 canes at ht. specified.
72	72	DL	DL	Dwarf Korean Lilac / Syringa meyeri 'Palibin'	5 Gal. Pot	Min. 5 canes at ht. specified.
40	40	DN	DN	Diabolo Ninebark / Physocarpus opulifolius 'Monte'	5 Gal. Pot	Min. 5 canes at ht. specified.
64	64	ID	ID	Crimson Pygmy Barberry / Berberis thunbergii 'Crimson Pygmy'	2 Gal. Pot	Min. 5 canes at ht. specified.
20	20	NB	NB	Summer Wine Ninebark / Physocarpus opulifolius 'Seward'	3 Gal. Pot	Min. 5 canes at ht. specified.
110	110	NF	NF	Neon Flash Spirea / Spiraea japonica 'Neon Flash'	3 Gal. Pot	Min. 5 canes at ht. specified.
6	6	PJ	PJ	PJM Compact Rhododendron / Rhododendron 'P.J.M. Compact'	5 Gal. Pot	Min. 5 canes at ht. specified.
77	77	WE	WE	Dwarf Winged Euonymous	5 Gal. Pot	Min. 5 canes at ht. specified.
Evergreen Shrubs						
12		12	KG	King's Gold Chamaecyparis / Chamaecyparis pisifera 'filifera 'King's Gold'	5 Gal. Pot	Min. 5 canes at ht. specified.
62	10	72	SJ	Scandia Juniper / Juniperus sabina 'Scandia'	5 Gal. Pot	Min. 5 canes at dia. specified.
23	36	59	TY	Taunton Yew / Taxus x media 'Taunton'	5 Gal. Pot	Min. 5 canes at ht. specified.
Perennial						
42	42	LB	LB	Little Bluestem / Schizachyrium scoparium 'Minnblue A'	3 gal. cont.	
108	108	MG	MG	Karl Foerster Feather Reed Grass / Calamagrostis x acutiflora 'Karl Foerster'	3 gal. cont.	
140	28	168	SD	Stella de Oro Daylily / Hemerocallis 'Stella de Oro'	1 gal. cont.	
291	412	696	TOTAL TREES			
525	242	767	TOTAL SHRUBS			

NOTE: QUANTITIES ON PLAN SUPERCEDE LIST QUANTITIES IN EVENT OF DISCREPANCY.

SEED PLANTING NOTES:

INFILTRATION AREA SEED MIX: MN STATE SEED MIX 33-261. SEED RATE TO BE 14.5 LBS/ACRE (PURE LIVE SEED)

POND SEED MIX: MN STATE SEED MIX 34-181. SEED RATE TO BE 5 LBS/ACRE (PURE LIVE SEED)

SHORT GRASS PRAIRIE SEED MIX: 41% LITTLE BLUESTEM, 35% SIDE OATS GRAMA, 13% BLUE GRAMA, 5% POVERTY OAT GRASS, 4% JUNE GRASS, 1% KALM'S BROME, 1% PRAIRIE DROPSSEED, BY PLS WEIGHT. SEEDING RATE: BROADCAST: 4 LBS./10,000 SQ. FT. DRILL: 8-10 LBS./ACRE. USE SHORT/DRY GRASS MIX BY PRAIRIE RESTORATION, INC. OR APPROVED EQUAL.

APPLY SEED PER THE FOLLOWING:
MULCH SEEDED AREAS WITH MN/DOT TYPE 3 (MCA CERTIFIED WEED FREE) MULCH AT A RATE OF 1 TON PER ACRE WITHIN 48 HOURS OF SEEDING. MULCH SHOULD THEN BE DISC ANCHORED TO KEEP IT FROM BLOWING AWAY.

SEEDING SHALL BE APPLIED FROM APRIL 1 - JUNE 30 OR NOV. 1 - FREEZE UP.

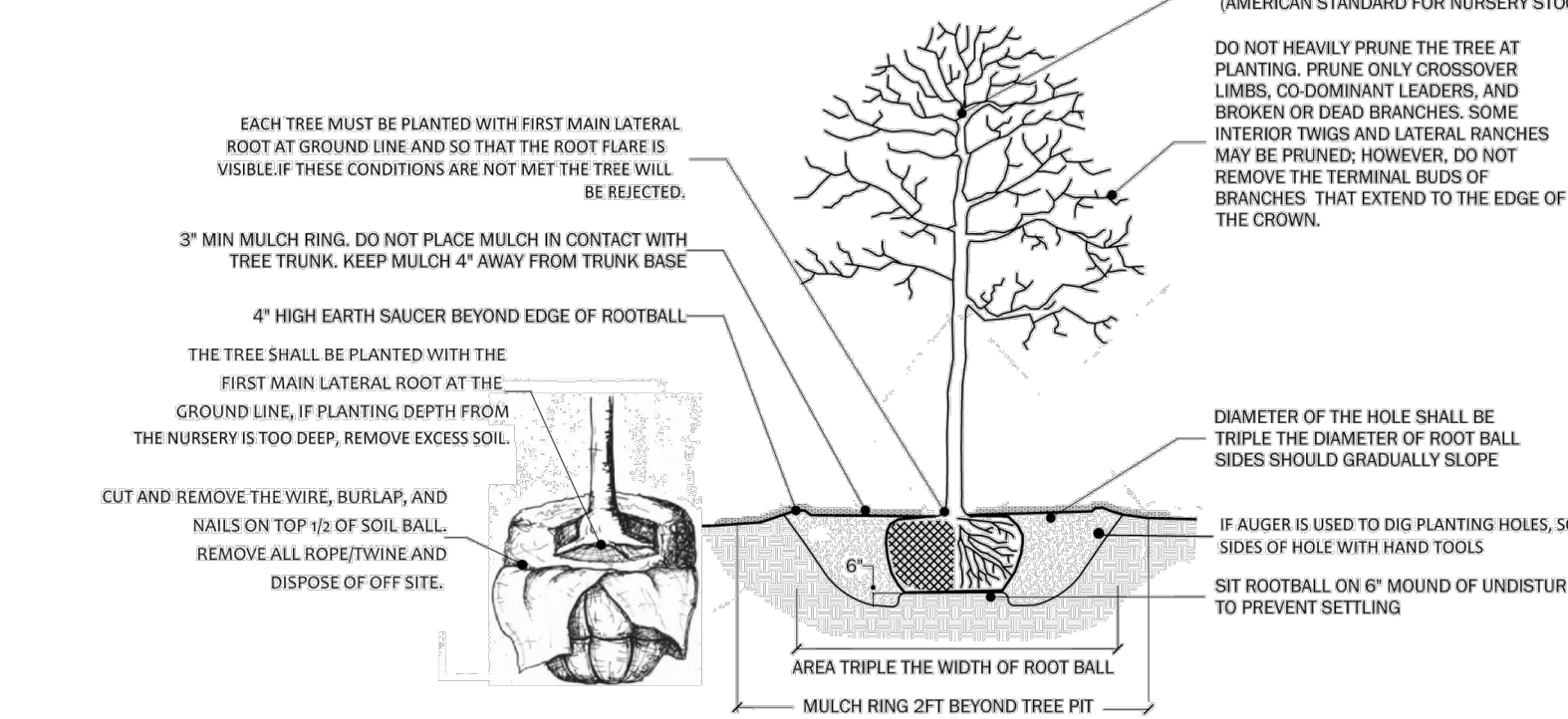
IF HYDROSEEDING UTILIZE APPROXIMATELY 500 GALLONS OF WATER PER ACRE. REFER TO MN/DOT SPEC 3884 FOR PROPER INSTALLATION OF HYDRO-SEED.

ALL NATIVE SEEDS USED ON THIS PROJECT SHALL BE CERTIFIED TO BE OF MINNESOTA ORIGIN BY THE MINNESOTA CROP IMPROVEMENT ASSOCIATION (MCIA).

SITE TO BE PREPARED BY LOOSENING TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES. THE SITE TO BE HARROWED OR RAKED FOLLOWING SEEDING, AND THEN PACKED USING A CULTI-PACKER OR EQUIVALENT.

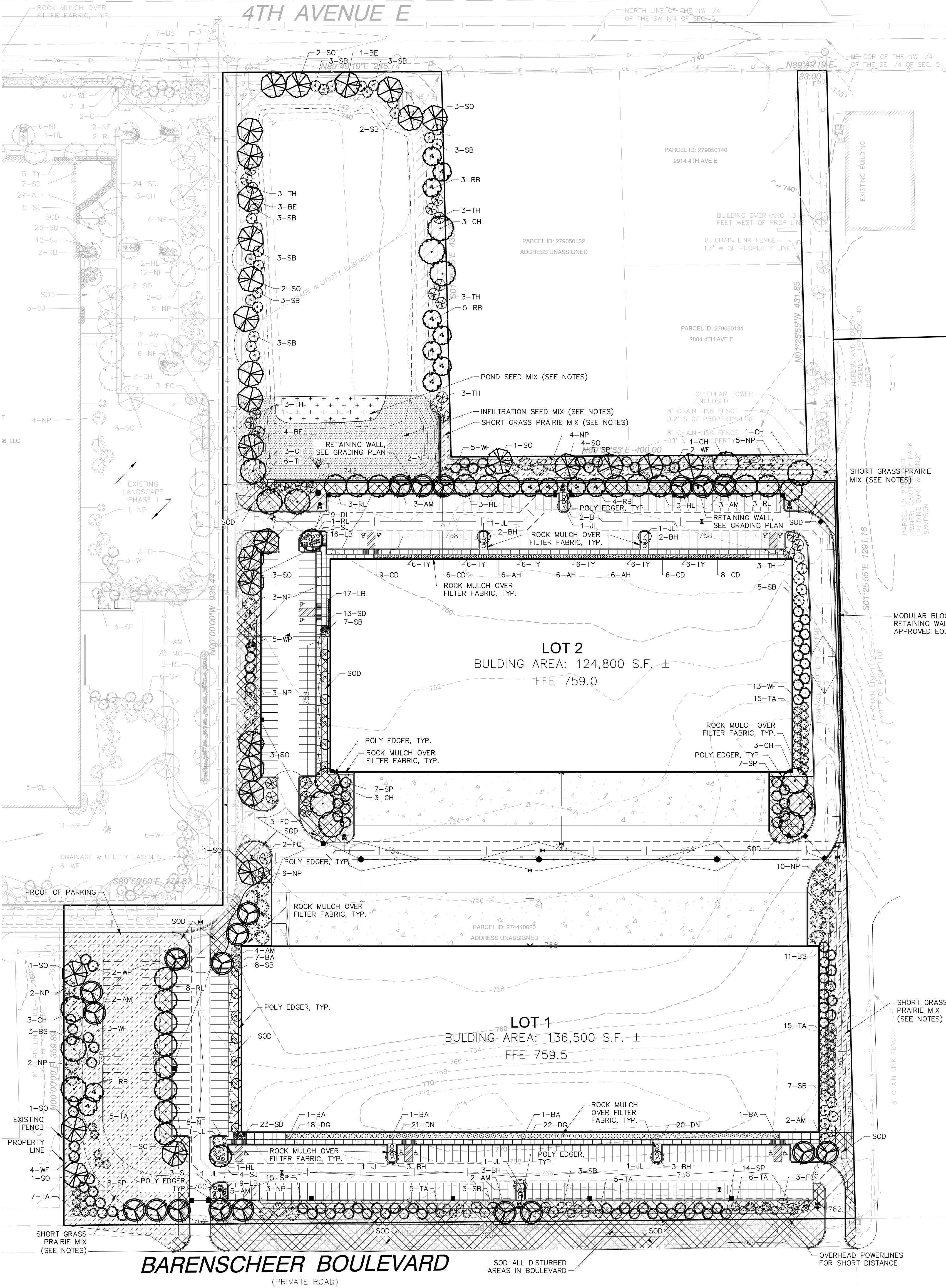
MAINTAIN SEEDER AREAS BY WATERING, REMULCHING AND REPLANTING AS NECESSARY TO ESTABLISH A UNIFORMLY DENSE STAND OF THE SPECIFIED GRASSES UNTIL ACCEPTED.

ANY AREAS FAILING TO ESTABLISH A STAND SHALL BE RESEED, REFERTILIZED AND REMULCHED WHENEVER 70% VEGETATIVE COVER IS NOT ACHIEVED. RESEEDING SHALL CONFORM IN ALL RESPECTS TO THESE SPECIFICATIONS. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE WORK AREAS RESULTING FROM EROSION AND/OR EQUIPMENT. THE CONTRACTOR SHALL REPAIR DAMAGE, INCLUDING REGRADING, RESEEDING, ETC. AS NECESSARY, BEFORE SIGNIFICANT DAMAGE OCCURS.



TREE PLANTING DETAIL

NO SCALE



BARENSCHEER BOULEVARD (PRIVATE ROAD)

LANDSCAPE PLAN NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO BECOME COMPLETELY FAMILIAR WITH SITE CONDITIONS.
- LANDSCAPE CONTRACTOR TO COORDINATE INSTALLATION WITH GENERAL CONTRACTOR AND CITY OF SHAKOPEE NATURAL RESOURCES DEPARTMENT PRIOR TO BEGINNING WORK TO BECOME FULLY AWARE OF THE CITY REQUIREMENTS FOR ALL LANDSCAPE WORK, TESTING AND APPROVAL PROCESS.
- ALL SHRUB AREAS UNLESS SPECIFIED AS OTHER, TO BE BED MULCHED WITH 4" DEPTH OF 3" RIVER ROCK MULCH OVER WEED BARRIER. KEEP MULCH/ROCK MINIMUM 4" AWAY FROM BASE OF PLANTS. EDGER TO BE VALLEY VIEW BLACK DIAMOND EDGING OR APPROVED EQUAL.
- INSTALL 3-4" DEPTH SHREDDED HARDWOOD MULCH, 3-6" FROM BASE OF THE TREES THAT ARE ISOLATED FROM PLANT BEDS. DO NOT PILE MULCH AGAINST THE BASE OF A PLANT OR TREE TRUNK; PULL THE MULCH AWAY FROM THE BASE ONE TO TWO INCHES.
- INSTALL 6" OF TOPSOIL. ALL TOPSOIL (WEATHER SALVAGED ON SITE OR BROUGHT IN AS IMPORT) TO BE USED ON SITE FOR TURF ESTABLISHMENT SHALL BE IDENTIFIED, TESTED AND APPROVED BY CITY OF SHAKOPEE ENGINEERING DEPARTMENT PRIOR TO PLACEMENT OF SAID TOPSOIL. TOPSOIL TEST RESULTS SHALL COMPLY WITH MNDOT'S "STANDARD SPECIFICATION FOR CONSTRUCTION" LATEST EDITION, SPECIFICATION 3877 FOR "SELECT TOPSOIL BORROW" (SPEC. 3877.2 B, TABLE 3877-2).
- CONTRACTOR SHALL INSTALL SOD IN DENOTED AREAS PER LOCAL INDUSTRY STANDARDS. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND HAVE STAGGERED JOINTS. SOD PLACED IN DRAINAGE SWALES AND AREAS OF SLOPES 3:1 OR GREATER SHALL BE STAKED EVERY 3'.
- CONTRACTOR SHALL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF TWO YEARS BEGINNING AT THE DATE OF ACCEPTANCE. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF WORK) WILL BE PROMPTLY REMOVED AND REPLACED (AS PER DIRECTION OF OWNER). COORDINATE TREE REPLACEMENT WITH CITY FORESTRY SPECIALIST. WARRANTY PERIOD WILL NOT BEGIN UNTIL INSTALLED PLANTS ARE INSPECTED BY CITY STAFF AND DETERMINED ACCEPTABLE. CONTRACTOR TO MAINTAIN NATURAL RESOURCES AT (852) 233-9550 TO SCHEDULE INSPECTION.
- CONTRACTOR SHALL PROVIDE A TWO YEAR MAINTENANCE PLAN FOR THE AREAS TO BE SEEDD AROUND THE INFILTRATION POND. SUBMIT TO CITY OF SHAKOPEE'S DEPARTMENT OF NATURAL RESOURCES AT THE TIME OF TREE/SHRUB REPLACEMENT.
- NOTE: 10% OF THE INSTALLED PLANTS WILL BE INSPECTED BY CITY STAFF AFTER INSTALLATION. IF 25% OR MORE OF INSTALLED PLANTS FAIL TO MEET THE REQUIREMENTS AND CONDITIONS, ALL INSTALLED PLANTS WILL BE REMOVED AND REPLACED AT THE COST OF THE APPLICANT.
- ALL MATERIAL SHALL COMPLY WITH STATE AND LOCAL CONSTRUCTION STANDARDS.
- REPAIR AT NO COST TO OWNER ALL DAMAGE TO PROPERTY RESULTING FROM LANDSCAPE WORK.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO UTILITIES DURING THE COURSE OF THE WORK. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO UTILITIES, SITE STRUCTURES, ETC., RESULTING FROM LANDSCAPE WORK.
- AFTER COMPLETION OF WORK AND PRIOR TO LEAVING SITE, SWEEP AND WASH ALL PAVED SURFACES AND REMOVE ALL DEBRIS RESULTING FROM LANDSCAPE OPERATIONS. LANDSCAPE CONTRACTOR SHALL REMOVE ALL OF THEIR OWN DEBRIS FROM SITE.
- LANDSCAPE CONTRACTOR TO PROTECT THE EXISTING VEGETATION TO BE RETAINED DURING SITE AND BUILDING CONSTRUCTION PROCESS, AS APPLICABLE PER CITY REQUIREMENTS. REFER TO DEMOLITION PLAN FOR TREE PROTECTION AREAS.
- ALL BUFFERS AND TREE SAVE AREAS ARE TO BE CLEARLY IDENTIFIED WITH PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
- CONTRACTOR SHALL SUPPLY DESIGN AND INSTALLATION OF AN IRRIGATION PLAN WITH 100% COVERAGE FOR SOD, SHRUB BEDS AND ALL LANDSCAPE ISLANDS PER GOVERNING AGENCY & LOCAL DESIGN STANDARDS. SOD AND SHRUB AREAS TO BE ON SEPARATE ZONES. THE IRRIGATION SYSTEM TO HAVE A RAIN SENSOR SHUTOFF. USE RAINBIRD OR APPROVED EQUAL. COORDINATE INSTALLATION WITH WORK OF OTHER SECTIONS AND PROPERTY OWNER.
- GENERAL CONTRACTOR SHALL FOLLOW THE STATE SOIL AND EROSION CONTROL SPECIFICATIONS FOR DISTURBED AREA STABILIZATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED PERMITS TO BE ISSUED BY REVIEWING AGENCY.
- BAKE ROOT IS AN ACCEPTABLE PLANTING STOCK FOR MEETING THE LANDSCAPING REQUIREMENTS. TREES STILL MUST MEET SIZE REQUIREMENTS. ALL BARE ROOT TREES SHALL BE PLANTED DURING THE SPRING OR FALL PLANTING SEASON. SPRING PLANTING SEASON IS CONSIDERED APRIL TO EARLY JUNE AND FALL PLANTING SEASON IS CONSIDERED LATE SEPTEMBER THROUGH NOVEMBER.
- SOIL COMPACTION FOR ALL NON-STRUCTURAL LANDSCAPE AREAS (INCLUDING LANDSCAPING ISLANDS) SHALL BE BETWEEN 75%-80% OF STANDARD PROCTOR (MAXIMUM DRY DENSITY) FOR A MINIMUM OF THE TOP 18" OF SOIL. COMPACTION SAMPLES ARE TO BE TAKEN AFTER FINAL GRADING OF THE SITE IS COMPLETE. THEY ARE TO BE SUBMITTED AND APPROVED BY THE CITY OF SHAKOPEE BEFORE INSTALLATION OF LANDSCAPING BEGINS. A REASONABLE NUMBER OF SAMPLES MUST BE TAKEN WITH EVEN COVERAGE OF ALL LANDSCAPED AREAS. SUBMIT SAMPLES TO SHAKOPEE NATURAL RESOURCES DEPT.
- TREES SHALL BE PLANTED ACCORDING TO CITY OF SHAKOPEE'S REQUIREMENTS. TREES SHALL BE PLANTED MINIMUM OF 6" FROM IMPERVIOUS SURFACES, 10' FROM PROPERTY LINES. NO TREE SHALL BE INSTALLED IN EASEMENTS CONTAINING UTILITIES. CITY'S RIGHT OF WAY, OR BELOW OVERHEAD UTILITIES. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES.
- ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERMEN.
- ALL TREE TRUNKS SHALL BE WRAPPED WITH BROWN CREPE TREE WRAP. APPLY WRAP IN NOVEMBER AND REMOVE IN APRIL. 7 STAKE OR 24 MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. HAVE OWNERS REPRESENTATIVE APPROVE ALL STAKING PRIOR TO INSTALLATION.

PHASE 2 LANDSCAPE CALCULATIONS

LANDSCAPE REQUIREMENTS BY GFA

	First 10k sf (3 units per 1k sf)	Next 40k sf (10-50k sf) (2 units per 1k sf)	Next 50k sf (50-100k sf) (1 units per 1k sf)	> 100k sf (1 units per 1.5k sf)	Total Units Required
Building A (136,500 sf)	30 Units	80 Units	50 Units	24 Units	184 Units
Building B (124,800 sf)	30 Units	80 Units	50 Units	17 Units	177 Units
					361 Units

LANDSCAPE REQUIREMENTS BY IMPERVIOUS AREA

	Impervious Area	Impervious sf	Landscap Required (1 Unit per 4k sf)
Phase 2 Impervious = Total Impervious - GFA	7,55 sq	328,000.00 sf	82 Units

TREES REQUIRED IN PARKING AREAS

	Parking Area	Trees Required (1 tree per 4k sf)
Building A (136,500 sf)	52573.08 sf	13 Trees
Building B (124,800 sf)	48027.26 sf	12 Trees

NOTE:
PER SHAKOPEE CITY CODE TOTAL LANDSCAPE REQUIRED = REQUIREMENTS BY GFA + REQUIREMENTS BY IMPERVIOUS AREA
TREES PLANTED IN PARKING AREAS COUNT TOWARD REQUIRED LANDSCAPE, NOT IN ADDITION TO.

LANDSCAPE REQUIRED BY GFA	361 UNITS
LANDSCAPE REQUIRED BY IMPERVIOUS AREA	82 UNITS
TOTAL PH2 LANDSCAPE REQUIREMENTS	443 UNITS REQUIRED

TREE MITIGATION CALCULATIONS:

TOTAL MITIGATION ESCROW (FOR ALL PHASES): \$267,000
MITIGATION REQUIREMENT FULFILLED: \$191,100

PHASE 2 TOTAL REMAINING MITIGATION ESCROW: \$76,000

PHASE 2 TOTAL REMAINING MITIGATION: 190 UNITS REQUIRED MITIGATION
(\$76,000/\$400 = 190 UNITS)

PHASE 2 LANDSCAPE REQUIREMENTS:

PHASE 2 LANDSCAPE REQUIRED: 443 UNITS	REQUIRED: SHRUBS 221*	PROVIDED: TREES 222	TREES 222
PHASE 2 MITIGATION REQUIRED: 190 UNITS	0**	190	190
	221	412	242

NOTES:
* PER SUBD. B, LANDSCAPE REQUIREMENTS NOT MORE THAN 50% OF REQUIRED LANDSCAPE UNITS MAY BE COMPOSED OF SHRUBBERY.
** TREE REPLACEMENT: NO MORE THAN 10% MAY BE COMPOSED OF SHRUBBERY WITH A REPLACEMENT RATIO OF 3:1 (SHRUBS:TREES).
ENTIRE 10% SHRUB ALLOCATION WAS USED ON PHASE 1.

SEED MIX LEGEND:

	INFILTRATION AREA SEED MIX: (MN STATE SEED MIX 33-261 STORMWATER SOUTH & WEST)
	POND SEED MIX: (MN STATE SEED MIX 34-181 EMERGENT WETLAND)
	SHORT GRASS PRAIRIE SEED MIX: SHORT/DRY GRASS MIX BY PRAIRIE RESTORATION, INC. OR APPROVED EQUAL
	SOD

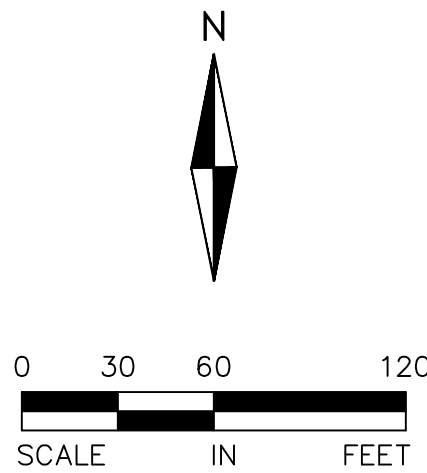
LANDSCAPE LEGEND:

	PROPOSED OVERSTORY TREE
	PROPOSED ORNAMENTAL TREE
	PROPOSED EVERGREEN TREE
	PROPOSED SHRUBS
	PROPOSED EDGER
	PROPOSED ACCENT BOULDER



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SCANNELL
PROPERTIES

VALLEY VIEW BUSINESS PARK THIRD ADDITION

4TH AVENUE E AND SHENANDOAH DRIVE

SHAKOPEE, MINNESOTA

PRELIMINARY PLAT AND SITE PLAN REVIEW

LANDSCAPE PLAN

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

MARK KRONBECK, P.L.A., A.S.L.A.

Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

DATE ISSUE

1.4.18 CITY SUBMITTAL

2.16.18 SITE PLAN REVISION

PROJECT TEAM DATA

DESIGNED: MMW

DRAWN: MMW

PROJECT NO: 213-0024.4

L-1

SHEET