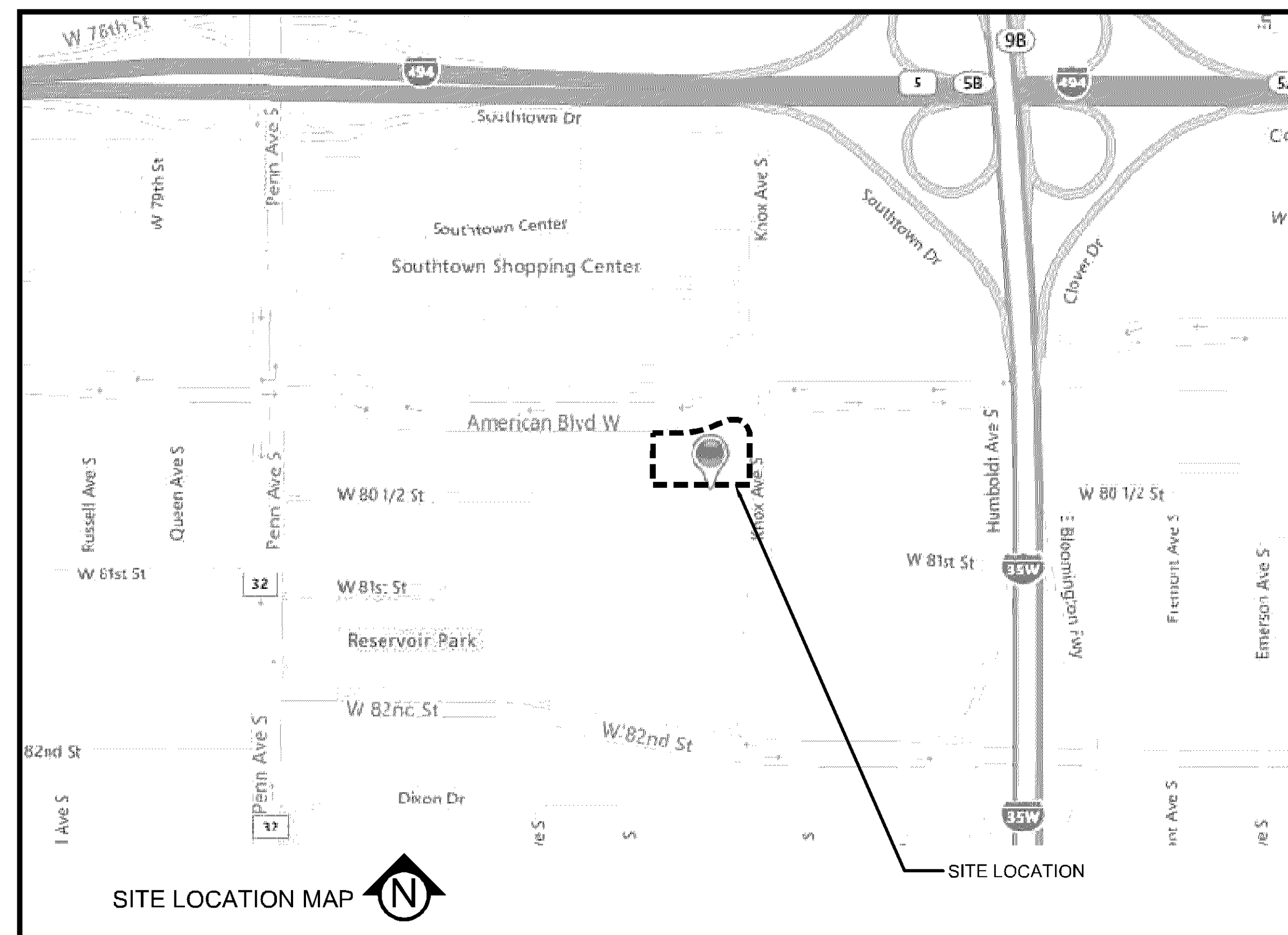


PL202300068

# KNOX & AMERICAN II

# BLOOMINGTON, MINNESOTA

ISSUED FOR: CITY SUBMITTAL



## ARCHITECT:

ESG ARCHITECTURE & DESIGN  
500 WASHINGTON AVE S, SUITE 1080  
MINNEAPOLIS, MN 55415  
CONTACT: ARON THOMAS  
612-268-2440

## DEVELOPER / PROPERTY OWNER:

STUART DEVELOPMENT CORPORATION  
1000 W 80TH STREET  
MINNEAPOLIS, MN 55420  
CONTACT: RYAN DUNLAY  
952-948-9546

ENGINEER / LANDSCAPE ARCHITECT:

<b>CIVIL SITE GROUP</b> 5000 GLENWOOD AVE GOLDEN VALLEY, MN 55422 CIVIL ENGINEER CONTACT: MATT PAVEK 612-615-0080 EXT 701	<b>CIVIL SITE GROUP</b> 5000 GLENWOOD AVE GOLDEN VALLEY, MN 55422 LANDSCAPE ARCHITECT CONTACT: BILL BROHMAN 612-615-0060 EXT 710
--	---

SURVEYOR:

CIVIL SITE GROUP  
5000 GLENWOOD AVE  
GOLDEN VALLEY, MN 55422  
CONTACT: RORY SYNSTELIEN  
RORY@CIVILSITEGROUP.COM  
612-615-0060

GEOTECHNICAL ENGINEER:

**BRAUN INTERTEC CORPORATION**  
11001 HAMPSHIRE AVE S  
MINNEAPOLIS, MN 55438  
CONTACT: JOSEPH L. WESTPHAL  
952-995-2000

ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



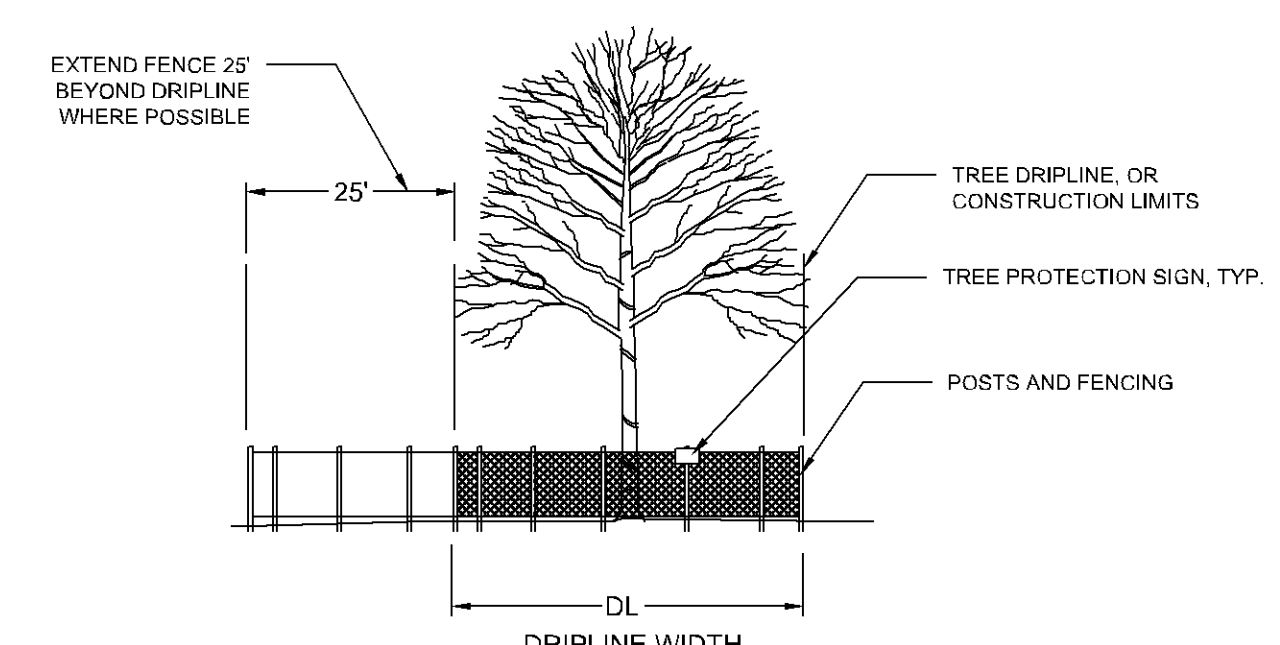
Know what's **below**.  
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SHEET INDEX

SHEET NUMBER	SHEET TITLE
C0.0	TITLE SHEET
V1.0	SITE SURVEY
C1.0	REMOVALS PLAN
C2.0	SITE PLAN
C2.1	SITE PLAN - TURNING MOVEMENT EXHIBIT
C2.2	SITE PLAN - EASEMENT EXHIBIT
C3.0	GRADING PLAN
C4.0	UTILITY PLAN
C5.0	CIVIL DETAILS
C5.1	CIVIL DETAILS
C5.2	CIVIL DETAILS
C5.3	CIVIL DETAILS
C5.4	CIVIL DETAILS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN NOTES & DETAILS
SW1.0	SWPPP - EXISTING CONDITIONS
SW1.1	SWPPP - PROPOSED CONDITIONS
SW1.2	SWPPP - DETAILS
SW1.3	SWPPP - NARRATIVE
SW1.4	SWPPP - ATTACHMENTS
SW1.5	SWPPP - ATTACHMENTS

REMOVAL NOTES:

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
- REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
- REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
- EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR PROPOSED PAVEMENT CONNECTIONS.
- REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE WITH PROPOSED PLANS.
- EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
- PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE DRAWINGS. WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
- MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS. FOR ANY WORK ON ADJACENT PRIVATE PROPERTY, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER PRIOR TO ANY WORK.
- DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
- PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
- SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT. SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
- VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS. AT NO POINT THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.
- ALL EXISTING SITE TRAFFIC/REGULATORY SIGNAGE TO BE INVENTORIED AND IF REMOVED FOR CONSTRUCTION SHALL BE RETURNED TO LGU.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



FURNISH A AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SHOWN ON PLAN, PRIOR TO ANY CONSTRUCTION. WHERE POSSIBLE PLACE FENCE 25' BEYOND DRIP LINE. PLACE TREE PROTECTION SIGN ON POSTS, ONE PER INDIVIDUAL TREE (FACING CONSTRUCTION ACTIVITY), OR ONE EVERY 100' LF ALONG A GROVE OR MULTI-TREE PROTECTION AREA.

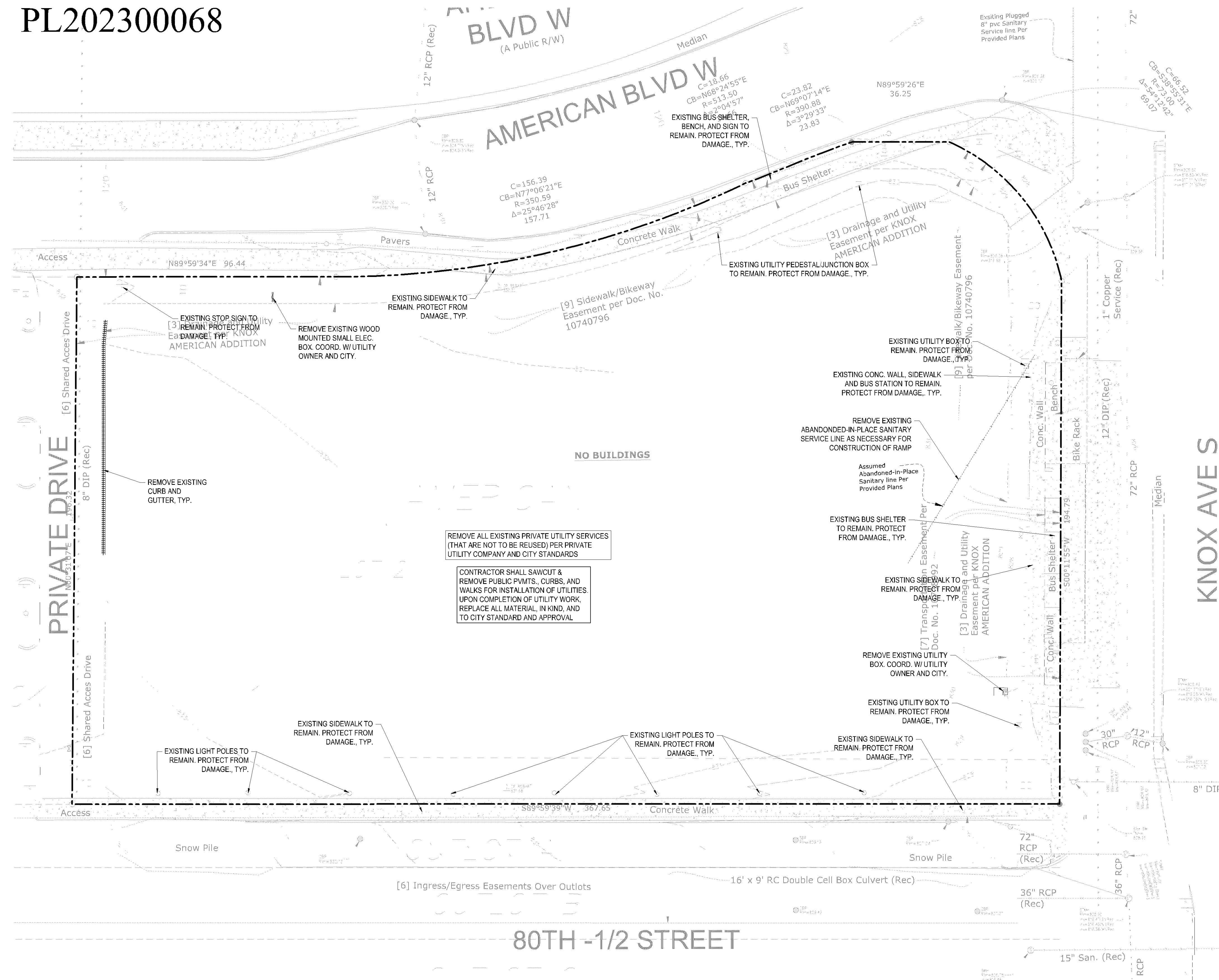
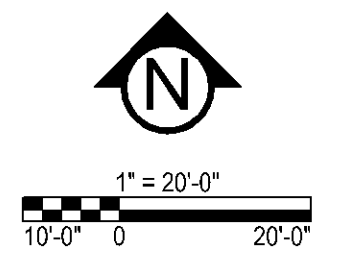
1 TREE PROTECTION  
NTS

REMOVALS LEGEND:

- EX. 1' CONTOUR ELEVATION INTERVAL
- REMOVAL OF PAVEMENT AND ALL BASE MATERIAL, INCLUDING BIT., CONC., AND GRAVEL PVMTS.
- REMOVAL OF STRUCTURE INCLUDING ALL FOOTINGS AND FOUNDATIONS.
- REMOVAL CURB AND GUTTER, IF IN RIGHT-OF-WAY, COORDINATE WITH LOCAL GOVERNING UNIT.
- TREE PROTECTION
- TREE REMOVAL - INCLUDING ROOTS AND STUMPS



Know what's below.  
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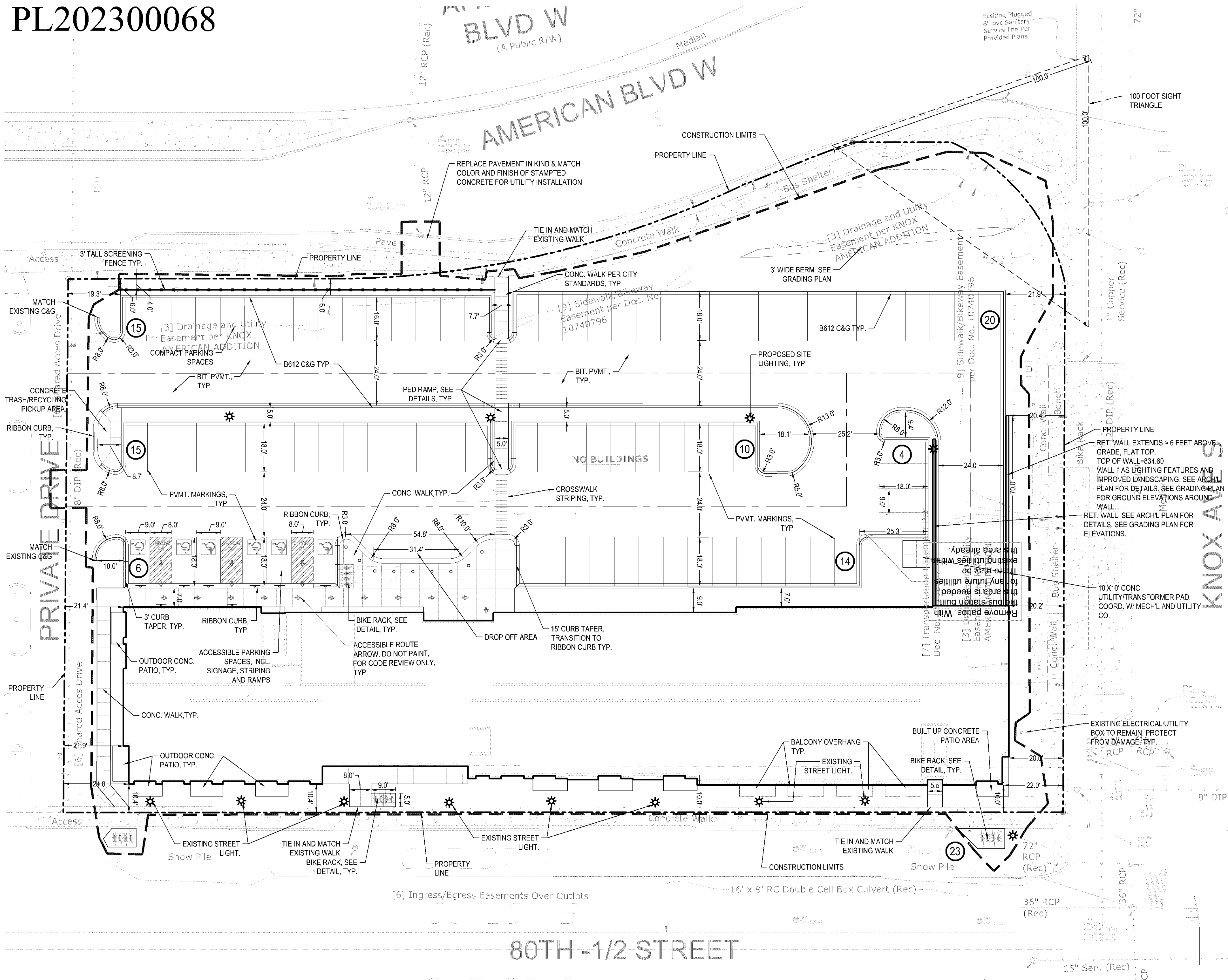
CITY OF BLOOMINGTON REMOVAL NOTES:

- RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0 - SW1.5

PL202300068



CITY OF BLOOMINGTON SITE SPECIFIC NOTES:

- ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.

SITE DATA

EXISTING ZONING	COMMUNITY COMMERCIAL (CC)
PROPOSED ZONING	HIGH DENSITY RESIDENTIAL (HDR) RM-100
NUMBER OF UNITS	99
PROPOSED DENSITY	54.82 DU/ACRE
PARKING SPACE DRIVE AISLE:	9'X18' 24'
REFER TO ARCHITECTURAL SITE PLAN FOR PARKING REQUIREMENTS	
SURFACE PARKING LOT SPACES PROVIDED	83
SURFACE PARKING LOT SPACES EXISTING	23
UNDERGROUND PARKING SPACES	50
TOTAL PARKING SPACES PROVIDED	156

OPERATIONAL NOTES:

- SNOW REMOVAL: ALL SNOW SHALL BE STORED ON-SITE OUTSIDE PARKING LOT. WHEN FULL, REMOVAL CO. SHALL REMOVE EXCESS OF-SITE
- TRASH REMOVAL: TRASH SHALL BE WHEELED OUT TO EXTERIOR TRASH PICK-UP AREA AND REMOVED BY COMMERCIAL CO. WEEKLY.
- DELIVERIES: DELIVERIES SHALL OCCUR AT THE FRONT DOOR VIA STANDARD COMMERCIAL DELIVERY VEHICLES (UPS, FED-EX, USPS).

SITE AREA TABLE:

SITE AREA CALCULATIONS			
	EXISTING CONDITION	PROPOSED CONDITION	
BUILDING COVERAGE	5,553 SF 7.1%	20,155 SF 25.6%	
ALL PAVEMENTS	59,530 SF 75.7%	42,917 SF 54.5%	
ALL NON-PAVEMENTS	13,608 SF 17.3%	15,619 SF 19.8%	
TOTAL SITE AREA	78,691 SF 100.0%	78,691 SF 100.0%	
IMPERVIOUS SURFACE			
EXISTING CONDITION	65,083 SF 82.7%		
PROPOSED CONDITION	63,072 SF 80.2%		
DIFFERENCE (EX. VS PROP.)	-2,011 SF -2.6%		

SITE LAYOUT NOTES:

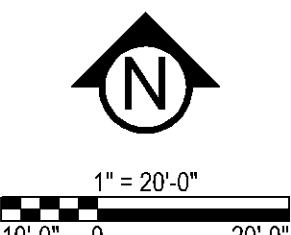
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCATIONAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
- THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
- CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS & ELEVATIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
- LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
- CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
- PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
- CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
- SEE SITE PLAN FOR CURB AND GUTTER TYPE. TAPER BETWEEN CURB TYPES-SEE DETAIL.
- ALL CURB RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
- FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
- PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
- ALL PARKING LOT PAINT STRIPPING TO BE WHITE, 4" WIDE TYP.
- BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
- ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.

SITE PLAN LEGEND:

- [Symbol] LIGHT DUTY BITUMINOUS PAVEMENT (IF APPLICABLE). SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH, SEE DETAIL.
- [Symbol] HEAVY DUTY BITUMINOUS PAVEMENT (IF APPLICABLE). SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH, SEE DETAIL.
- [Symbol] CONCRETE PAVEMENT (IF APPLICABLE) AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS, WITHIN ROW SEE CITY DETAIL, WITHIN PRIVATE PROPERTY SEE CSG DETAIL.
- [Symbol] PROPERTY LINE
- [Symbol] CONSTRUCTION LIMITS
- [Symbol] CURB AND GUTTER-SEE NOTES (T.O.) TIP OUT GUTTER WHERE APPLICABLE-SEE PLAN
- [Symbol] TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS
- [Symbol] SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED. HC = ACCESSIBLE SIGN NP = NO PARKING FIRE LANE ST = STOP CP = COMPACT CAR PARKING ONLY ACCESSIBILITY ARROW (IF APPLICABLE) DO NOT PAINT.



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PRELIMINARY:  
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CONSTRUCTION

KNOX & AMERICAN II

8000 KNOX AVE S, BLOOMINGTON, MN 55431

STUART DEVELOPMENT CORPORATION

PROJECT

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.

Matthew R. Pavlek  
DATE 05/17/23 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY  
DATE DESCRIPTION  
3/26/2023 S&ET-2 PLAN  
4/26/2023 PRE-APP DISC SUBMISSION  
05/17/2023 DEVELOPMENT APPLICATION SUBMITTAL

DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

REVISION SUMMARY  
DATE DESCRIPTION


SITE PLAN

C2.0

PRELIMINARY:  
NOT FOR  
CONSTRUCTION

PROJECT  
**KNOX & AMERICAN II**  
8000 KNOX AVE S, BLOOMINGTON, MN 55431  
**STUART DEVELOPMENT CORPORATION**  
1000 W 40TH STREET MINNEAPOLIS, MN 55420

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.

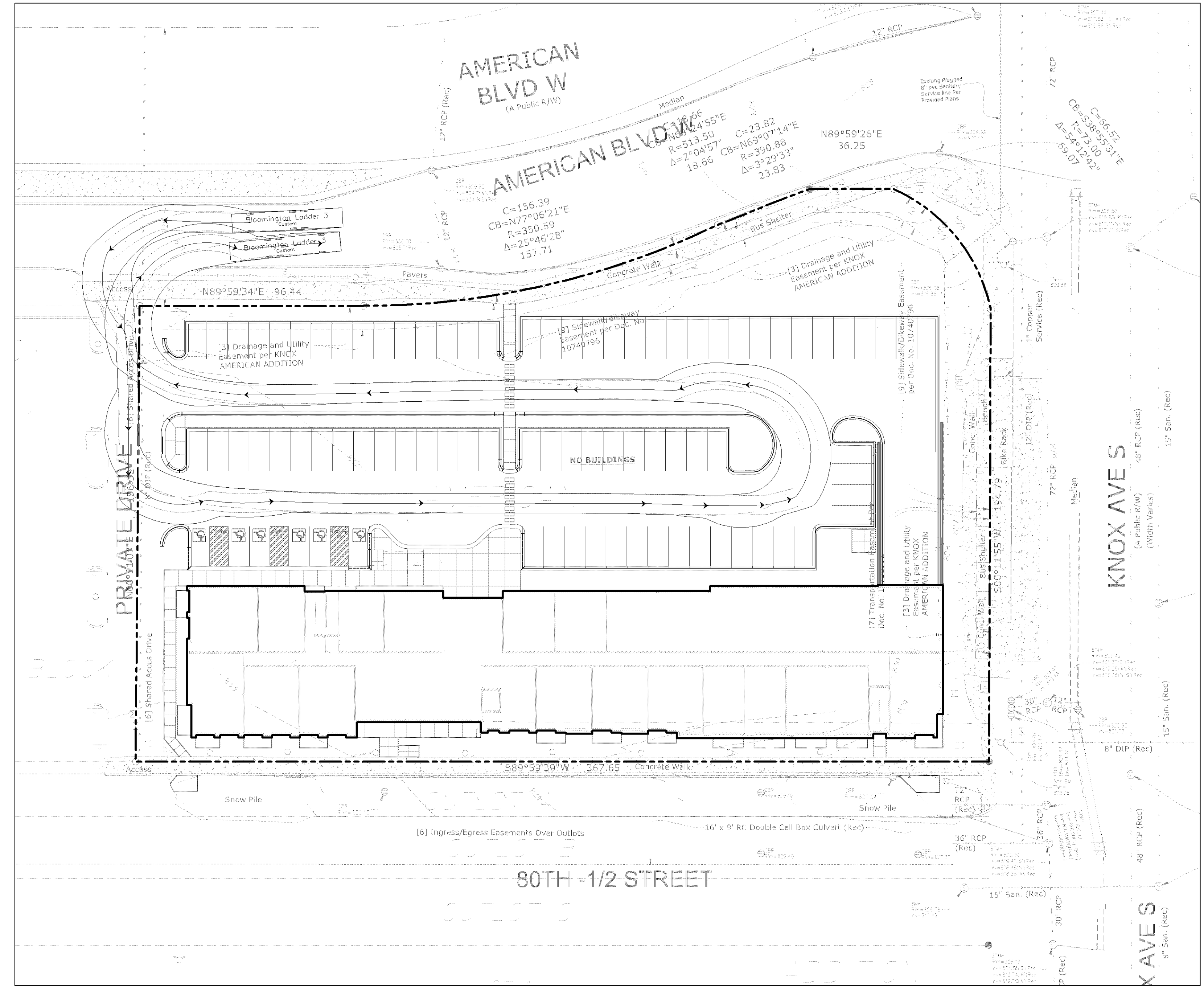
  
Matthew R. Pavlek  
DATE 05/17/23 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
3/8/2023	SKETCH PLAN
4/26/2023	PRE-APP DISC SUBMISSION
05/17/2023	DEVELOPMENT APPLICATION SUBMITTAL

DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

REVISION SUMMARY	
DATE	DESCRIPTION

SITE PLAN - TURNING  
MOVEMENT EXHIBIT

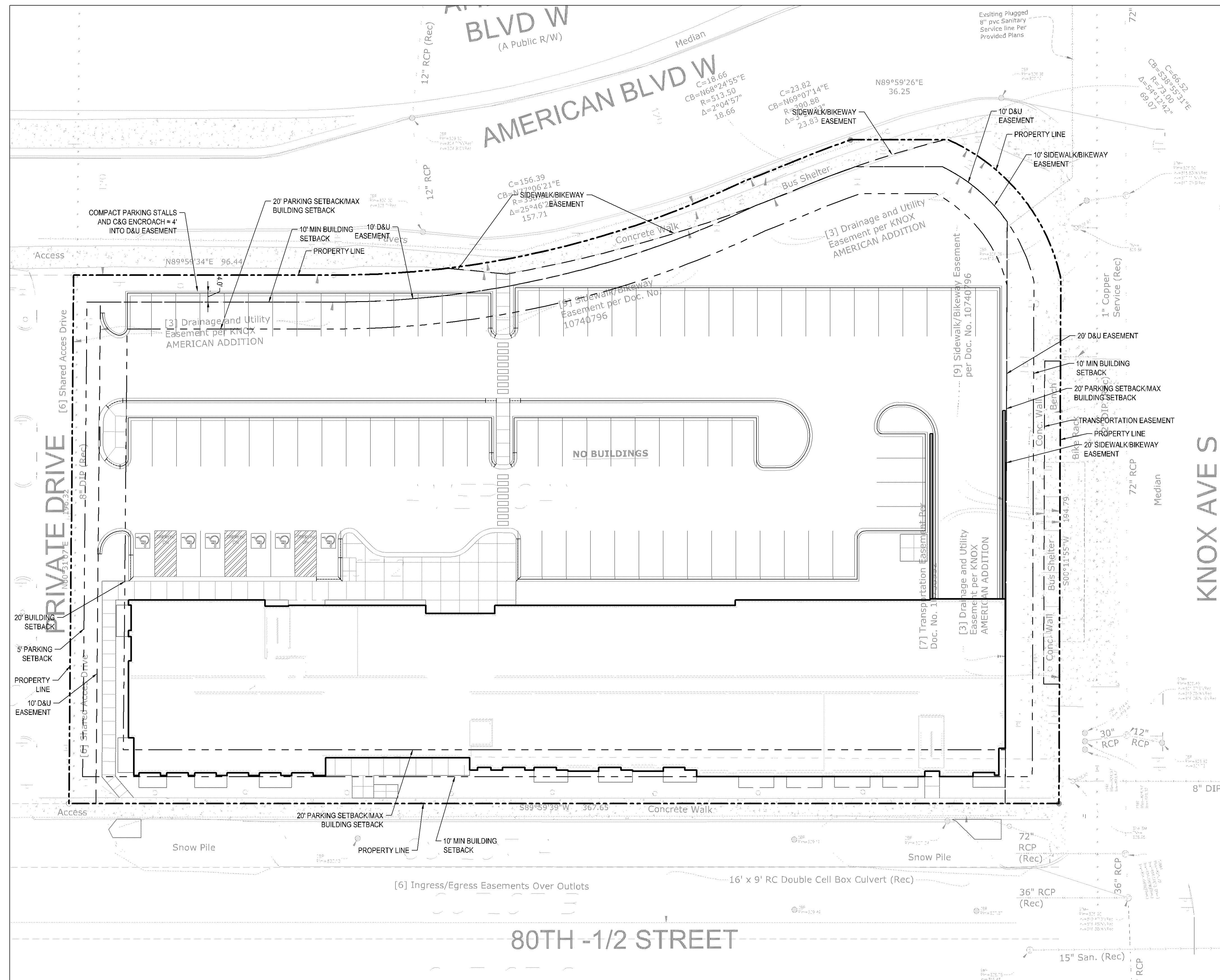


1 TURNING MOVEMENT EXHIBIT - FIRE TRUCK

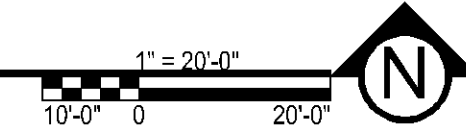
1" = 30'-0"  
15'-0" 0 30'-0" N

1" = 20'-0"  
10'-0" 0 20'-0" N

PL202300068



1 SITE PLAN EASEMENT EXHIBIT



PRELIMINARY:  
NOT FOR  
CONSTRUCTION

LECT  
**KNOX & AMERICAN II**  
3000 KNOX AVE S. BLOOMINGTON, MN 55424

8000 KNOX AVE S, BLOOMINGTON, MN 55431

**SIUARI DEVELOPMENI CORPORATION**  
1000 W 80TH STREET, MINNEAPOLIS, MN 55420

PROJECT

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.

Matthew R. Pavak  
DATE 05/17/23 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
3/9/2023	SKETCH PLAN
4/28/2023	PRE-APP DRC SUBMISSION
05/17/2023	DEVELOPMENT APPLICATION SUBMITTAL


A blank coordinate plane with a horizontal x-axis and a vertical y-axis intersecting at the origin. The axes are labeled with 'x' and 'y' at their ends. There are tick marks on both axes, but no numerical values are provided. The grid consists of a single horizontal line and a single vertical line.

A blank coordinate plane with x and y axes. The x-axis is horizontal and the y-axis is vertical, intersecting at the origin. There are tick marks on both axes, but no numerical labels are provided. The grid lines are thin and light gray.

A blank coordinate plane with a horizontal x-axis and a vertical y-axis intersecting at the origin. The axes are represented by solid lines, and the origin is marked with a small dot. There are no tick marks or labels on the axes.

---

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DRAWN BY: JR, BB      REVIEWED BY: MP  
PROJECT NUMBER: 22027

PROJECT NUMBER: Z3027
REVISION SUMMARY

REVISION SUMMARY	
DATE	DESCRIPTION

DATE	DESCRIPTION

A horizontal number line with arrows at both ends. It is marked with integers from -10 to 10. A point is plotted at the position of -4 and labeled with the number -4.

A blank coordinate plane with x and y axes. The x-axis is horizontal and the y-axis is vertical, intersecting at the origin. There are tick marks on both axes, but no numerical labels are provided. The grid lines are thin and light gray.

	0	8
	9	.


SITE PLAN -

EASEMENT EXHIBIT

**Figure 1**

**APPENDIX**

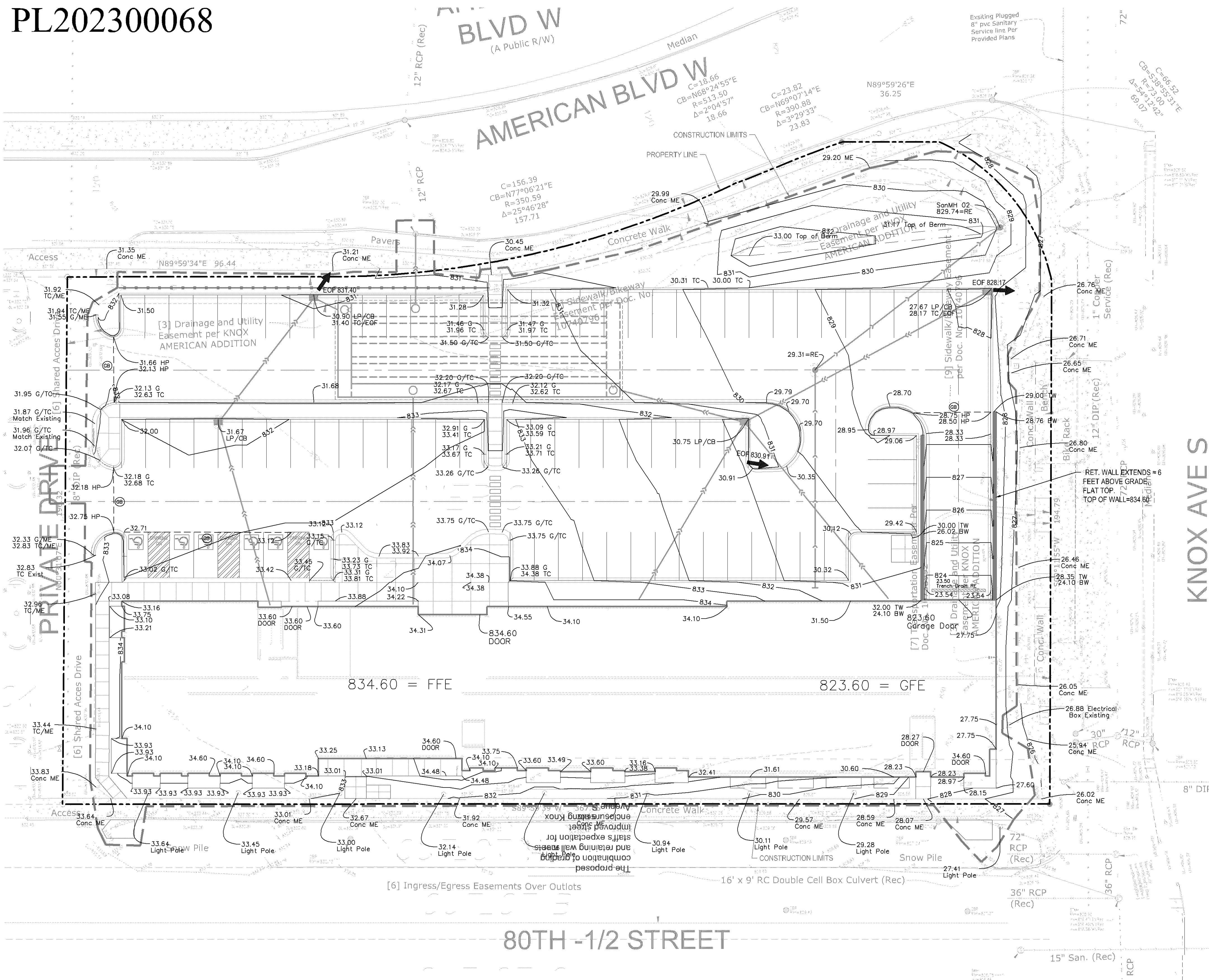
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C2.2 |

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PL202300068



**CITY OF BLOOMINGTON GRADING NOTES:**

1. RESERVED FOR CITY SPECIFIC GRADING NOTES.

**EROSION CONTROL NOTES:**

SEE SWPPP ON SHEETS SW1.0 - SW1.5

**GENERAL GRADING NOTES:**

- CONTRACTOR SHALL VERIFY ALL BUILDING ELEVATIONS, (FFE, LFE, GFE), PRIOR TO CONSTRUCTION BY CROSS CHECKING WITH ARCHITECTURAL, STRUCTURAL AND CIVIL ELEVATIONS FOR EQUIVALENT "100" ELEVATIONS. THIS MUST BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF ANY FOOTING MATERIALS. VERIFICATION OF THIS COORDINATION SHALL BE CONFIRMED IN WRITING BY CIVIL, SURVEYOR, ARCHITECTURAL, STRUCTURAL AND CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.
- THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
- ANY ELEMENTS OF AN EARTH RETENTION SYSTEM AND RELATED EXCAVATIONS THAT FALL WITHIN THE PUBLIC RIGHT OF WAY WILL REQUIRE A "RIGHT OF WAY EXCAVATION PERMIT". CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THIS PERMIT PRIOR TO CONSTRUCTION IF APPLICABLE.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
- PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1.
- PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AND ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
- IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.
- FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
- TOLERANCES**
  - THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
  - THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
  - AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
  - TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- MAINTENANCE**
  - THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
  - CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES. DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEEDED AND MULCHED.
  - WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

**GRADING PLAN LEGEND:**

----- 1125 -----	EX. 1' CONTOUR ELEVATION INTERVAL
----- 1137 -----	1.0' CONTOUR ELEVATION INTERVAL
41.26	SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED)
891.00 GFE	GARAGE FLOOR ELEVATION
891.00 FFE	FINISHED FLOOR ELEVATION
891.00 CB	SPOT GRADE ELEVATION CATCH BASIN
891.00 LP	SPOT GRADE ELEVATION LOW POINT
891.00 HP	SPOT GRADE ELEVATION HIGH POINT
891.00 RE	SPOT GRADE ELEVATION RIM ELEVATION
891.00 G	SPOT GRADE ELEVATION GUTTER
891.00 TC	SPOT GRADE ELEVATION TOP OF CURB
891.00 BW/TW	SPOT GRADE ELEVATION BOTTOM OF WALL/TOP OF WALL
891.00 ME	SPOT GRADE ELEVATION MATCH EXISTING
89	GRADE BREAK - HIGH POINTS
=====	CURB AND GUTTER (T.O = TIP OUT)
→	EMERGENCY OVERFLOW



PRELIMINARY:  
NOT FOR  
CONSTRUCTION

**KNOX & AMERICAN II**  
8000 KNOX AVE S, BLOOMINGTON, MN 55431  
**STUART DEVELOPMENT CORPORATION**  
1000 W 40TH STREET, MINNEAPOLIS, MN 55420

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.

Matthew R. Pavlek  
DATE 05/17/23 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION

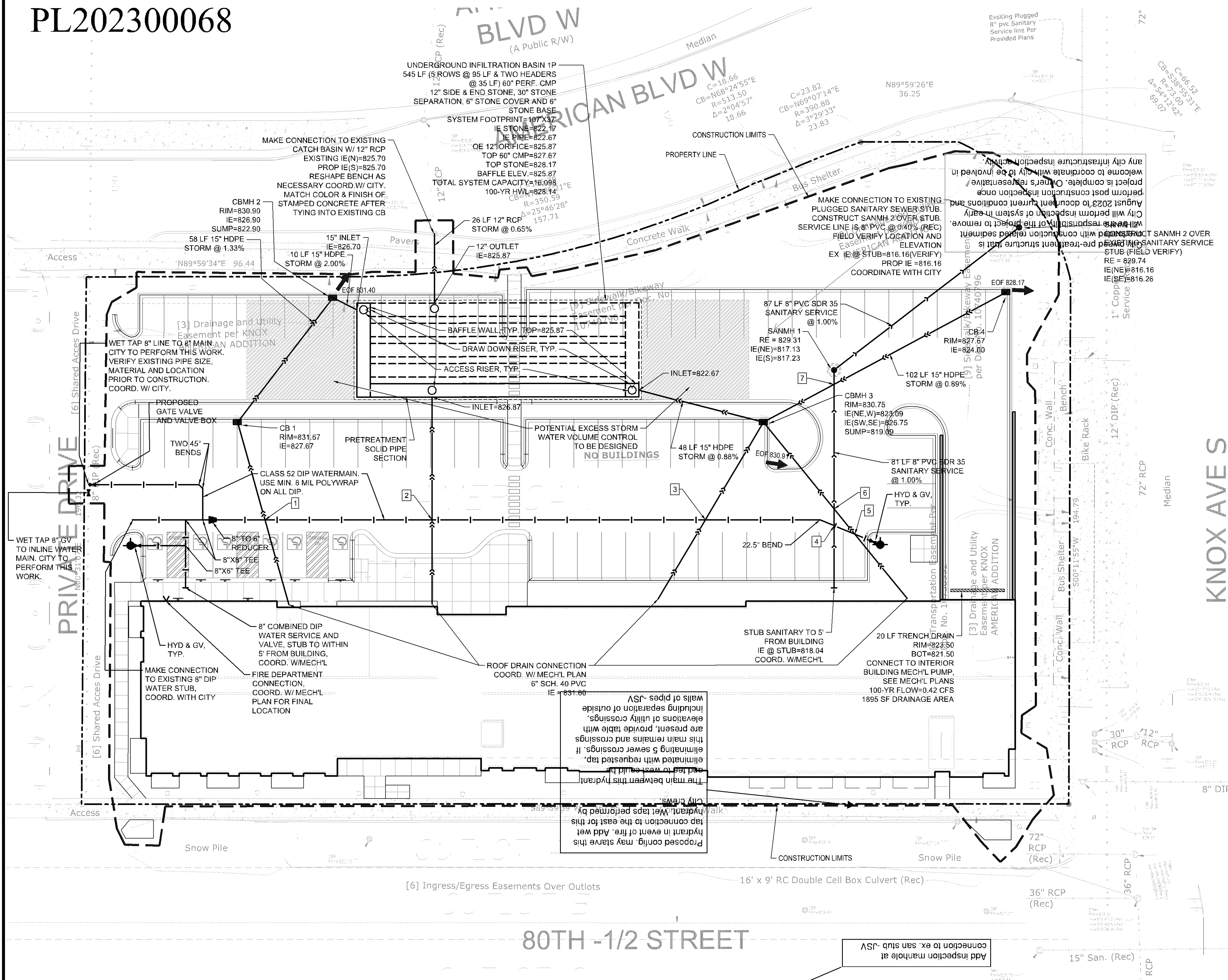
REVISION SUMMARY	
DATE	DESCRIPTION

DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

REVISION SUMMARY	
DATE	DESCRIPTION

**GRADING PLAN**

PL202300068



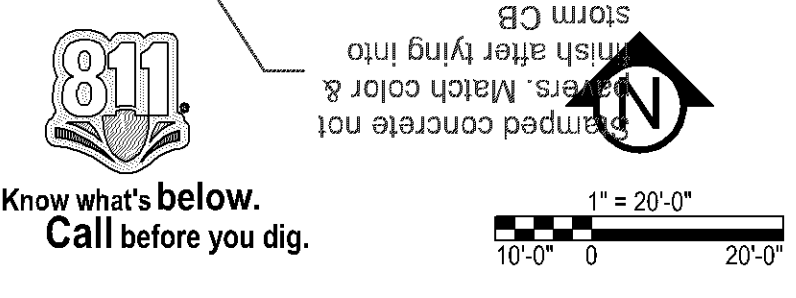
- GENERAL UTILITY NOTES:**
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
  - SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
  - CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
  - UTILITY INSTALLATION 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 (CEAM), AND SHALL CONFORM WITH THE REQUIREMENTS OF THE CITY AND THE PROJECT SPECIFICATIONS.
  - CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
  - ALL WATER PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE (DIP) AWWA C151, ASME B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
  - ALL SANITARY SEWER SHALL BE SDR 26 POLYVINYL CHLORIDE (PVC) ASTM D3034 & F769, OR SCH 40 ASTM D1785, 2665, ASTM F794, 1866) UNLESS OTHERWISE NOTED.
  - ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
  - PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
  - UTILITIES ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS.
  - CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.
  - ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
  - HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
  - A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
  - A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
  - ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
  - CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
  - COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
  - COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
  - ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
  - ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
  - CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
  - CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
  - CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
  - ALL JOINTS AND CONNECTIONS IN STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, OR OTHER STRUCTURES.
  - ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MN RULES, CHAPTER 4714, SECTION 1109.0.
  - FOR ALL SITES LOCATED IN CLAY SOIL AREAS, DRAIN TILE MUST BE INSTALLED AT ALL LOW POINT CATCH BASINS 25' IN EACH DIRECTION. SEE PLAN AND DETAIL. INSTALL LOW POINT DRAIN TILE PER PLANS AND GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS.

- CITY OF BLOOMINGTON UTILITY NOTES:**
- UTILITY AS-BUILTS MUST BE PROVIDED TO THE CITY PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
  - HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
  - UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM SANITARY AND WATER SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.
  - UTILITY AS-BUILTS MUST BE PROVIDED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
  - COMBINATION OF FIRE AND DOMESTIC SERVICE MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.
  - TAPS OF LIVE WATER MAINS ARE DONE BY CITY FORCES. THE CONTRACTOR PAYS FOR AND COORDINATES THIS WORK.
  - CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. A PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT UTILITIES (952-563-4568 FOR PERMIT INFORMATION.
  - UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
  - A MINIMUM 10-FOOT HORIZONTAL SEPARATION AND 18-INCH VERTICAL SEPARATION IS REQUIRED BETWEEN WATER MAIN AND SEWERS.
  - USE CLASS 52 DIP WATER MAIN FOR PIPE 12 INCH DIAMETER AND SMALLER. A MINIMUM 8 MIL POLYWRAP IS REQUIRED ON ALL DIP.
  - ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSI/AWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED PIPES IS NOT ALLOWED.

UTILITY CROSSING INFORMATION		
MAINTAIN MINIMUM 18" OF SEPARATION AT ALL WATERMAIN-SEWER CROSSINGS. INSULATE AS NECESSARY		
UTILITY CROSSING NUMBER	ELEVATION OF OUTER DIAMETER OF PIPE	SEPARATION BETWEEN OUTER DIAMETER OF PIPES [FT] (MIN 18" OR 1.5 FT)
1	BOTTOM OF STORM SEWER=829.8 TOP OF WATER MAIN=825.4	4.4
2	BOTTOM OF STORM SEWER=829.7 TOP OF WATER MAIN=826.0	3.7
3	BOTTOM OF STORM SEWER=829.5 TOP OF WATER MAIN=824.3	5.2
4	BOTTOM OF WATER MAIN=822.4 TOP OF SANITARY SEWER=818.5	3.9
5	BOTTOM OF STORM SEWER=829.8 TOP OF WATER MAIN=822.8	7.0
6	BOTTOM OF STORM SEWER=829.1 TOP OF SANITARY SEWER=818.4	10.7
7	BOTTOM OF STORM SEWER=823.3 TOP OF SANITARY SEWER=818.0	5.3

**UTILITY LEGEND:**

- MANHOLE
- CATCH BASIN
- GATE VALVE AND VALVE BOX
- PROPOSED FIRE HYDRANT
- WATER MAIN
- SANITARY SEWER
- STORM SEWER
- FES AND RIP RAP



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**esc**  
ARCHITECTURE & DESIGN

**PRELIMINARY:  
NOT FOR CONSTRUCTION**

**KNOX & AMERICAN II**  
8000 KNOX AVE S, BLOOMINGTON, MN 55431

**STUDIOS DEVELOPMENT CORPORATION**  
1000 W 40TH STREET, MINNEAPOLIS, MN 55420

PROJECT

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 05/17/23 DRAWN BY JR BB PROJECT NUMBER 23027

ISSUED FOR PERMIT SUBMITTAL SUMMARY

DATE	DESCRIPTION
3/26/2023	DESIGN
4/26/2023	PERMIT SUBMISSION
5/15/2023	PERMIT APPLICATION SUBMITTAL

DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

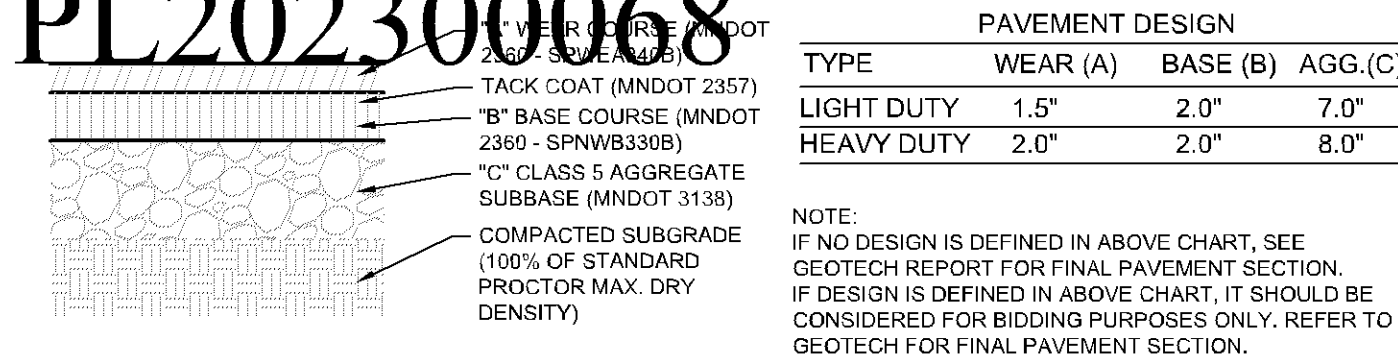
REVISION SUMMARY

DATE	DESCRIPTION

UTILITY PLAN

**C4.0**  
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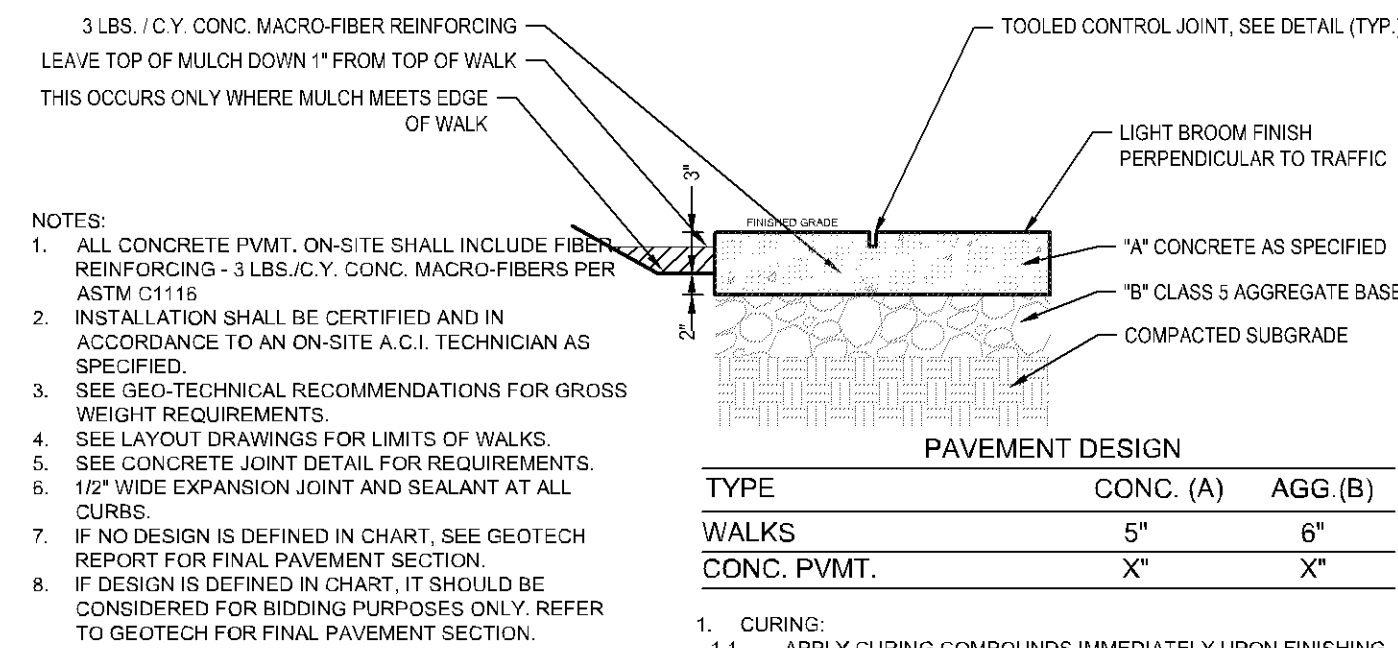
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TYPE	WEAR (A)	BASE (B)	AGG. (C)
LIGHT DUTY	1.5"	2.0"	7.0"
HEAVY DUTY	2.0"	2.0"	8.0"

NOTE:  
IF NO DESIGN IS DEFINED IN ABOVE CHART, SEE GEOTECH REPORT FOR FINAL PAVEMENT SECTION.  
IF DESIGN IS DEFINED IN ABOVE CHART, IT SHOULD BE CONSIDERED FOR BIDDING PURPOSES ONLY. REFER TO GEOTECH FOR FINAL PAVEMENT SECTION.

## 1 BITUMINOUS PAVEMENT - ALL TYPES N T S

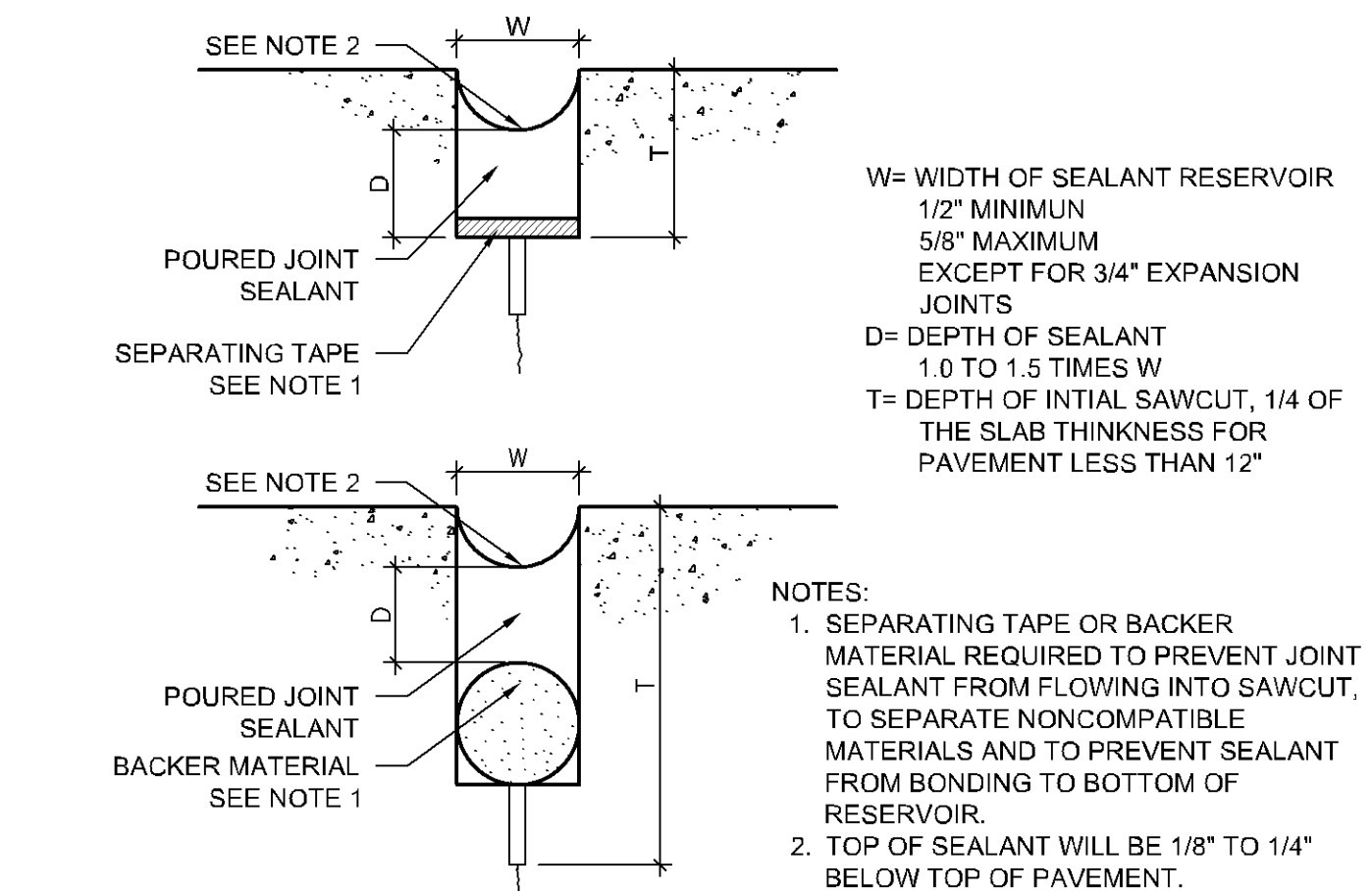


- NOTES:
- ALL CONCRETE PVMT. ON-SITE SHALL INCLUDE FIBER REINFORCING - 3 LBS./CY CONC. MACRO-FIBERS PER ASTM C1116
  - INSTALLATION SHALL BE CERTIFIED AND IN ACCORDANCE TO AN ON-SITE A.C.I. TECHNICIAN AS SPECIFIED.
  - SEE GEO-TECHNICAL RECOMMENDATIONS FOR GROSS WEIGHT REQUIREMENTS.
  - SEE LAYOUT DRAWINGS FOR LIMITS OF WALKS.
  - SEE CONCRETE JOINT DETAIL FOR REQUIREMENTS.
  - 1/2" WIDE EXPANSION JOINT AND SEALANT AT ALL CURBS.
  - IF NO DESIGN IS DEFINED IN CHART, SEE GEOTECH REPORT FOR FINAL PAVEMENT SECTION.
  - IF DESIGN IS DEFINED IN CHART, IT SHOULD BE CONSIDERED FOR BIDDING PURPOSES ONLY. REFER TO GEOTECH FOR FINAL PAVEMENT SECTION.

TYPE	CONC. (A)	AGG. (B)
WALKS	5"	6"
CONC. PVMT.	X"	X"

1. CURING:
- 1.1. APPLY CURING COMPOUNDS IMMEDIATELY UPON FINISHING OF CONC. SURFACE.
  - 1.2. ALL CONC. SURFACES SHALL HAVE CURING COMPOUNDS APPLIED PER ASTM C-309, AT 200 S.F. PER GAL.
  - 1.3. ALL CURING COMPOUNDS SHALL BE TYPE 1 (CLEAR) AND CONTAIN ACRYLIC BASED CLASS B RESTRICTED RESIN SOLIDS.

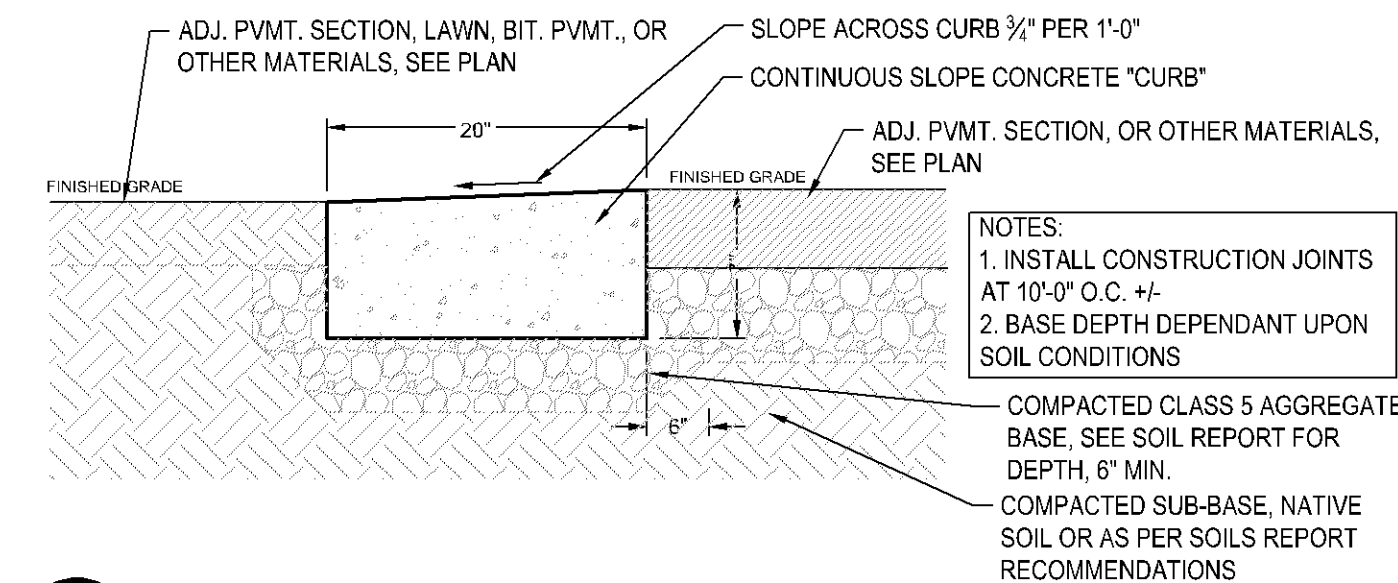
## 2 CONCRETE PVMT./WALK/PAD N T S (PRIVATE PROPERTY)



W= WIDTH OF SEALANT RESERVOIR  
1/2" MINIMUM  
5/8" MAXIMUM  
EXCEPT FOR 3/4" EXPANSION JOINTS  
D= DEPTH OF SEALANT  
1.0 TO 1.5 TIMES W  
T= DEPTH OF INTIAL SAWCUT, 1/4 OF THE SLAB THICKNESS FOR PAVEMENT LESS THAN 12"

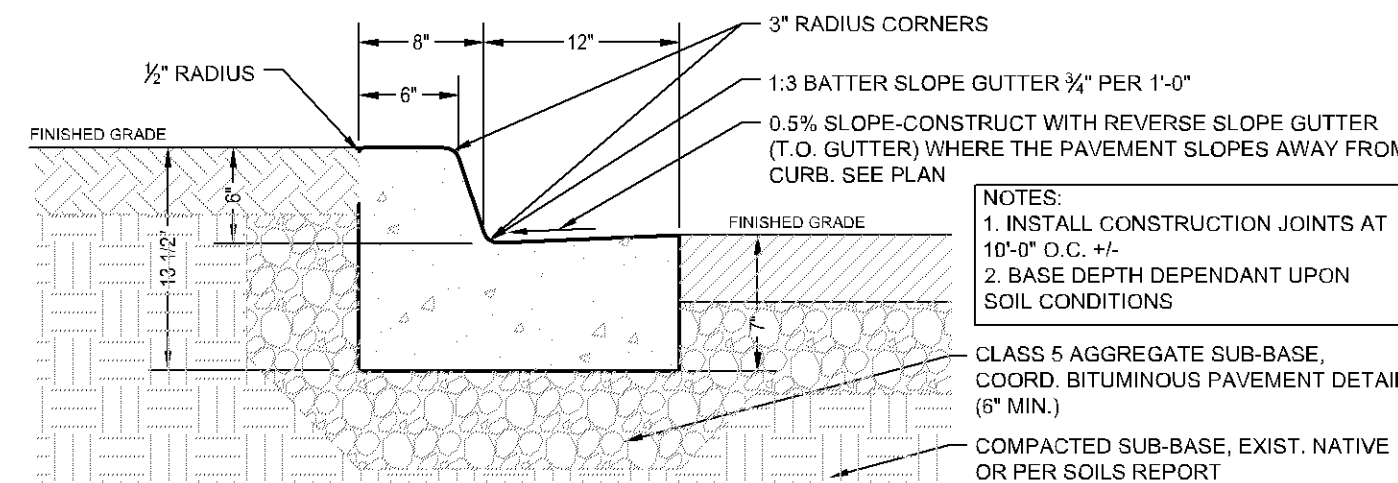
- NOTES:
- SEPARATING TAPE OR BACKER MATERIAL REQUIRED TO PREVENT JOINT SEALANT FROM FLOWING INTO SAWCUT, TO SEPARATE NONCOMPATIBLE MATERIALS AND TO PREVENT SEALANT FROM BONDING TO BOTTOM OF RESERVOIR.
  - TOP OF SEALANT WILL BE 1/8" TO 1/4" BELOW TOP OF PAVEMENT.

## 3 JOINT SEALANT DETAILS N T S



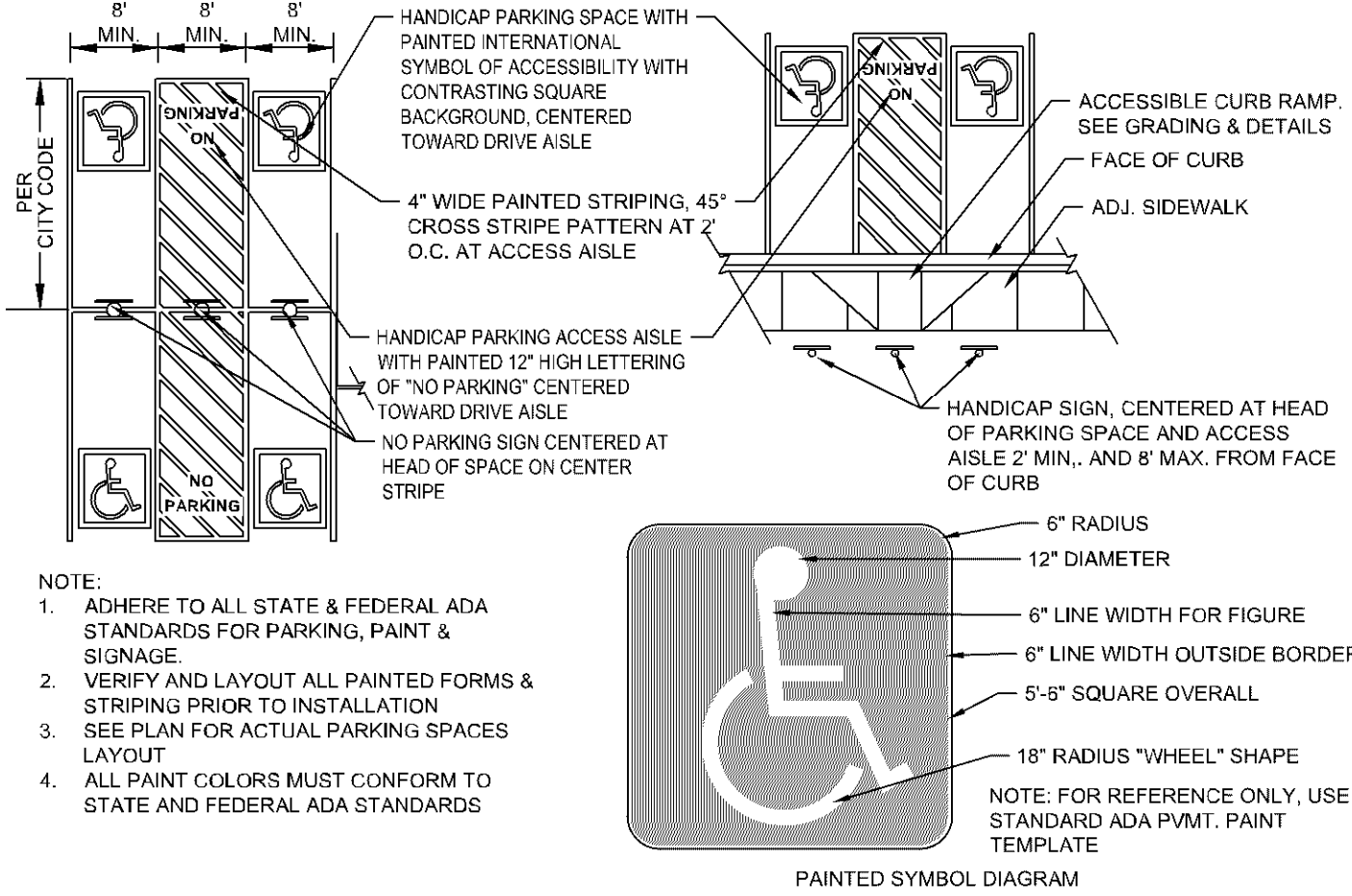
- NOTES:
- INSTALL CONSTRUCTION JOINTS AT 10'-0" O.C. +/-
  - BASE DEPTH DEPENDANT UPON SOIL CONDITIONS
- COMPACTED CLASS 5 AGGREGATE BASE, SEE SOIL REPORT FOR DEPTH, 6" MIN.
- COMPACTED SUB-BASE, NATIVE SOIL OR AS PER SOILS REPORT RECOMMENDATIONS

## 4 RIBBON CURB N T S

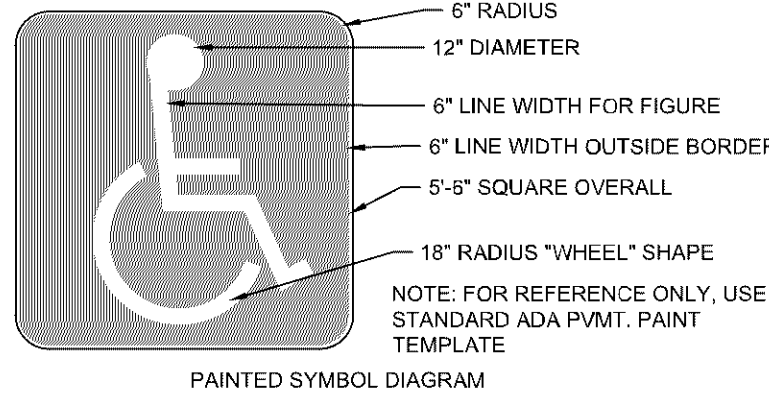


- NOTES:
- INSTALL CONSTRUCTION JOINTS AT 10'-0" O.C. +/-
  - BASE DEPTH DEPENDANT UPON SOIL CONDITIONS
- CLASS 5 AGGREGATE SUB-BASE, COORD. BITUMINOUS PAVEMENT DETAIL (6" MIN.)
- COMPACTED SUB-BASE, EXIST. NATIVE OR PER SOILS REPORT

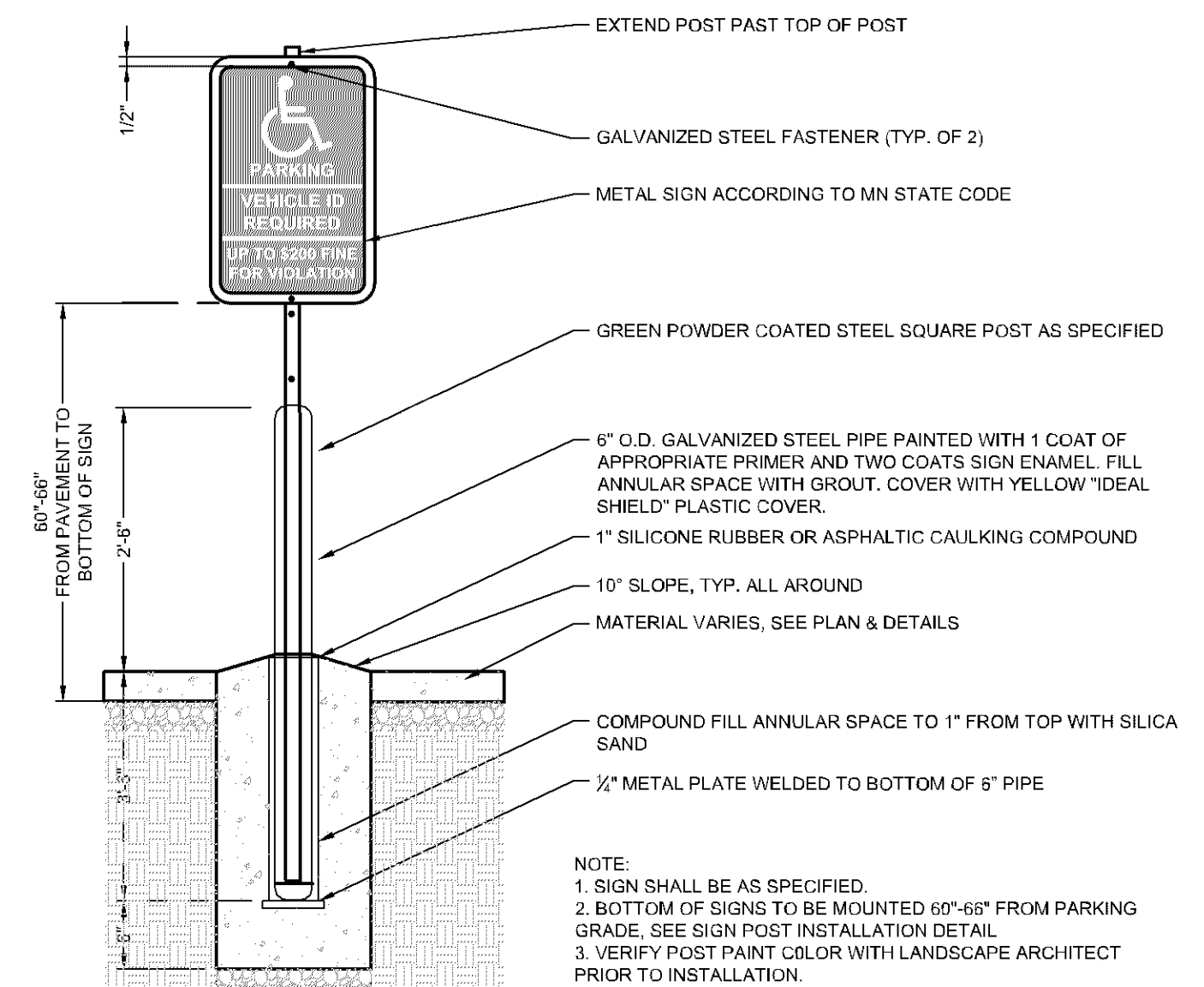
## 5 B-612 CONCRETE CURB AND GUTTER N T S



- NOTE:
- ADHERE TO ALL STATE & FEDERAL ADA STANDARDS FOR PARKING, PAINT & SIGNAGE.
  - VERIFY AND LAYOUT ALL PAINTED FORMS & STRIPING PRIOR TO INSTALLATION.
  - SEE PLAN FOR ACTUAL PARKING SPACES LAYOUT.
  - ALL PAINT COLORS MUST CONFORM TO STATE AND FEDERAL ADA STANDARDS.

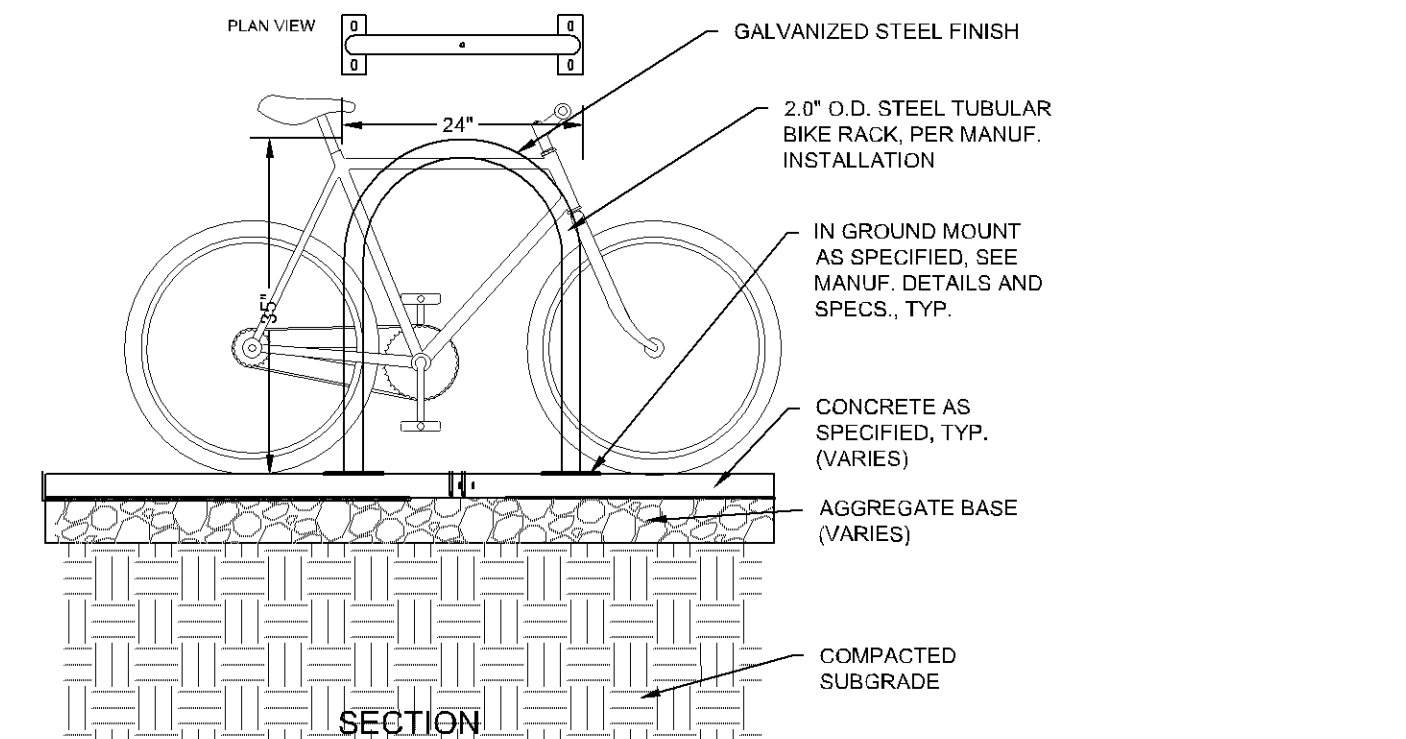


## 6 ACCESSIBLE PARKING PAVEMENT MARKING N T S



- NOTE:
- SIGN SHALL BE AS SPECIFIED.
  - BOTTOM OF SIGNS TO BE MOUNTED 60"-68" FROM PARKING GRADE. SEE SIGN POST INSTALLATION DETAIL.
  - VERIFY POST PAINT COLOR WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

## 7 ACCESSIBLE SIGN AND POST N T S

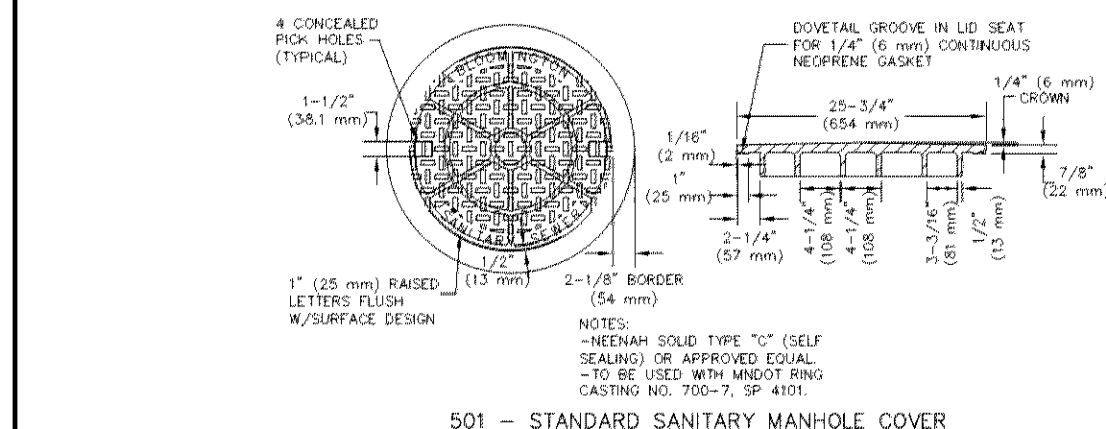


- NOTES:
- SEE GEO-TECHNICAL REPORT FOR FOOTING AND BASE MATERIAL RECOMMENDATIONS.
  - SUBMIT SHOP DRAWINGS AND FINISH COLOR SAMPLES TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
  - COORDINATE INSTALLATION OF SLEEVES AND APPURTENANCES WITH THE MANUFACTURERS RECOMMENDATIONS.
  - CAST IN CONCRETE INSTALLATION UNLESS OTHERWISE NOTED.
  - TYPE: DOUBLE SIDED PARKING

## 8 BICYCLE RACK - HOOP STYLE N T S

### GENERAL DETAILS NOTES:

CONTRACTOR SHALL REVIEW ALL CIVIL AND ARCHITECTURAL DETAILS PRIOR TO WORK. ANY REDUNDANT, CONTRADICTIONARY OR CONFLICTING INFORMATION PRESENTED IN ANY PLAN OR DETAIL THROUGHOUT THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT AND CIVIL ENGINEER AND RESOLVED PRIOR TO WORK COMMENCING.

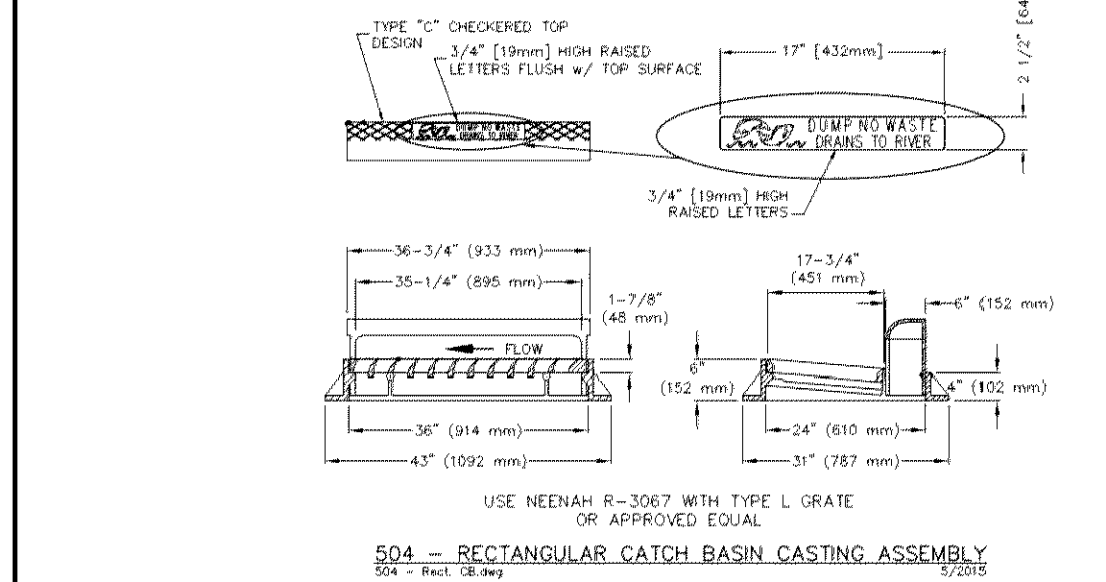


NOTES:

- MINIMUM SOLID TYPE "C" (SELF SEALING) OR APPROVED EQUAL.
- TO BE USED WITH MANDOT RING CASTING NO. 700-7, (SP. 4101).

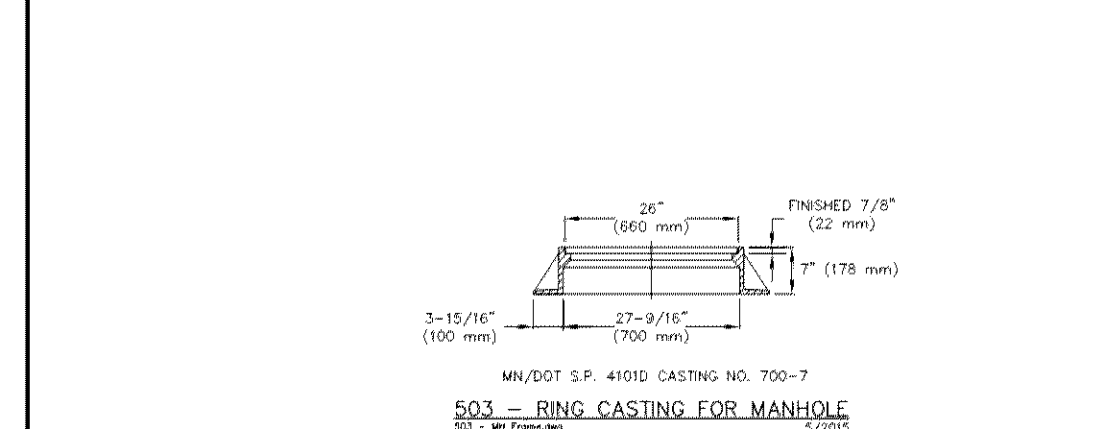
501 - STANDARD SANITARY MANHOLE CASTING

ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 5/15/2015 LAST REVISED BY: KBO
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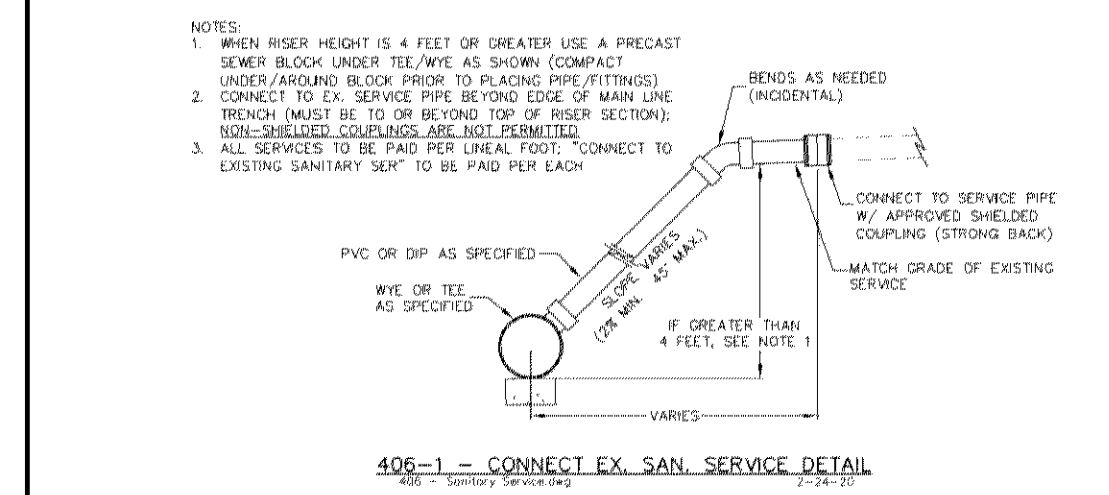
504 - RECTANGULAR CATCH BASIN CASTING ASSEMBLY

ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 5/15/2015 LAST REVISED BY: KBO
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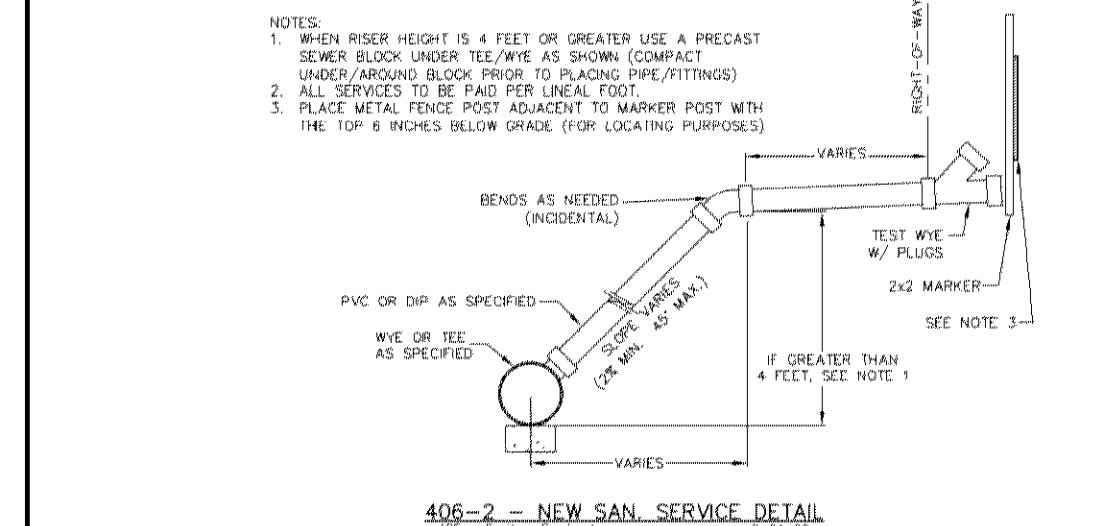


503 - RING CASTING FOR MANHOLE

ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 5/15/2015 LAST REVISED BY: KBO
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406-1 - CONNECT EX. SAN. SERVICE DETAIL



406-2 - NEW SAN. SERVICE DETAIL

ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 2/24/2020 LAST REVISED BY: KBO
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NOTE: IF A SEWER MAIN IS CONNECTED MORE THAN 24" ABOVE THE INVERT OF THE OUTGOING SEWER, CONNECTION SHALL BE AT LEAST OF AN OUTSIDE DROP. SEE DETAIL THIS SHEET.

NOTE: FROM GROUND TO TOP OF CONNECTION THROUGH LIFTED HOLES WHICH PENETRATE THROUGH CONCRETE WALLS ARE NOT PERMITTED.

NOTE: STEPS ARE NOT PERMITTED IN MANHOLES.


NOTE: CHIMNEY TEAL REQUIRED. SEE DETAIL 404.

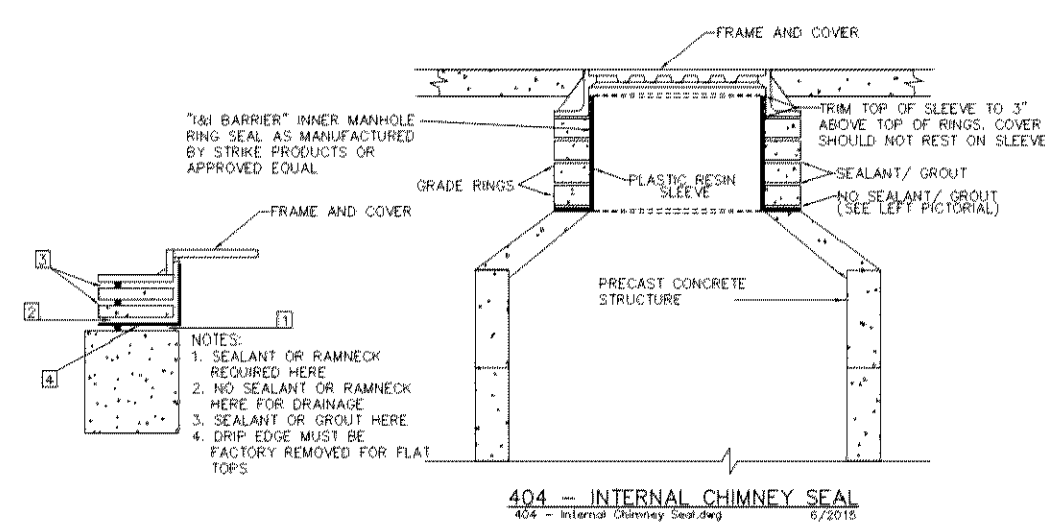
REVISIONS:


1. MIN/NOT 5" 4.010 2" ADJUSTING RINGS AS NEEDED [6" MIN TO 12" MAX]. SET EACH RING IN FULL BED OF MORTAR.
2. 15" SHORT CONE OR FLAT TOP ARE ACCEPTABLE. A CENTER HO ACCESS IS REQUIRED.
3. 12" TOP SECTION REQUIRED.
4. USE ONLY PRECAST SECTIONS, NO BRICK OR BLOCK.
5. 8" CAST-IN-PLACE CONCRETE OR 6" PRECAST REINFORCED CONCRETE (4" MINIMUM OD).
6. CONCRETE MORTAR ALL AROUND.
7. CLEAN CONNECTION TO BEAR AGAINST FIRM UNDISTURBED SOIL.
8. PROVIDE WATER TIGHT JOINT CONNECTIONS.
9. DETAIL THIS SHEET.
10. 10" RING LUGGET.
11. FOR CONNECTION TO EXISTING M.W.'S, CORE DRILL OPENING AND PROVIDE PIPE B WATER TIGHT CONNECTOR.
12. 18" SAND OR FOUNDATION MATERIAL.
13. UNDISTURBED SOIL OR COMPACTED SUBGRADE.

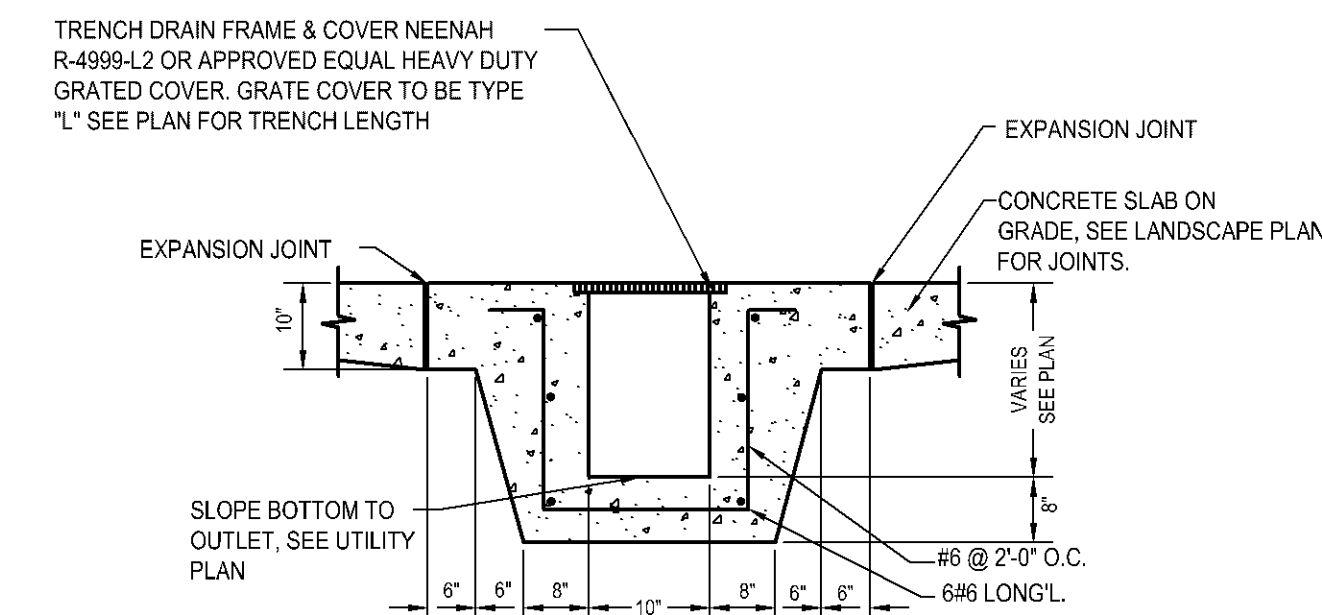
400 STD. SANITARY SEWER M.W.

100 - 100 300 400 500 600 700 800 900 1000

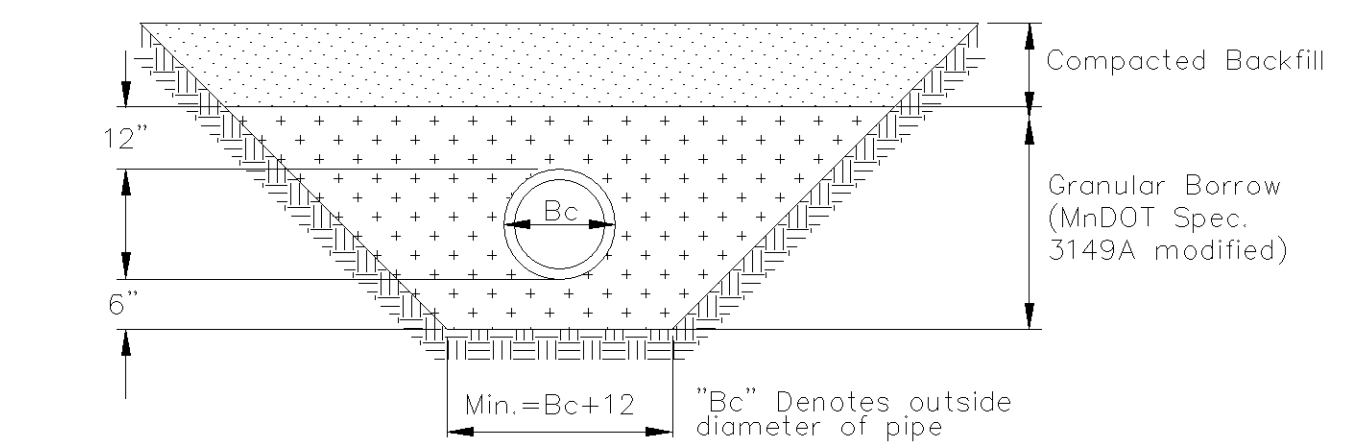
H:\CAD_CDM\Details Updated\400 - SAN SEWER complete\400 - Std San MH	
 <p>CITY OF <b>BLOOMINGTON</b> MINNESOTA</p> <p>ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT</p>	<p>1700 W. 64TH ST BLOOMINGTON, MN 55431 Phone: (952) 563-3700</p> <p>400 - Std San MH</p> <p>LAST REVISED: 2/27/2023 LAST REVISED BY: KBO</p>



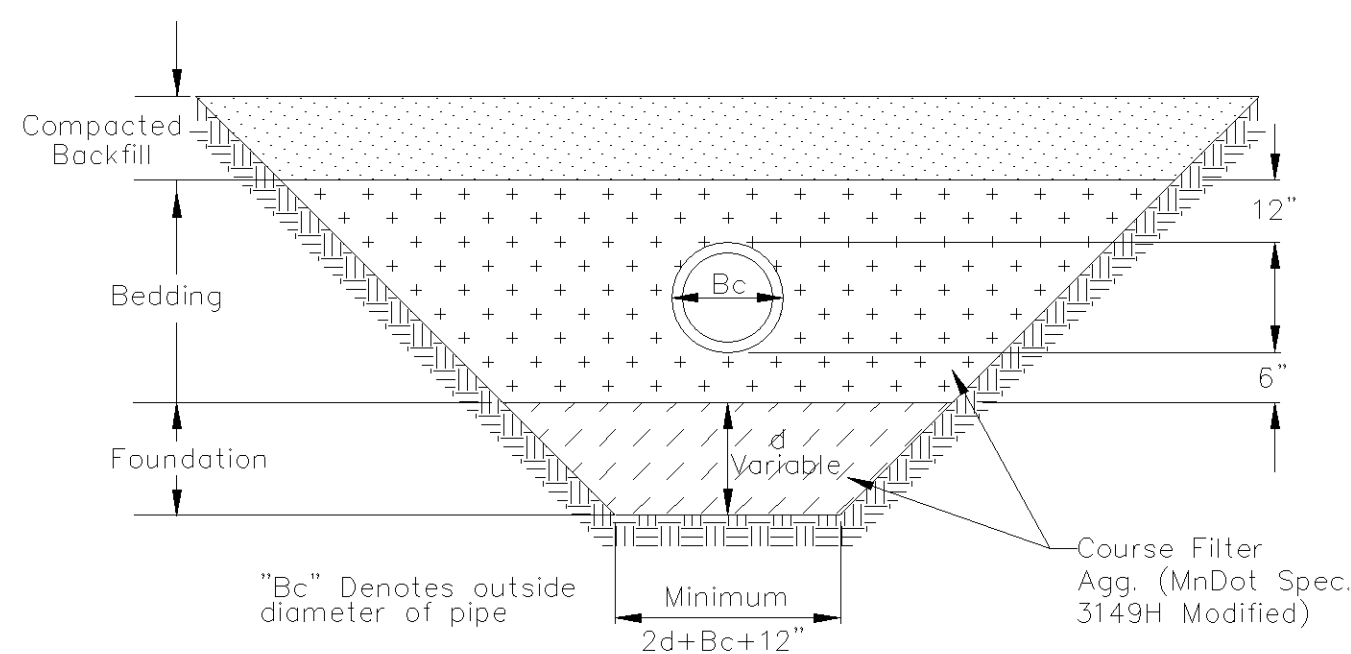
W:\Cad_Comm\Default Updated\40 - SAN SEWER\40a - Internal Chimney Seal			
 <p style="text-align: center;"><b>BLOOMINGTON</b> MINNESOTA</p>	<div style="display: flex; justify-content: space-between;"> <div> <p>1300 W. WYKE ST. CHICAGO, ILL. 60643 PHONE: (800) 542-8100</p> </div> <div style="text-align: right;"> <p><b>40a - Internal Chimney Seal</b></p> </div> </div>		
<p><b>ENGINEERING DIVISION</b> <b>PUBLIC WORKS DEPARTMENT</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <p>LAST REVISED 6/15/2015</p> </td> <td style="width: 50%; padding: 5px;"> <p>LAST REVISED BY: ABO</p> </td> </tr> </table>	<p>LAST REVISED 6/15/2015</p>	<p>LAST REVISED BY: ABO</p>
<p>LAST REVISED 6/15/2015</p>	<p>LAST REVISED BY: ABO</p>		



1 TRENCH DRAIN  
N T S

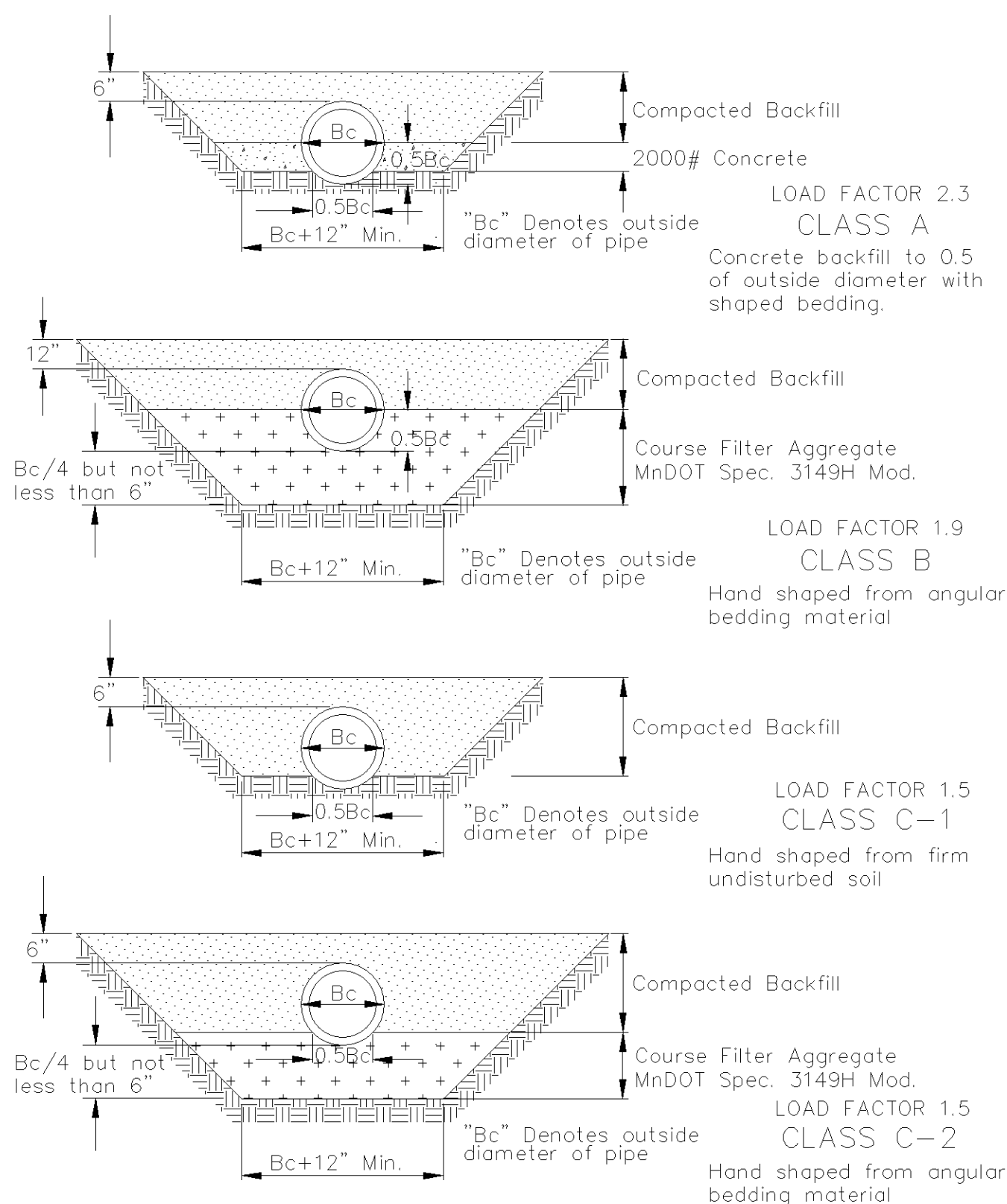


## PIPE FOUNDATION & BEDDING IN GOOD SOILS

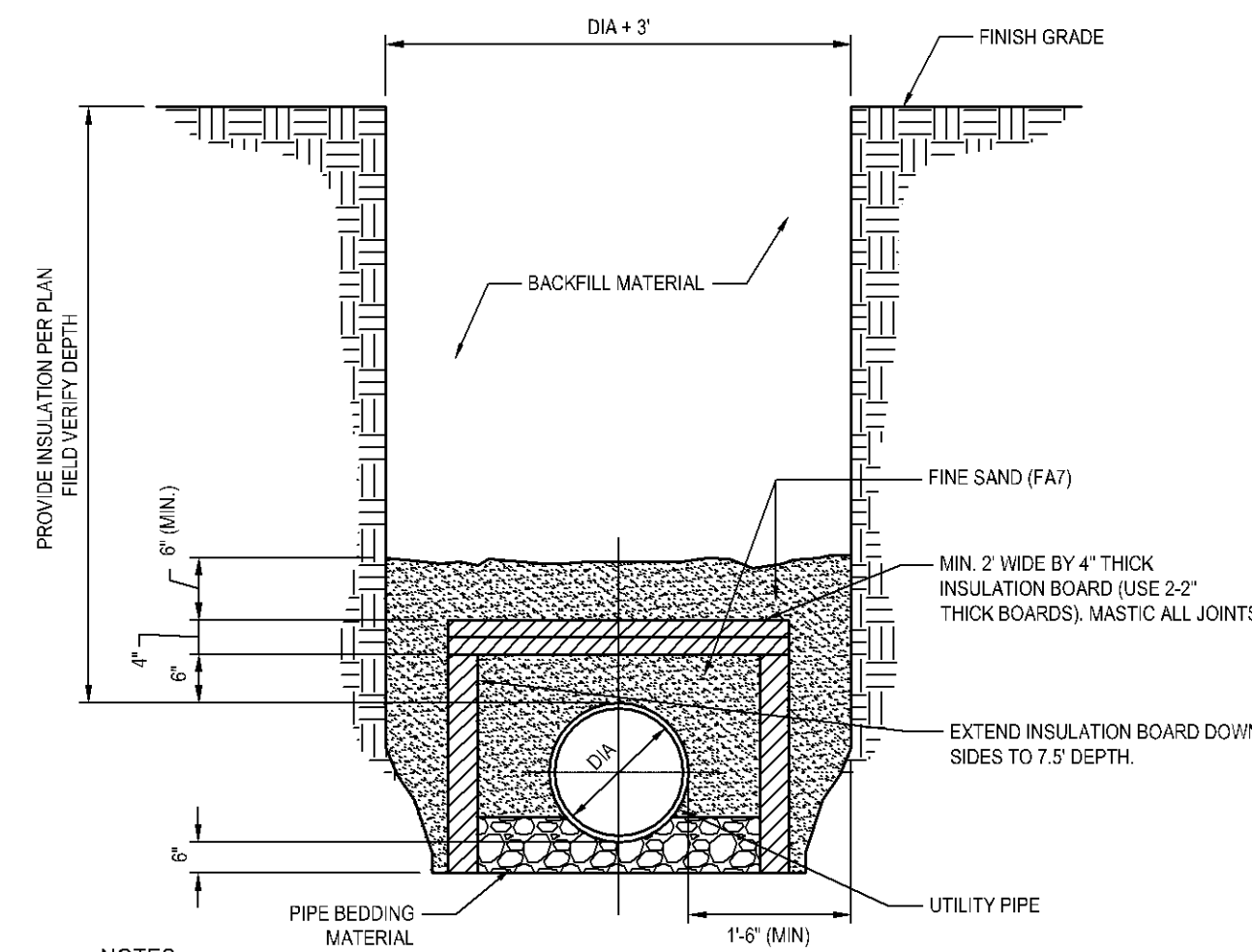


## PIPE FOUNDATION & BEDDING IN POOR SOILS

2 PIPE BEDDING - PVC  
NTS



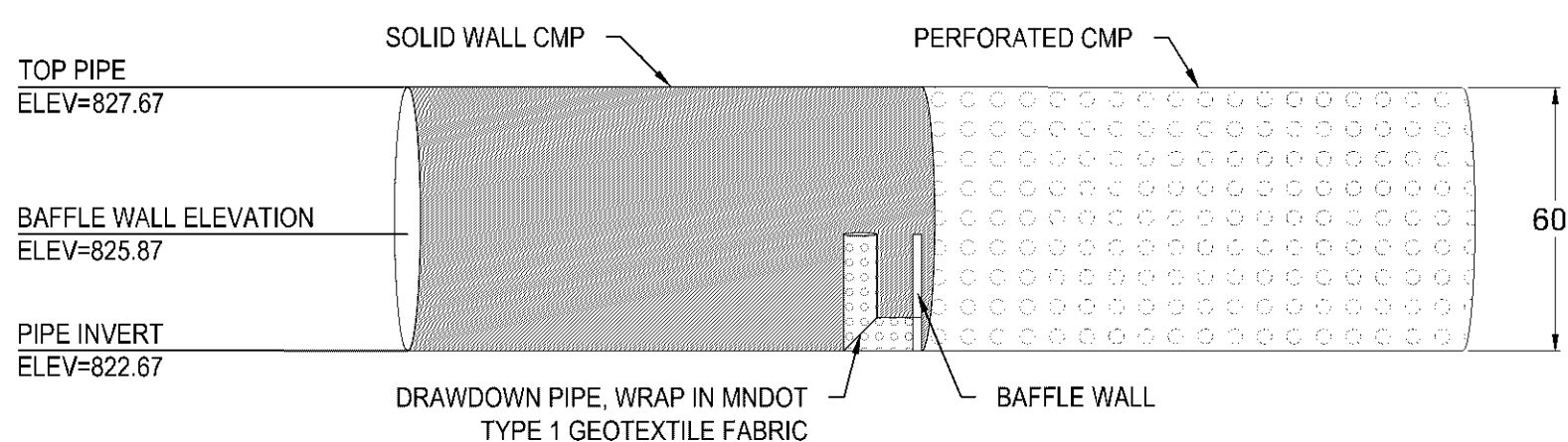
3 PIPE BEDDING - RCP & DIP  
NTS



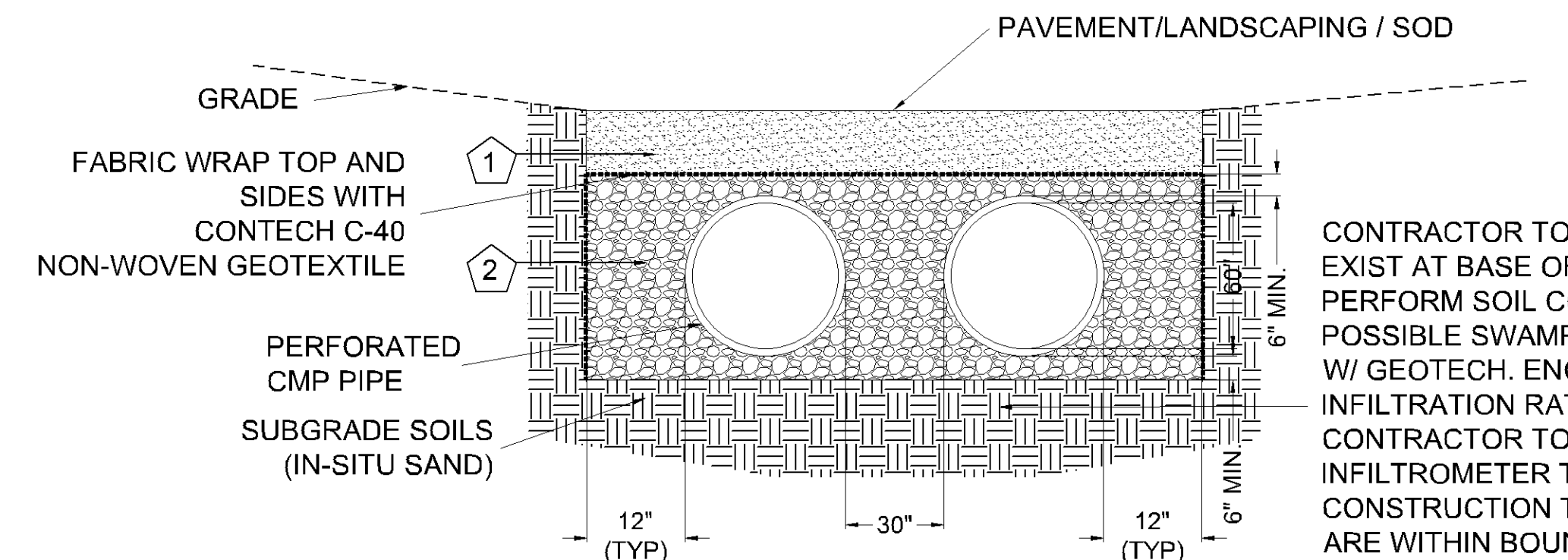
**NOTES:**

1. INSULATION BOARD TO BE CLOSED CELL, EXTRUDED POLYSTYRENE FOAM MEETING ASTM 578, TYPE VI, 40PSI COMPRESSING STRENGTH (ASTM D1621) 0.1%MAX. WATER ABSORPTION (ASTM C272).
2. BACKFILL MATERIAL AROUND INSULATION MUST BE FINE SAND FREE FROM ROOT, ORGANIC MATERIAL, OR OTHER INJURIOUS MATERIALS.
3. OVERLAP ALL INSULATION BOARD JOINTS.


## 4 UTILITY PIPE INSULATION DETAIL



5 DRAWDOWN RISER DETAIL  
NTS



## SECTION DETAIL

- KEY**  NTS
1. TOPSOIL
2. FREE DRAINING ANGULAR WASHED STONE 3/4" - 2" PARTICLE SIZE (NON CARBONATE).  
INSTALL TO MIN. 95% STANDARD DENSITY PER AASHTO T99.

## CONSTRUCTION SEQUENCING

- |   |   |
|---|---|
| 1. INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION. | 9. PLANT AND MULCH SITE.  |
| 2. ALL DOWN-GRADIENT PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.                                  | 10. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.  |
| 3. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.   | <u>GENERAL NOTES</u>  |
| 4. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.                            | 1. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION. |
| 5. PERFORM ALL OTHER SITE IMPROVEMENTS.   | 2. GRADING OF RETENTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTATION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.  |
| 6. SEED AND MULCH ALL AREAS AFTER DISTURBANCE.  | 3. ALL SUB MATERIALS BELOW THE SPECIFIED RETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.  |
| 7. CONSTRUCT RETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.   |   |
| 8. IMPLEMENT TEMPORARY AND PERMANENT EROSION CONTROL PRACTICES.   |   |

## 6 UNDERGROUND INFILTRATION SYSTEM

PRELIMINARY:  
NOT FOR  
CONSTRUCTION

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.

  
Matthew R. Pavek  
DATE 05/17/23 LICENSE NO. 44263

## ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
3/9/2023	SKETCH PLAN
4/26/2023	PRE-APP DRC SUBMISSION
05/17/2023	DEVELOPMENT APPLICATION SUBMITTAL


DRAWN BY: JR, BB      REVIEWED BY: MP  
PROJECT NUMBER: 23027

## REVISION SUMMARY

[illegible]



I HEREBY CERTIFY THAT THIS PLAN,  
SPECIFICATION, OR REPORT WAS  
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Matthew R. Pavek  
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## ISSUE/SUBMITTAL SUMMARY

[illegible]

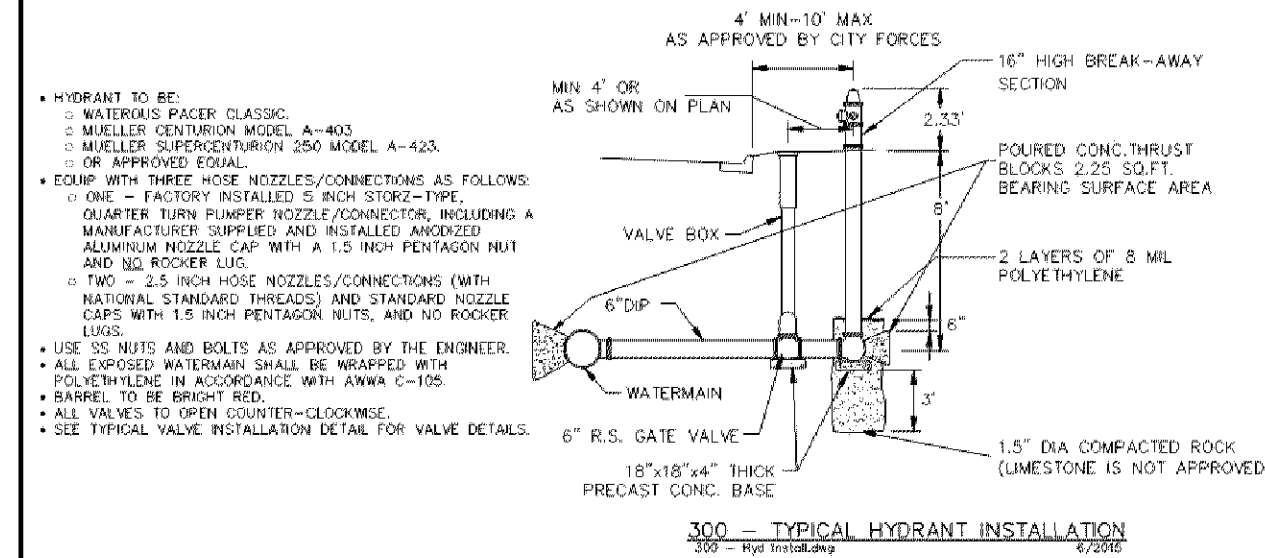
DRAWN BY: JR, BB      REVIEWED BY: MP  
PROJECT NUMBER: 23027

## REVISION SUMMARY

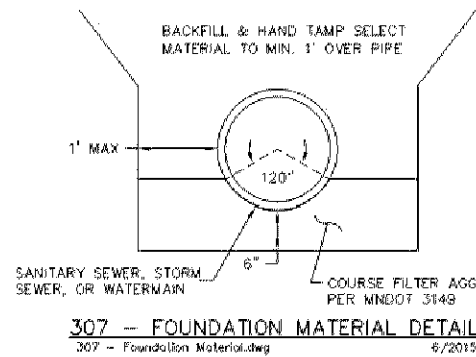
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CIVIL DETAILS

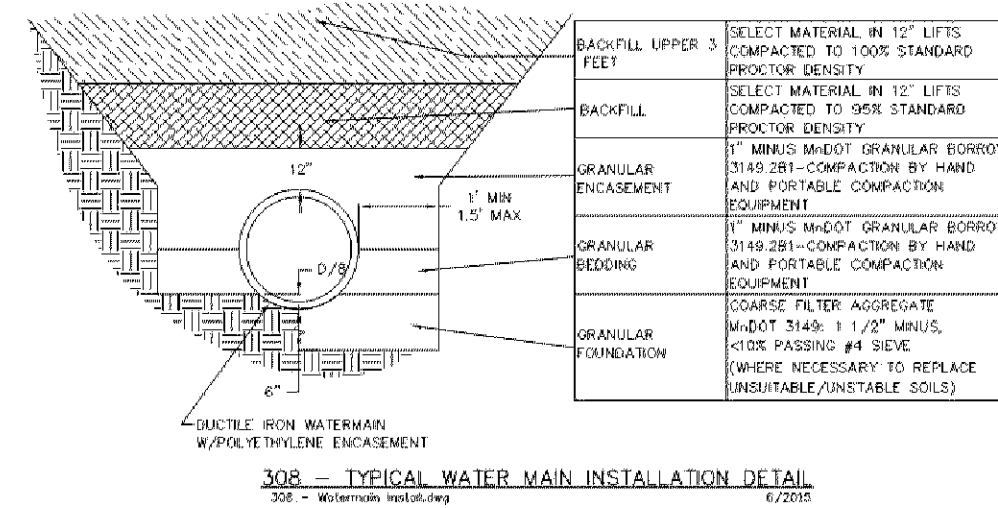
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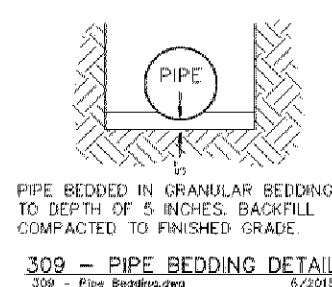
W:\CAP_CDDM\Details\Updated\300 - WATER\300 - Hyd Install OF BY <b>BLOOMINGTON</b> NEWSPORT		1700 N. 30TH ST BLOOMINGTON, IN 47403 (PHONE) (317) 344-3371	PLATE NAME <b>300 - Hyd Install</b>
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT		LAST REVISED: 2/24/2023 LAST REVISED BY: KBC	




H:\Cod_Comm\Details\updates\0 - 300 - WATER\307 - Foundation Material	
 <b>BLOOMINGTON</b> IN 47403 PHONE: (317) 842-0700	<b>307 - Foundation Material</b>
<b>ENGINEERING DIVISION</b> <b>PUBLIC WORKS DEPARTMENT</b>	LAST REVISED: 6/15/2015 LAST REVISED BY: KRG



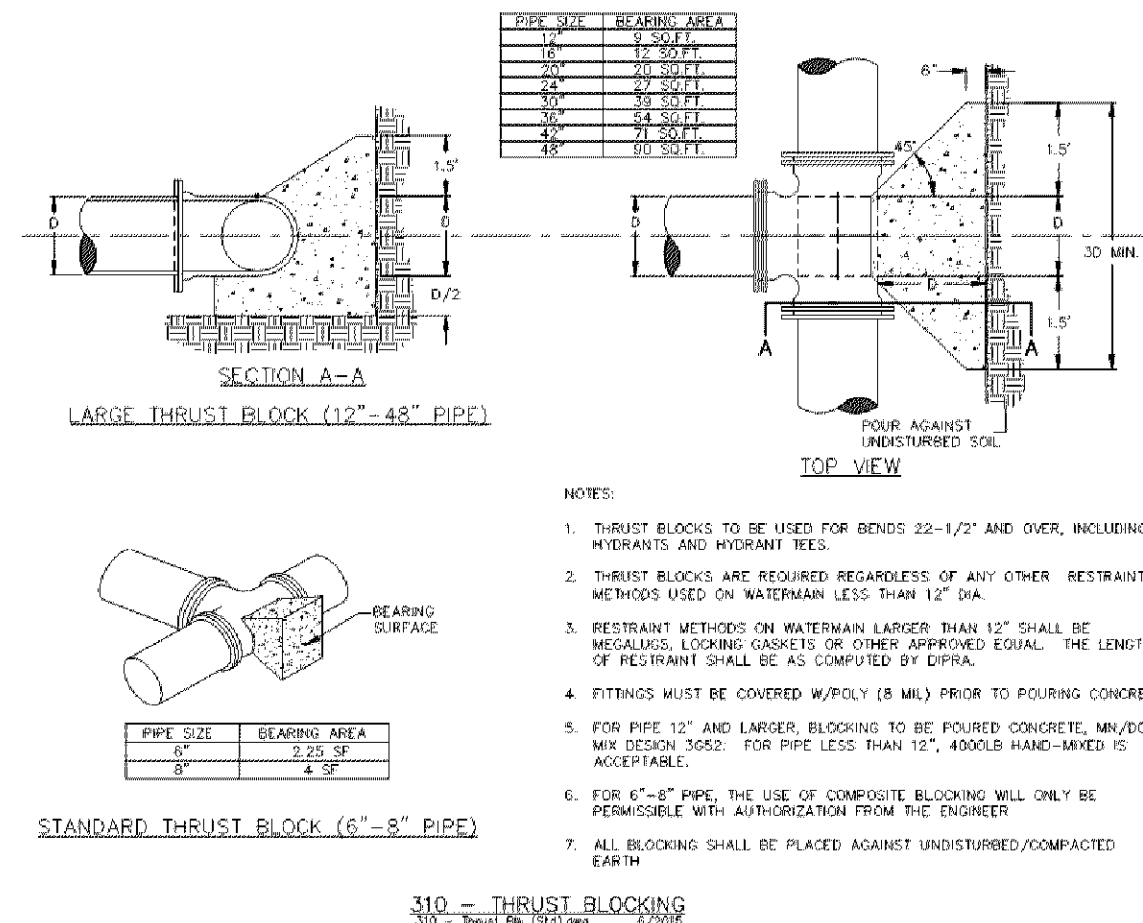
CITY OF BLOOMINGTON MINNEAPOLIS		308 - Watermain Install	
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT		LAST REVISED: 6/15/2015 LAST REVISION BY: KRO	





**BLOOMINGTON**  
 MINNESOTA  
 1750 W. 50TH ST  
 ST. CROIX COUNTY, MN 55411  
 PHONE (952) 553-8700

**ENGINEERING DIVISION**  
**PUBLIC WORKS DEPARTMENT**

LAST REVISED: 6/15/2015  
 LAST REVISED BY: KEO




**CITY OF BLOOMINGTON**  
 MISSISSIPPI  
 1700 W. MAIN ST.  
 BLOOMINGTON, MS 38901  
 PHONE: (662) 553-8700

**ENGINEERING DIVISION**  
**PUBLIC WORKS DEPARTMENT**

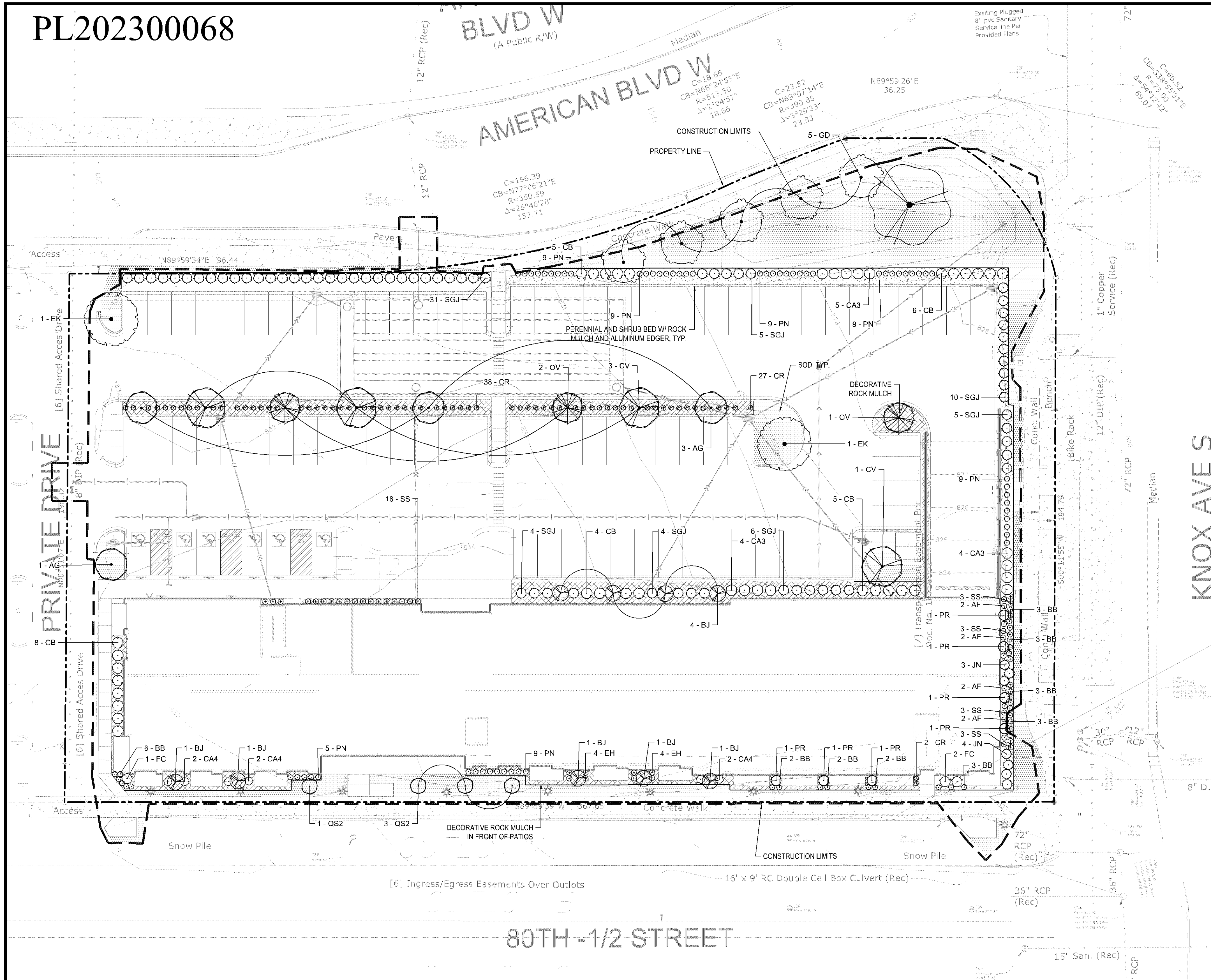
310 - Thrust Blocking

LAST REVISED: 3/1/2023  
 LAST REVISED BY: KRG

This detail was updated on 2/24/23. Replace this detail with the revised detail.



PL202300068



LANDSCAPE NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. WHERE SHOWN, SHRUB & PERENNIAL BEDS SHALL BE MULCHED WITH 4" DEPTH (MINIMUM AFTER INSTALLATION AND/OR TOP DRESSING OPERATIONS) OF DECORATIVE ROCK MULCH.
3. ALL TREES SHALL BE MULCHED WITH SHREDDED CEDAR MULCH TO OUTER EDGE OF SAUCER OR TO EDGE OF PLANTING BED, IF APPLICABLE. ALL MULCH SHALL BE KEPT WITHIN A MINIMUM OF 2" FROM TREE TRUNK.
4. IF SHOWN ON PLAN, RANDOM SIZE LIMESTONE Boulders COLOR AND SIZE TO COMPLIMENT NEW LANDSCAPING. OWNER TO APPROVE BOULDER SAMPLES PRIOR TO INSTALLATION.
5. PLANT MATERIALS SHALL CONFORM WITH THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND SHALL BE OF HARDY STOCK, FREE FROM DISEASE, DAMAGE AND DISFIGURATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PLUMPNESS OF PLANT MATERIAL FOR DURATION OF ACCEPTANCE PERIOD.
6. UPON DISCOVERY OF A DISCREPANCY BETWEEN THE QUANTITY OF PLANTS SHOWN ON THE SCHEDULE AND THE QUANTITY SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
7. CONDITION OF VEGETATION SHALL BE MONITORED BY THE LANDSCAPE ARCHITECT THROUGHOUT THE DURATION OF THE CONTRACT. LANDSCAPE MATERIALS PART OF THE CONTRACT SHALL BE WARRANTED FOR TWO (2) FULL GROWING SEASONS FROM SUBSTANTIAL COMPLETION DATE.
8. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL RECEIVE 6" LAYER TOPSOIL AND SOD AS SPECIFIED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
9. COORDINATE LOCATION OF VEGETATION WITH UNDERGROUND AND OVERHEAD UTILITIES, LIGHTING FIXTURES, DOORS AND WINDOWS. CONTRACTOR SHALL STAKE IN THE FIELD FINAL LOCATION OF TREES AND SHRUBS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
10. ALL PLANT MATERIALS SHALL BE WATERED AND MAINTAINED UNTIL ACCEPTANCE.
11. REPAIR AT NO COST TO OWNER ALL DAMAGE RESULTING FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
12. SWEEP AND MAINTAIN ALL PAVED SURFACES FREE OF DEBRIS GENERATED FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
13. PROVIDE SITE WIDE IRRIGATION SYSTEM DESIGN AND INSTALLATION. SYSTEM SHALL BE FULLY PROGRAMMABLE AND CAPABLE OF ALTERNATE DATE WATERING. THE SYSTEM SHALL PROVIDE HEAD TO HEAD OR DRIP COVERAGE AND BE CAPABLE OF DELIVERING ONE INCH OF PRECIPITATION PER WEEK. SYSTEM SHALL EXTEND INTO THE PUBLIC RIGHT-OF-WAY TO THE EDGE OF PAVEMENT/BACK OF CURB.
14. CONTRACTOR SHALL SECURE APPROVAL OF PROPOSED IRRIGATION SYSTEM INCLUDING PRICING FROM OWNER, PRIOR TO INSTALLATION.

IRRIGATION NOTES:

1. ENTER SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
3. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
4. SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
5. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND METERING FACILITIES.
6. IRRIGATION WATER LINE CONNECTION SIZE IS 1/2" POLYETHYLENE GLASS REINFORCED HIGH DENSITY POLYETHYLENE (HDPE) PIPE. SEE MECHANICAL PLANS FOR COVERAGE.
7. ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.
8. ALL LATERAL LINES SHALL BE 12" BELOW FINISHED GRADE.
9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.
10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL, "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
12. FABRICATE ALL PIPE TO MANUFACTURER'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
13. BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
15. GROUP VALVE BOXES TOGETHER FOR EASE OF ACCESS. SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE.
16. IRRIGATION CONTROLLER SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL 300 VOLT COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.
18. AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
19. ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
20. USE SCREENS ON ALL HEADS.
21. A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
23. ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTEND 3' BEYOND PERIMETER OF VALVE BOX.
24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

Landscape Requirements	
Developable Landscape Area (square feet):	78,691
Required Trees:	31
Provided Trees:	32
Required Shrubs:	79
Provided Shrubs:	129

LEGEND

- STAFF BELIEVES THE LINE OF GRASSES AND DOGWOOD SHRUBS IS NOT ADEQUATE TO PREVENT THE PARKING LOT FROM BEING USED AS A THROUGHWAY. THE PARKING LOT IS NOT ADEQUATE TO PREVENT THE PARKING LOT FROM BEING USED AS A THROUGHWAY. THE PARKING LOT IS NOT ADEQUATE TO PREVENT THE PARKING LOT FROM BEING USED AS A THROUGHWAY.

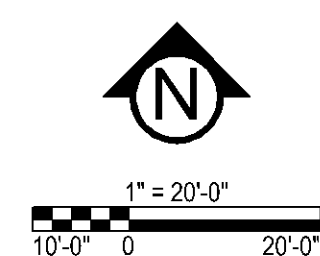
		MULCH SCHEDULE		
AREA	MULCH TYPE	EDGING	FABRIC	REMARKS
TREE RINGS	4" DEPTH, SHREDDED CEDAR	YES	NO	SEE DETAIL SHT. L1.1
PLANTING BEDS	4" DEPTH, DECORATIVE ROCK	YES	NO	SEE DETAIL SHT. L1.1 AND GROUND COVER SCHEDULE
MAINT. STRIP AT BUILDING FOUNDATION	NA	NA	NA	
DOG PARK MULCH	NA	NA	NA	
NATIVE SEED AREAS	NA	NA	NA	

NOTE: COORDINATE ALL MULCH AND PLANTING BED MATERIAL PRIOR TO INSTALLATION. PROVIDE SAMPLES AND SHOP DRAWINGS/PHOTOS/DATA SHEETS OF ALL MATERIALS.

If area is being considered for snow storage consider grading to limit snow melt runoff from running across paved surfaces to increase safety and decrease use



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**esg**  
ARCHITECTURE & DESIGN


PRELIMINARY:  
NOT FOR  
CONSTRUCTION

CT  
**KNOX & AMERICAN II**

8000 KNOX AVE S, BLOOMINGTON, MN 55431

**STUART DEVELOPMENT CORPORATION**  
1000 W 80TH STREET, MINNEAPOLIS, MN 55420

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.

  
Patrick J. Sarver  
DATE 05/17/23 LICENSE NO. 24904

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
3/9/2023	SKETCH PLAN
4/26/2023	PRE-APP DRC SUBMISSION
05/17/2023	DEVELOPMENT APPLICATION SUBMITTAL

DRAWN BY: JR, BB      REVIEWED BY: MP

PROJECT NUMBER: 23027
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## REVISION SUMMARY

DATE	DESCRIPTION
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[illegible]

17	8

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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LANDSCAPE PLAN

LANDSCAPE PLAN

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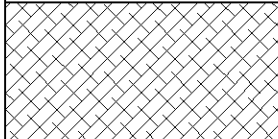

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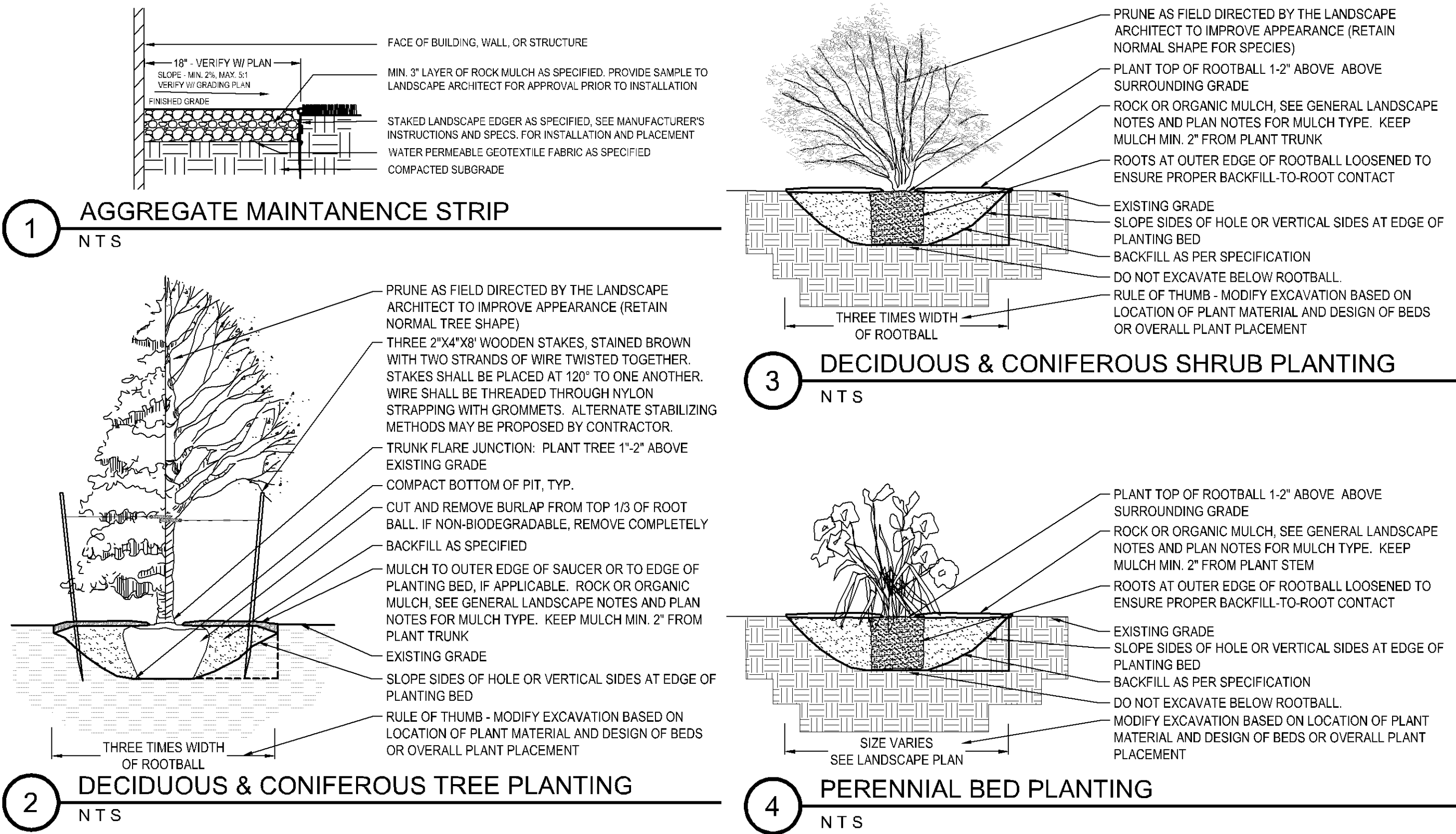
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PL 202300068  
PLANT SCHEDULE

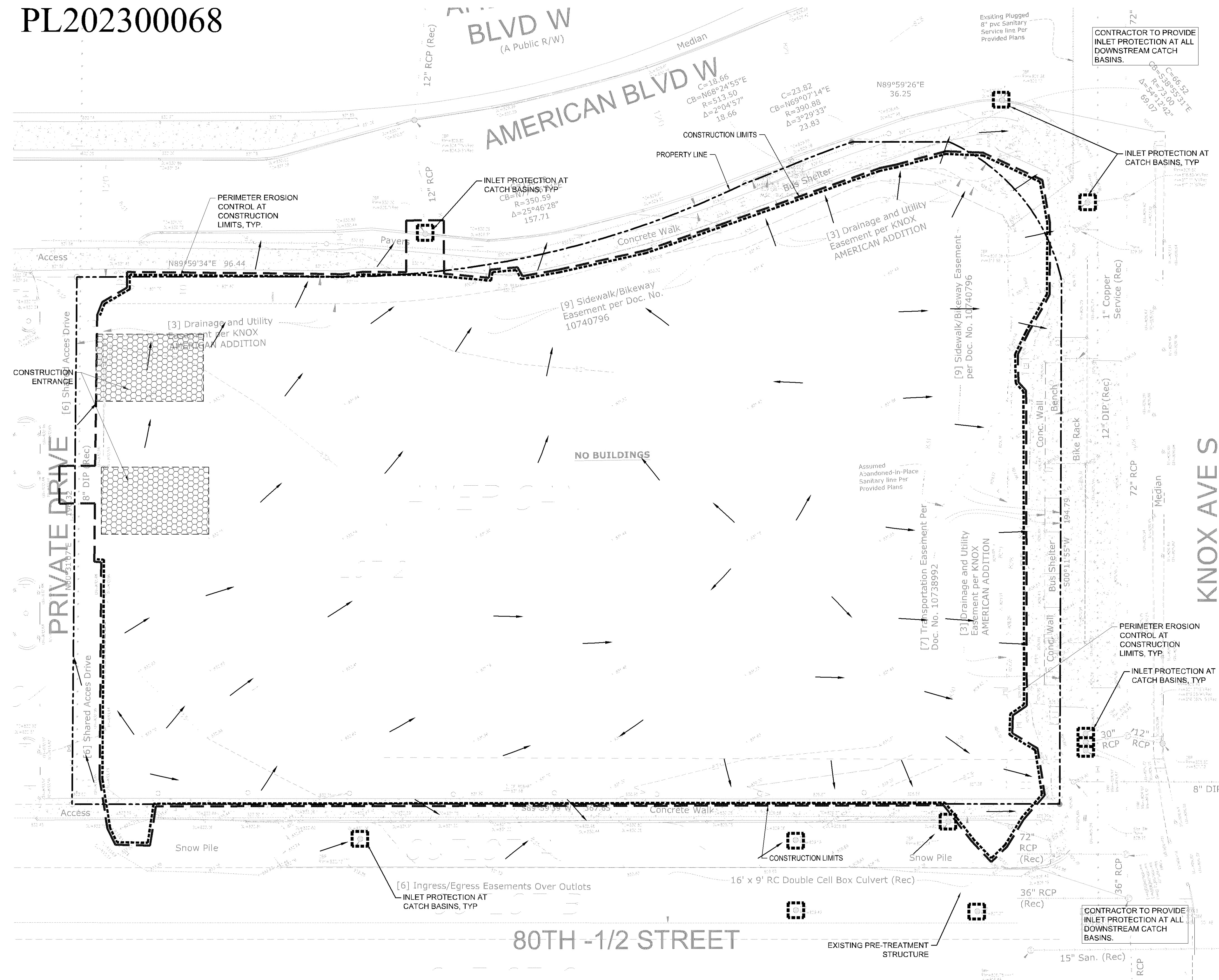
TREES	QTY	COMMON / BOTANICAL NAME	CONT	NATIVE PLANTS	POLLINATOR FRIENDLY
BJ	9	Parkland Pillar® Asian White Birch / Betula platyphylla 'Jefpark'	2.5' CAL. B&B	NOT NATIVE	N
GD	5	Street Keeper Honey Locust / Gleditsia triacanthos 'Draves' TM	2.5' Cal. B&B	NATIVE CULTIVAR	N
EK	2	Espresso Kentucky Coffeetree / Gymnocladus dioica 'Espresso'	2.5' Cal. B&B	NATIVE CULTIVAR	N
QP	1	American Dream® Oak / Quercus bicolor 'JFS-KW12'	2.5' CAL. B&B	NATIVE CULTIVAR	N
QS2	4	Kindered Spirit Oak / Quercus robur x bicolor 'Nader'	2.5' Cal. B&B	NOT NATIVE	Y
ORNAMENTAL TREES	QTY	COMMON / BOTANICAL NAME	CONT	NATIVE PLANTS	POLLINATOR FRIENDLY
AG	4	Autumn Brilliance Serviceberry / Amelanchier x grandiflora 'Autumn Brilliance'	1.5' Cal. B&B	NATIVE	Y
CV	4	Thornless Cockspur Hawthorn / Crataegus crus-galli inermis TM	1.5' Cal. B&B	NATIVE	Y
OV	3	American Hophornbeam / Ostrya virginiana	1.75' Cal B&B	NATIVE	Y
SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE PLANTS	POLLINATOR FRIENDLY
CA4	6	New Jersey Tea / Ceanothus americanus	#1 CONT	NATIVE	Y
CA3	13	Arctic Fire Dogwood / Cornus sericea 'Arctic Fire'	#5 CONT	NATIVE CULTIVAR	Y
CB	28	Firedance Dogwood / Cornus sericea 'Balladeline' TM	#5 CONT	NATIVE CULTIVAR	Y
FC	3	Gold Tide Forsythia / Forsythia x 'Courtasol' TM	#2 CONT	NOT NATIVE	Y
SGJ	65	Sea Green Juniper / Juniperus chinensis 'Sea Green'	#5 CONT	NOT NATIVE	N
JN	7	Grey Guardian Juniper / Juniperus virginiana 'Greguard' TM	#5 CONT	NATIVE	N
PR	7	Raspberry Lemonade Ninebark / Physocarpus opulifolius 'ZLEYel2' TM	#5 CONT	NATIVE CULTIVAR	Y
GRASSES	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE PLANTS	POLLINATOR FRIENDLY
BB	27	Blonde Ambition Blue Grama / Bouteloua gracilis 'Blonde Ambition'	#1 CONT	NATIVE CULTIVAR	Y
CR	67	Reed Grass / Calamagrostis brachytricha	#1 CONT	NOT NATIVE	N
EH	8	Bottlebrush Grass / Elymus hystrix	#1 CONT	NATIVE	Y
PN	59	Northwind Switch Grass / Panicum virgatum 'North Wind'	#1 CONT	NATIVE CULTIVAR	Y
SS	32	Smoke Signal Little Bluestem / Schizachyrium scoparium 'Smoke Signal'	#1 CONT	NATIVE CULTIVAR	Y
PERENNIALS	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE PLANTS	POLLINATOR FRIENDLY
AF	8	Blue Fortune Anise Hyssop / Agastache x 'Blue Fortune'	#1 CONT	NATIVE CULTIVAR	Y

PLANT SCHEDULE		
GROUND COVERS	COMMON / BOTANICAL NAME	SIZE
	Decorative Rock Mulch / Decorative Rock Mulch 2"- 4" Dresser Trap Rock, uniform in size over filter fabric. Include aluminum edging as shown on plan, or as needed. Provide Samples.	Mulch
	Blue Grass Based / Sod Commercial grade, locally grown, well rooted sod blend of improved Kentucky Bluegrass w/ uniform color, leaf texture, density and varieties consisting of a minimum of two and no more than four common cultivars.	Sod



Know what's below.  
Call before you dig.

PL202300068



CITY OF BLOOMINGTON EROSION CONTROL NOTES:

1. AN EROSION CONTROL BOND IS REQUIRED. COORDINATE WITH CITY.
2. CITY OWNED PRE-TREATMENT STRUCTURE THAT IS OVERLOADED WITH CONSTRUCTION RELATED SEDIMENT WILL BE THE RESPONSIBILITY OF THE PROJECT TO REMOVE. CITY WILL PERFORM AN INSPECTION OF THE SYSTEM IN EARLY AUGUST 2023 TO DOCUMENT CURRENT CONDITIONS AND PERFORM POST CONSTRUCTION INSPECTION ONCE PROJECT IS COMPLETE. OWNER'S REPRESENTATIVE WELCOME TO COORDINATE WITH CITY TO BE INVOLVED IN ANY CITY INFRASTRUCTURE INSPECTION ACTIVITY.
3. ENSURE ALL INLET PROTECTION DEVICES HAVE EMERGENCY OVERFLOW PROTECTION TO PREVENT FLOODING.

SWPPP NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (851-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. THIS PROJECT IS GREATER THAN ONE ACRE AND WILL REQUIRE AN MPCA NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY EROSION CONTROL PERMITS REQUIRED BY THE CITY.
3. SEE SHEETS SW1.0 - SW1.5 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.
4. SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.
5. CONTRACTOR IS RESPONSIBLE FOR SWPPP IMPLEMENTATION, INSPECTIONS, AND COMPLIANCE WITH NPDES PERMIT.

ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

LEGEND:

- 1125 - - - - - EX. 1' CONTOUR ELEVATION INTERVAL
- 1137 - - - - - 1.0' CONTOUR ELEVATION INTERVAL
- DRAINAGE ARROW
- SILT FENCE / BIOROLL - GRADING LIMIT
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET



Know what's below.  
Call before you dig.



1" = 20'-0"  
10'-0" 0 20'-0"

PRELIMINARY:  
NOT FOR  
CONSTRUCTION

PROJECT  
**KNOX & AMERICAN II**  
8000 KNOX AVE S, BLOOMINGTON, MN 55431  
**STUART DEVELOPMENT CORPORATION**  
1000 W 40TH STREET MINNEAPOLIS, MN 55420

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.

Matthew R. Pavlek  
DATE 05/17/23 LICENSE No. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
3/20/23	SHEET PLAN
4/26/2023	PRE-APP DISC SUBMISSION
05/17/2023	DEVELOPMENT APPLICATION SUBMITTAL

REVISION SUMMARY	
DATE	DESCRIPTION

DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

REVISION SUMMARY	
DATE	DESCRIPTION

SWPPP - EXISTING  
CONDITIONS

SW1.0

PL202300068

PRELIMINARY:  
NOT FOR  
CONSTRUCTION

PROJECT  
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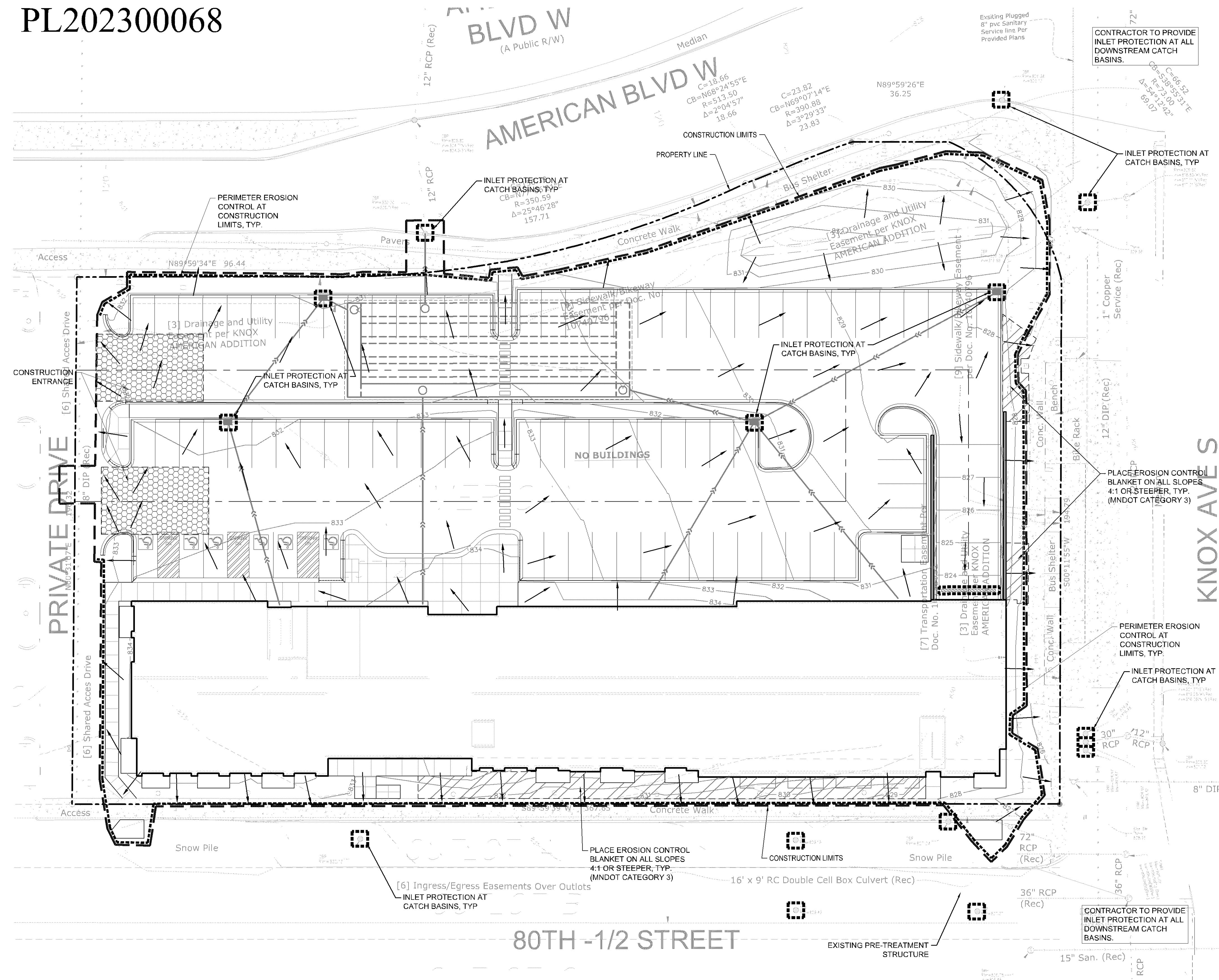
ISSUE/SUBMITTAL SUMMARY	
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DRAWN BY: JR, BB REVIEWED BY: MP  
PROJECT NUMBER: 23027

REVISION SUMMARY	
DATE	DESCRIPTION

SWPPP - PROPOSED CONDITIONS

SW1.1  
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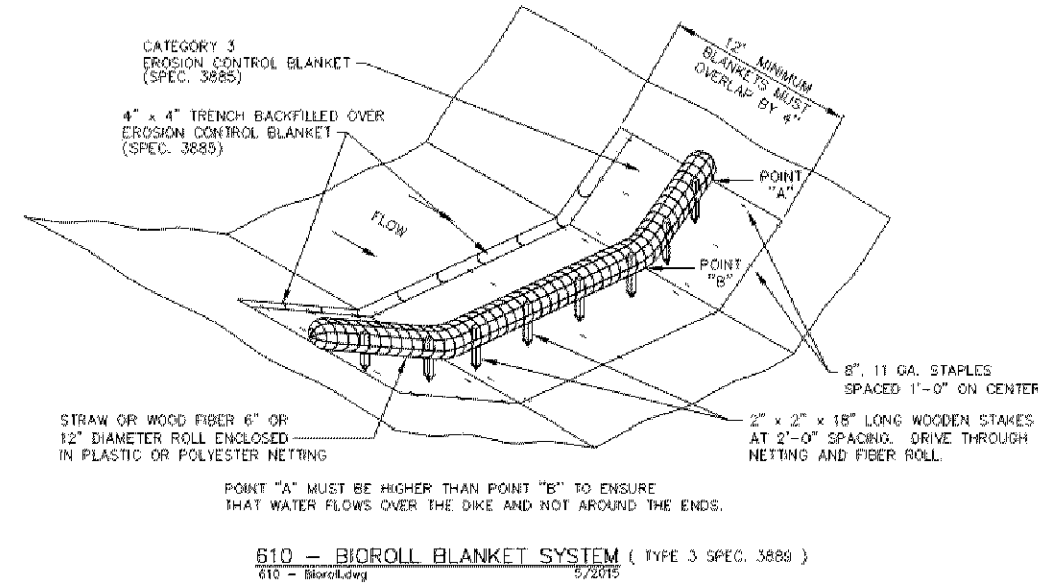
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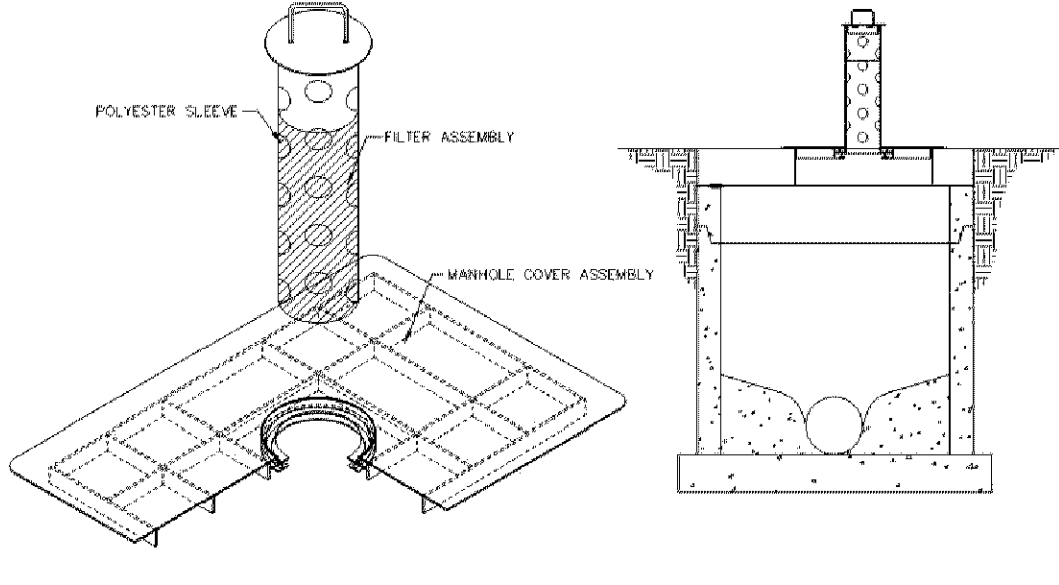
Know what's below.  
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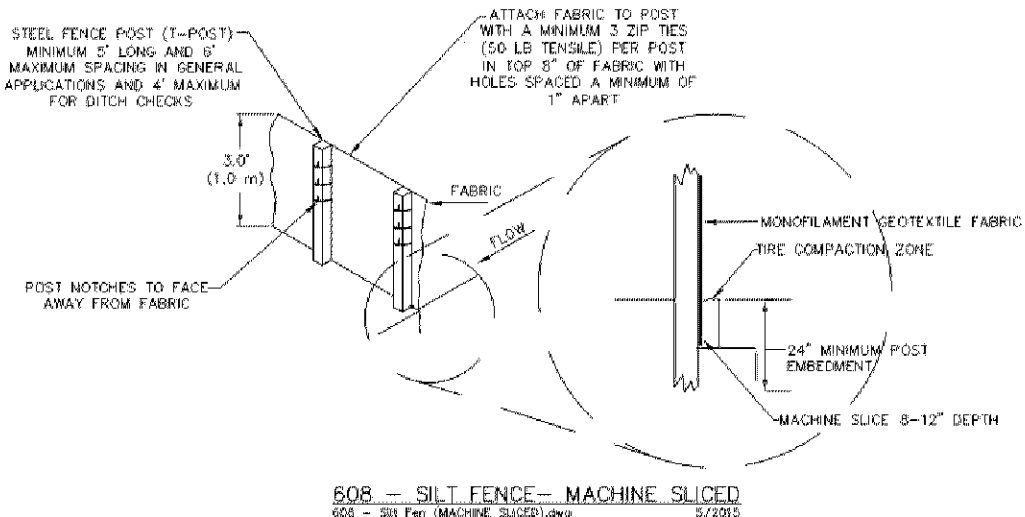
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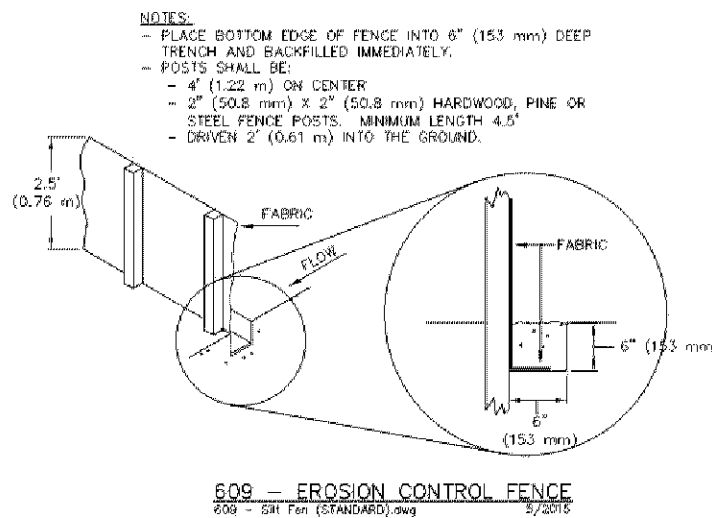
610 - Bioroll



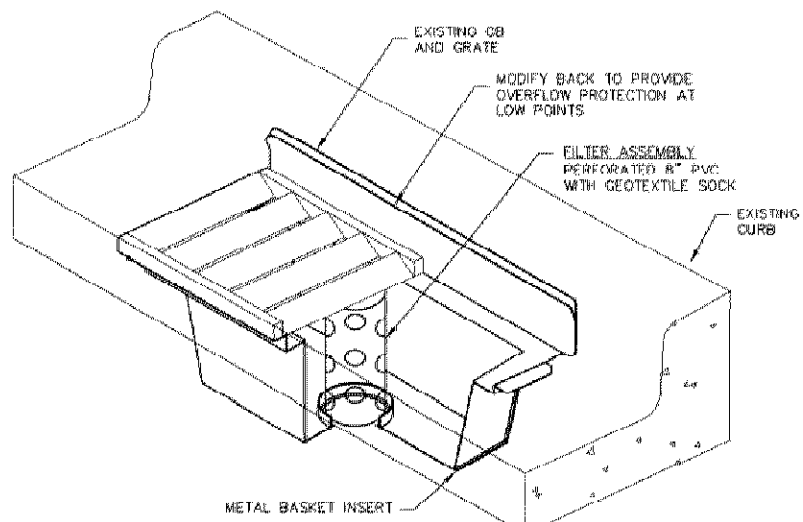
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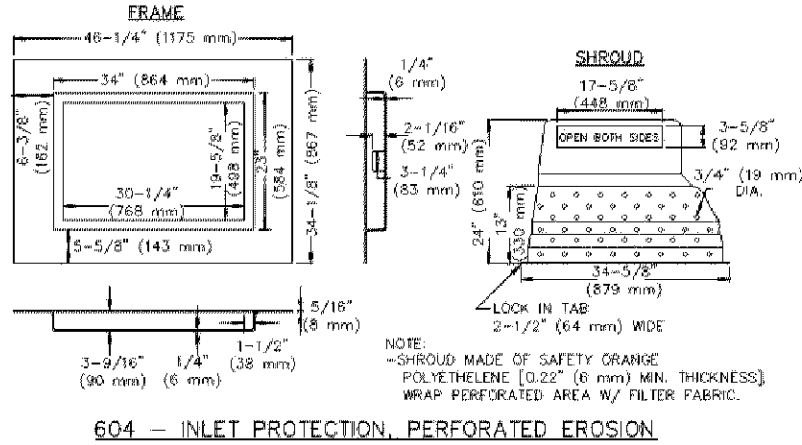
608 - Silt Fen (MACHINE SLICED)



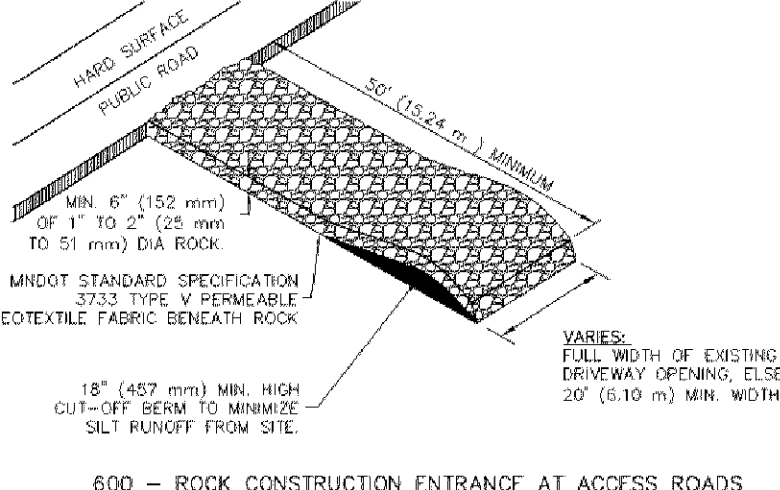
609 - Silt Fen (STANDARD)



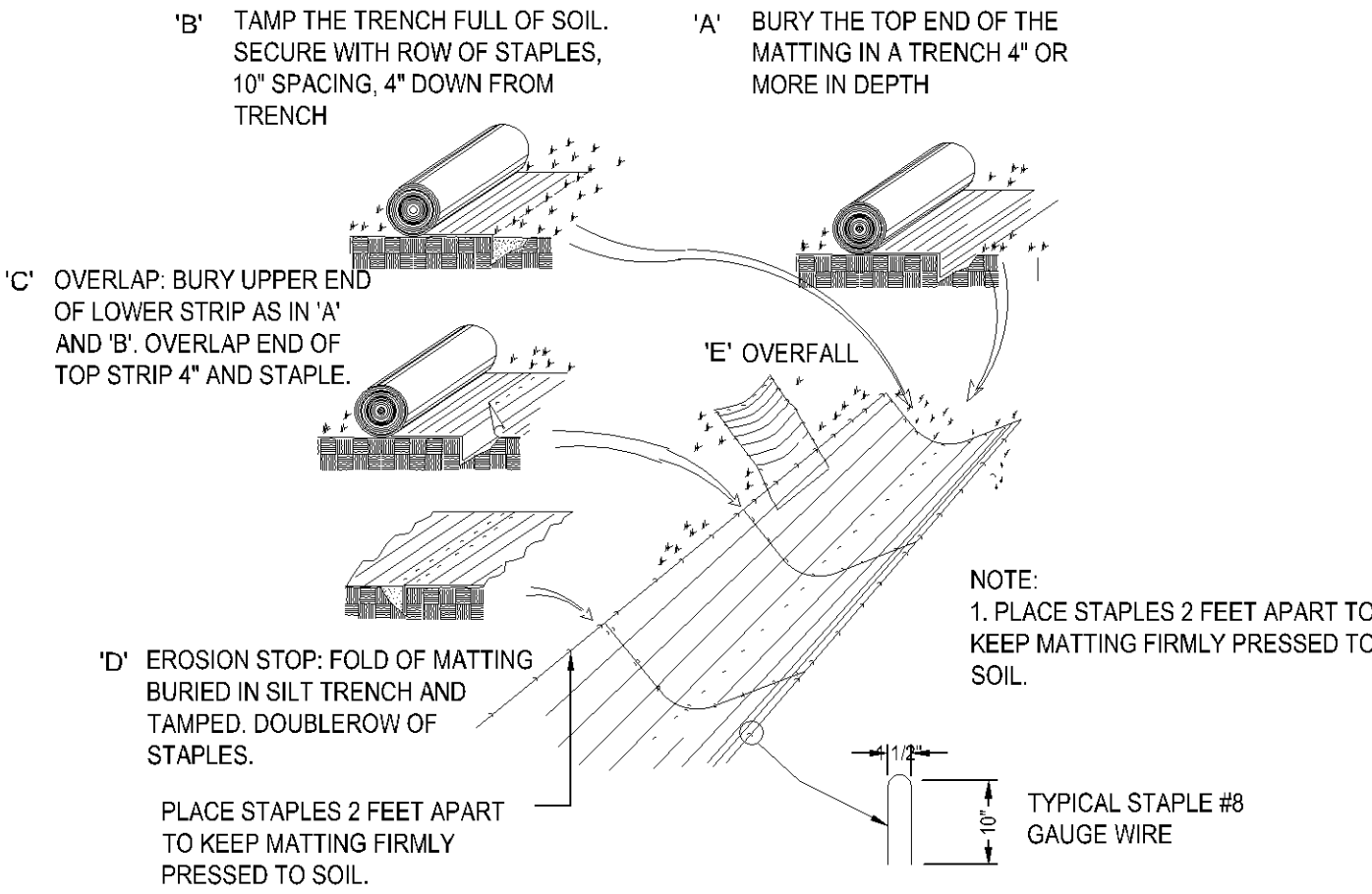
601 - Wimeo (CB)



604 - Inlet Shroud (2x3)



600 - Rock Const. Ent



1 EROSION BLANKET

# PL202300068

THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENT A POLLUTANT CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (DATED AUGUST 1, 2018 #MNR10001) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION CONTROL.

## STORMWATER DISCHARGE DESIGN REQUIREMENTS

### SWPPP

THE NATURE OF THIS PROJECT WILL BE CONSISTENT WITH WHAT IS REPRESENTED IN THIS SET OF CONSTRUCTION PLANS AND SPECIFICATIONS. SEE THE SWPPP PLAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A CONSTRUCTION SWPPP TEMPLATE) FOR ADDITIONAL SITE SPECIFIC SWPPP INFORMATION. THE PLANS SHOW LOCATIONS AND TYPES OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMP'S. STANDARD DETAILS ARE ATTACHED TO THIS SWPPP DOCUMENT.

THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES IS AS FOLLOWS:

1. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE
2. INSTALLATION OF SILT FENCE AROUND SITE
3. INSTALL ORANGE CONSTRUCTION FENCING AROUND INFILTRATION AREAS
4. INSTALL INLET PROTECTION AT ALL ADJACENT AND DOWNSTREAM CATCH BASINS
5. CLEAR AND GRUB FOR TEMPORARY SEDIMENT BASIN / POND INSTALL
6. CONSTRUCT TEMPORARY SEDIMENT BASIN / POND (SECTION 14)
7. CLEAR AND GRUB REMAINDER OF SITE
8. STRIP AND STOCKPILE TOPSOIL
9. ROUGH GRADING OF SITE
10. STABILIZE DENUDED AREAS AND STOCKPILES
11. INSTALL SANITARY SEWER, WATER MAIN STORM SEWER AND SERVICES
12. INSTALL SILT FENCE / INLET PROTECTION AROUND CBS
13. INSTALL STREET SECTION
14. INSTALL CURB AND GUTTER
15. BITUMINOUS ON STREETS
16. FINAL GRADE BOULEVARD, INSTALL SEED AND MULCH
17. REMOVE ACCUMULATED SEDIMENT FROM BASIN / POND
18. FINAL GRADE POND / INFILTRATION BASINS (DO NOT COMPACT SOLS IN INFILTRATION AREAS.)
19. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD/LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

### RECORDS RETENTION:

THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

ALL OWNER(S) MUST KEEP THE SWPPP, ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOT AS OUTLINED IN SECTION 4. THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.

1. THE FINAL SWPPP
2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT
3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (SEE SECTION 11, INSPECTIONS AND MAINTENANCE)
4. ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE, AND
5. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

### SWPPP IMPLEMENTATION RESPONSIBILITIES:

1. THE OWNER AND CONTRACTOR ARE PERMITTEE(S) AS IDENTIFIED BY THE NPDES PERMIT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP, INCLUDING THE ACTIVITIES OF ALL OF THE CONTRACTOR'S SUBCONTRACTORS.
3. CONTRACTOR SHALL PROVIDE A PERSON(S) KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMP'S AND IMPLEMENTATION OF THE SWPPP.
4. CONTRACTOR SHALL PROVIDE PERSON(S) MEETING THE TRAINING REQUIREMENTS OF THE NPDES PERMIT TO CONDUCT INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ON-SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY MPCA. CONTRACTOR SHALL PROVIDE TRAINING DOCUMENTATION FOR THESE INDIVIDUAL(S) AS REQUIRED BY THE NPDES PERMIT. THIS TRAINING DOCUMENTATION SHALL BE RECORDED IN OR WITH THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. DOCUMENTATION SHALL INCLUDE:
  - 4.1. NAMES OF THE PERSONNEL ASSOCIATED WITH THE PROJECT THAT ARE REQUIRED TO BE TRAINED PER SECTION 21 OF THE PERMIT.
  - 4.2. DATES OF TRAINING AND NAME OF INSTRUCTOR AND ENTITY PROVIDING TRAINING.
  - 4.3. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.
5. FOLLOWING FINAL STABILIZATION AND THE TERMINATION OF COVERAGE FOR THE NPDES PERMIT, THE OWNER IS EXPECTED TO FURNISH LONG TERM OPERATION AND MAINTENANCE (O & M) OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM.

## CONSTRUCTION ACTIVITY REQUIREMENTS

### SWPPP AMENDMENTS (SECTION 6):

1. 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.
2. 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.
3. 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 WATER OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7030.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMDL.

### BMP SELECTION AND INSTALLATION (SECTION 7):

1. 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.

### EROSION PREVENTION (SECTION 8):

1. BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED.
2. 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).
3. 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.
4. FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROVLGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATERS EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.
5. 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.
6. 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.
7. 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.
8. 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.
9. PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11.

### SEDIMENT CONTROL (SECTION 9):

1. 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 UPGRADEMENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADEMENT AND DISTURBING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT OR LONG TERM PERMANENT COVER.
2. IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADEMENT 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.

3. 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.
4. 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.
5. 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.
6. PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER OR AN ALTERNATE WITH POTENTIAL FOR DISCHARGING TO THE INLET.
7. PERMITTEES MAY REPAIR INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AGENCY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.
8. PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER.
9. 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.
10. 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.
11. PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET.
12. PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14.
13. IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION.
14. PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE.
15. PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE.
16. 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.
17. 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.

### DEWATERING AND BASIN DRAINING (SECTION 10):

1. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-ADEN 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. 7030.0210, 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.
2. 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.
3. 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.
4. 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.

### INSPECTIONS AND MAINTENANCE (SECTION 11):

1. 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 1/2 INCH IN 24 HOURS.
2. PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS.
3. 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.
4. 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.
5. 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.
6. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.
7. PERMITTEES MUST MAINTAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME.
8. 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.B.
9. PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:
  - a. 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
  - b. 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
  - c. 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.
10. 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:
  - a. DATE AND TIME OF INSPECTIONS; AND
  - b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
  - c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND
  - d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND
  - e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 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
  - f. 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
  - g. 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.

### POLLUTION PREVENTION MANAGEMENT (SECTION 12):

1. 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.
2. 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.
3. PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT, SOLID PESTICIDES, 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.
4. PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.
5. 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.
6. 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.
7. PERMITTEES MUST STAY ALERT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
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.

8. 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 WASH-OUT FACILITY.

### PERMIT TERMINATION (SECTION 4 AND SECTION 13):

1. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE.
2. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT.
3. 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.
4. 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 18 AND IS OPERATING AS DESIGNED.
5. PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT.
6. 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.
7. 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.
8. 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.

### SEED NOTES:

ALL SEED MIXES AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.

### GENERAL RECOMMENDATIONS:

THE CONTRACTOR IS RESPONSIBLE TO SALVAGE AND PRESERVE EXISTING TOPSOIL NECESSARY FOR FINAL STABILIZATION AND TO ALSO MINIMIZE COMPACTION IN ALL LANDSCAPE AREAS. IMMEDIATELY BEFORE SEEDING THE SOIL SHALL BE TILLED TO A MINIMUM DEPTH OF 3 INCHES.

### TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

#### SEED

- TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.

#### MULCH

- IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)

#### SLOPES

- 3:1 (HORIZ/VERT.) OR FLATTER MUCH SHALL BE COVERED WITH MULCH
- SLOPES STEEPER THAN 3:1 OR DITCH RUNOFFS SHALL BE COVERED WITH EROSION CONTROL BLANKET.
- SEE PLAN FOR MORE DETAILED DITCH AND STEEP SLOPE EROSION CONTROL TREATMENTS.

## TRAINING SECTION 21

DESIGN ENGINEER: MATTHEW R. PAVEK P.E.  
TRAINING COURSE: DESIGN OF SWPPP  
TRAINING ENTITY: UNIVERSITY OF MINNESOTA  
INSTRUCTOR: JOHN CHAPMAN  
DATES OF TRAINING COURSE: 5/15/2011 - 5/16/2011  
TOTAL TRAINING HOURS: 12  
RE-CERTIFICATION: 2/27/2020 (8 HOURS), EXP. 5/31/2023

## OWNER INFORMATION

STUART DEVELOPMENT CORPORATION  
1000 W 80TH STREET  
MINNEAPOLIS, MN 55420  
CONTACT: RYAN DUNLAY  
952-948-9546

## AREAS AND QUANTITIES:

SITE AREA CALCULATIONS	EXISTING CONDITION		PROPOSED CONDITION	
BUILDING COVERAGE	5,553 SF	7.1%	20,155 SF	25.6%
ALL PAVEMENTS	59,530 SF	75.7%	42,917 SF	54.5%
ALL NON-PAVEMENTS	13,608 SF	17.3%	15,615 SF	19.8%

TOTAL SITE AREA	78,691 SF	100.0%	78,691 SF	100.0%
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IMPERVIOUS SURFACE		
EXISTING CONDITION	65,083 SF	82.7%
PROPOSED CONDITION	63,072 SF	80.2%
DIFFERENCE (EX. VS PROP.)	-2,011 SF	-2.6%

EROSION CONTROL QUANTITIES	
DISTURBED AREA	73,000 SF
SILT FENCE/BIO-ROLL	±1100 LF
EROSION CONTROL BLANKET	±2000 SF
INLET PROTECTION DEVICES	16 EA

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION.

## SWPPP CONTACT PERSON

### CONTRACTOR:

### SWPPP INSPECTOR TRAINING:

ALL SWPPP INSPECTIONS MUST BE PERFORMED BY A PERSON THAT MEETS THE TRAINING REQUIREMENTS OF THE NPDES CONSTRUCTION SITE PERMIT. TRAINING CREDENTIALS SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON SITE WITH THE SWPPP

## PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORM WATER MANAGEMENT SYSTEM

PERMANENT STORMWATER MANAGEMENT IS NOT REQUIRED AS PART OF THIS PROJECT TO MEET NPDES PERMIT REQUIREMENTS. THE PROPERTY OWNER IS RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PROPOSED STORMWATER SYSTEM.

## SWPPP ATTACHMENTS (ONLY APPLICABLE IF SITE IS 1 ACRE OR GREATER):

CONTRACTOR SHALL OBTAIN A COPY OF THE FOLLOWING SWPPP ATTACHMENTS WHICH ARE A PART OF THE OVERALL SWPPP PACKAGE:  
ATTACHMENT A: CONSTRUCTION SWPPP TEMPLATE - SITE SPECIFIC SWPPP DOCUMENT  
ATTACHMENT B: CONSTRUCTION STORMWATER INSPECTION CHECKLIST  
ATTACHMENT C: MAINTENANCE PLAN FOR PERMANENT STORM WATER TREATMENT SYSTEMS  
ATTACHMENT D: STORMWATER MANAGEMENT REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER, AVAILABLE UPON REQUEST.  
ATTACHMENT E: GEOTECHNICAL EVALUATION REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER, AVAILABLE UPON REQUEST.

## SUPPLEMENTARY SITE SPECIFIC EROSION CONTROL NOTES:

THESE NOTES SUPERCEDE ANY GENERAL SWPPP NOTES.

THIS PROJECT IS GREATER THAN 1.0 ACRES SO AN NPDES PERMIT IS REQUIRED AND NEEDS TO BE SUBMITTED TO THE MPCA. THE CONTRACTOR IS REQUIRED TO FOLLOW THE GUIDELINES IN THE NPDES PERMIT THROUGHOUT CONSTRUCTION.

### PROJECT NARRATIVE:

PROJECT IS A REDEVELOPMENT OF A SMALL ONE STORY OFFICE BUILDING AND PARKING LOT INTO A MULTIFAMILY RESIDENTIAL BUILDING. SITE AND LANDSCAPE IMPROVEMENTS WILL OCCUR.

### NATIVE BUFFER NARRATIVE:

PRESERVING A 50' NATURAL BUFFER AROUND WATER BODIES IS NOT REQUIRED AS PART OF THIS PROJECT BECAUSE WATER BODIES ARE NOT LOCATED ON SITE.

### INFILTRATION NARRATIVE:

INFILTRATION IS PROVIDED THROUGH THE USE OF AN UNDERGROUND INFILTRATION BASIN ON THE SITE.

### SOIL CONTAMINATION NARRATIVE:

SOILS ONSITE HAVE NOT BEEN IDENTIFIED AS CONTAMINATED. AN MPCA SOILS ASSESSMENT WAS COMPLETED AND IT WAS DETERMINED THAT THIS SITE IS APPROPRIATE FOR INFILTRATION.

### SPECIAL TMDL BMP REQUIREMENTS SITE SPECIFIC (IF REQUIRED):

THIS PROJECT IS WITHIN ONE MILE AND DISCHARGES TO PENN LAKE - PENN LAKE IS IDENTIFIED AS IMPAIRED WATER BODIES PER THE MPCA'S 303(D) IMPAIRED WATERS LIST. PENN LAKE IS IMPAIRED FOR NUTRIENTS. BECAUSE THIS WATER IS LOCATED WITHIN ONE MILE OF THE SITE, BMPS AS DEFINED IN THE NPDES PERMIT ITEMS 23.9 AND 23.10 APPLY. THESE ARE AS FOLLOWS:

1. DURING CONSTRUCTION:
  - a. STABILIZATION OF ALL EXPOSED SOIL AREAS MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE COMPLETED LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
  - b. TEMPORARY SEDIMENT BASIN REQUIREMENTS DESCRIBED IN SECTION 14. MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

### PERMANENT STABILIZATION NOTES SITE SPECIFIC:

#### PERMANENT SEED MIX

- FOR THIS PROJECT ALL AREAS THAT ARE NOT TO BE SODDED OR LANDSCAPED SHALL RECEIVE A NATIVE PERMANENT SEED MIX.



