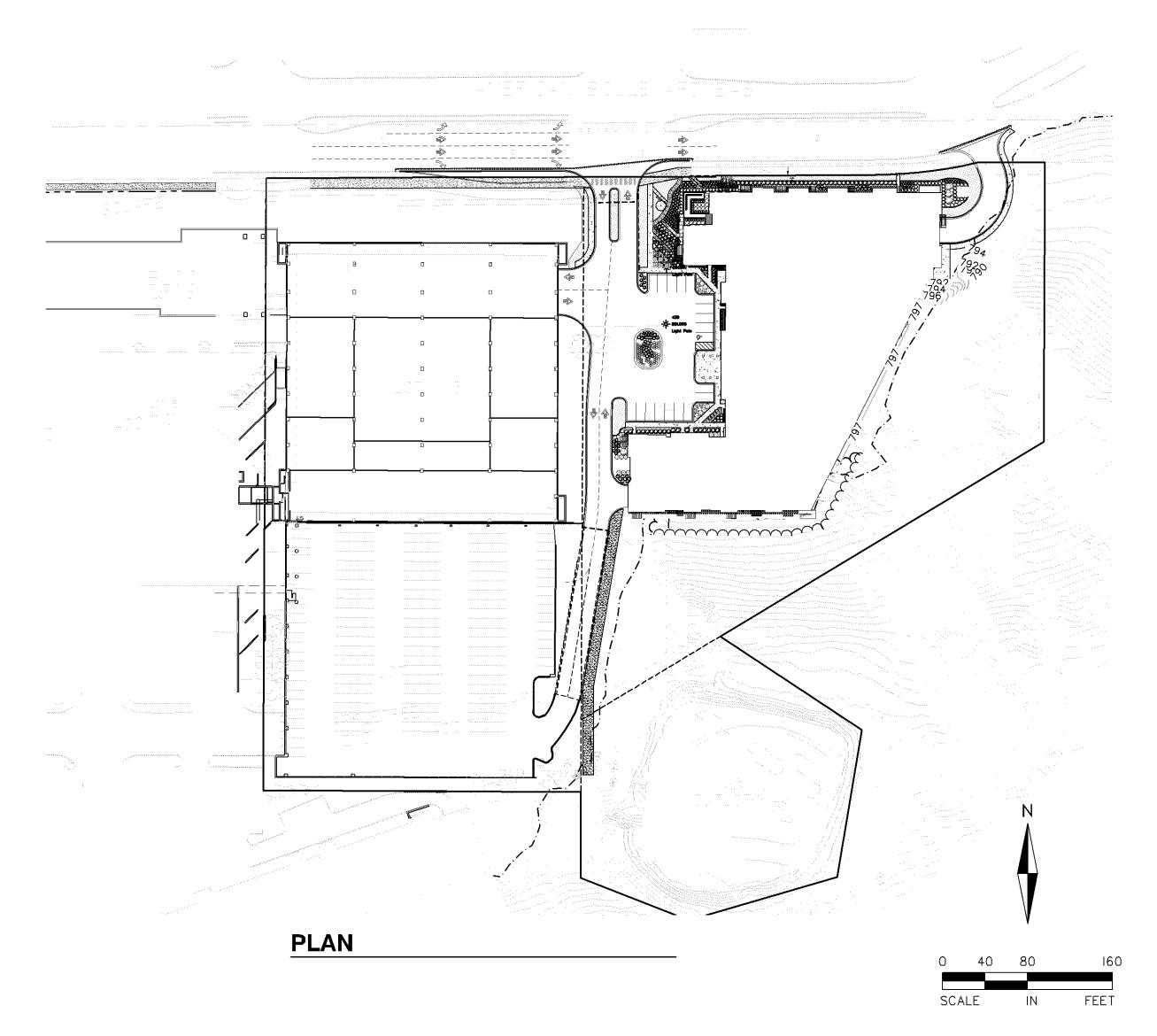
AMERICAN BOULEVARD E AND 34TH AVE SOUTH BLOOMINGTON, MINNESOTA FINAL DEVELOPMENT PLAN





SITE VICINITY MAP

L-2.0

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C-3.0	DEMOLITION PLAN
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C-6.0	UTILITY PLAN
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LANDSCAPE DETAILS



733 Marquette Avenue Suite 700 Minneapolis, MN 55402 612.758.3080 www.alliant-inc.com

DEVELOPER

KAEDING MANAGEMENT RON CLARK CONSTRUCTION

ARCHITECT

MOMENTUM DESIGN GROUP PRIOR WORKS BUILDING 755 PRIOR AVENUE NORTH SUITE #301A ST. PAUL, MINNESOTA 55104 OFFICE: 952.583.9788 WWW.MDGARCHITECTS.COM

SURVEYOR

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CONSULTANT

ALLIANT ENGINEERING, INC. 733 MARQUETTE AVE STE, 700 MINNEAPOLIS, MN 55415 PH: 612-758-3080 / FX: 612-758-3099 www.alliant-inc.com

CIVIL ENGINEER

DAVE NASH LICENSE NO. 40922 EM: dnash@alliant-inc.com

LANDSCAPE ARCHITECT

MARK KRONBECK, PLA, ASLA LICENSE NO. 26222 EM: mkronbeck@alliant-inc.com

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

DAVID NASH, PE

12-30-19

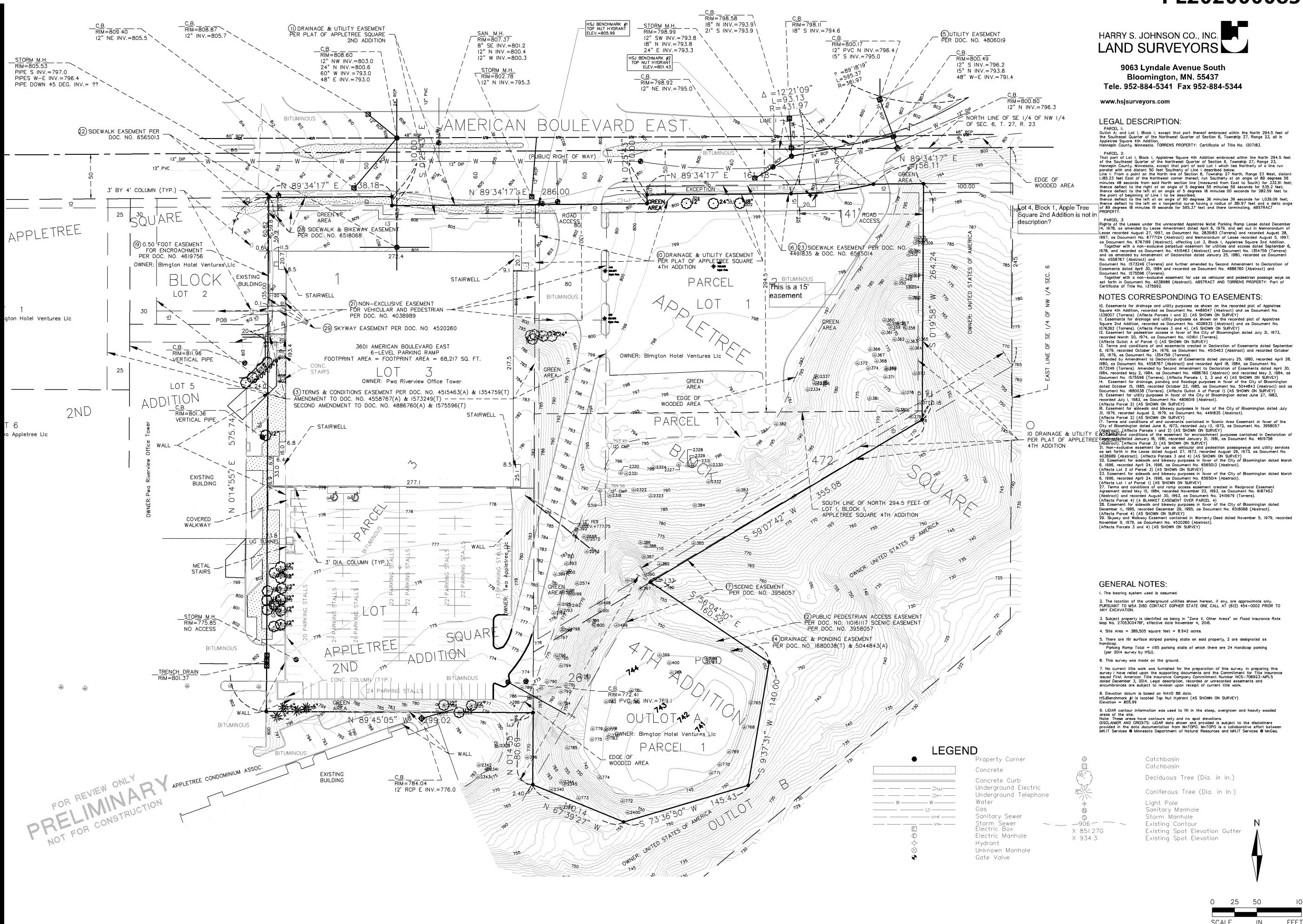
Date	License N
QUALITY	ASSURANCE/CONTRO
BY	DATE
DATE	ISSUE
01-29-20	CITY SUBMITTAL
03-27-20	PROGRESS PLOT
05-06-20	REVISED CITY SUBMITTA

PROJECT TEAM DATA PROJECT NO:

C-1.0

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QUALITY ASSURANCE/CONTROL

ВҮ		DATE
DATE	ISSUE	
PROJECT DESIGNED:	TEAM	DATA

PROJECT NO:

219-0123 C-2.0

TREE INVENTORY

Tog Number 1981						I
15 Basswood X	Tag Number	DBH	Common Name	Remove	Located in the Bluff	Notes
1983 19						2x trunk 15, 11
Section Sect						
300				X		
907						
398						
300 20 Inchance Yes Yes						
10 15 Interference Yes			· · · · · · · · · · · · · · · · · · ·			
311 37	-		·			
9.12 1.5 selectory Yes 9.14 39 selectory Yes 9.14 39 selectory Yes 9.15 1 selectory Yes 9.17 1 selectory Yes 9.18 1 selectory Yes 9.19 1 selectory Yes 9.10 1 selectory Yes 9.10 1 selectory Yes 9.11 1 selectory Yes 9.12 1 selectory Yes 9.13 1 selectory Yes 9.15 1 selectory Yes 9.17 2 selectory Yes 9.18 2 selectory Yes 9.19 selectory Yes 9.10 selectory Yes 9.11 selectory Yes 9.11 selectory Yes 9.11 selectory Yes 9.12 selectory Yes 9.13 selectory Yes			-			
131 4 Incharry Yes						
91-4 91-1 14-1	-					
340 14 spekberry Yes Yes						
350 12 Incickerry Yes Yes						
SS-2 SI Incoherry			·			
354 8 Jonas Yes			-			
337 G Locus Yes						
355	356	37	Locust		Yes	
358 27 Lurack Yes 380 3 Backberry Yes 381 3 Lorast Yes 4 Backberry Yes 383 6 Backberry Yes 383 6 Backberry Yes 385 6 Backberry Yes 385 6 Backberry Yes 385 6 Backberry Yes 386 6 Call of State Yes 387 Call of State Yes 388 Call	357	6	Locust		Yes	
360	358	4	Hackberry		Yes	
Sol	359	27	Locust		Yes	
362			-			
Solid Collecterry Yes						
366 6			-			
S65	-					
366						
Sept						
368						
369						2v trunk 18 22
370						2A UMIN 10, 23
371 310 Elm						
372						
373						
376						
375						
376						
377 9 Hackberry Yes						
378	377				Yes	
380	378	7	Hackberry		Yes	
381 30 Elm						
382						
383 20 Russian Olive						2x trunk 18, 12
385						
385						2x trunk 10, 10
386	-					
388						20100115
Section Sect						2X Trunk 15, 5
389						
390						
391 25 Russian Olive Yes 3x trunk 7, 10, 8						
392						3x trunk 7. 10. 8
393 7 Locust						,,-
194			i	X		
395						
S					Yes	
397 6 Elm						
399 4 Hackberry Yes 400 4 Hackberry Yes 402 6 Hackberry Yes 764 8 Elm Yes 765 8 Elm Yes 766 9 Elm Yes 767 9 Elm Yes 768 5 Elm Yes 769 8 Elm Yes 770 6 Elm Yes 771 5 Elm Yes 772 9 Elm Yes 772 9 Elm Yes 772 9 Elm Yes 773 4 Elm Yes 774 4 Elm Yes 775 19 Elm Yes 776 6 Hackberry Yes 779 4 Elm Yes 780 17 Elm Yes <td>397</td> <td></td> <th></th> <td></td> <td>Yes</td> <td></td>	397				Yes	
400	398	7	Elm		Yes	
March Marc						
764 8 Elm Yes 1 765 8 Elm Yes 1 766 9 Elm Yes 2x trunk 5, 4 767 9 Elm Yes 2x trunk 5, 4 768 5 Elm Yes 1 769 8 Elm Yes 1 770 6 Elm Yes 1 771 5 Elm Yes 1 772 9 Elm Yes 1 773 4 Elm Yes 1 774 4 Elm Yes 1 775 19 Elm Yes 1 776 6 Hackberry Yes 1 777 7 Elm Yes 1 779 4 Elm Yes 1 780 17 Elm Yes 1 781 6 Elm Yes			-			
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787 10 Elm X Yes 788 10 Elm X Yes 789 7 Elm X Yes						
788 10 Elm X Yes 789 7 Elm X						
789 7 Elm X				_		
					Yes	
/9Ս Ե Elm X Yes					.,	
	790	6	EIM	Х	Yes	<u> </u>

Tag Number	DBH	Common Name	Remove	Located in the Bluff	Notes
791		Elm	Remove	Yes	Notes
792		Elm	X	Yes	
793		Hackberry		Yes	
794		Elm		Yes	
795		Elm		Yes	
796		Elm		Yes	
797	12	Cottonwood		Yes	
798	9	Elm		Yes	
799	6	Elm		Yes	
901	5	Elm		Yes	
1396	15	Box Elder		Yes	
1498		Elm		Yes	
1499		Elm		Yes	
2193		Cottonwood		Yes	
2194		Elm		Yes	
2195		Elm		Yes	
2196		Cottonwood		Yes	
2199		Cottonwood		Yes	
2200		Elm	X	Yes	
2301		Colorado Green Spruce			11' tall
2303		Colorado Green Spruce			11' tall
2304		Colorado Green Spruce			11' tall
2305		Crab Apple			
2306 2307		Crab Apple			
2307		Crab Apple			
2308		Crab Apple Crab Apple			
2310		Crab Apple			
2311		Crab Apple			
2312		Crab Apple			
2313		Crab Apple			
2314		Crab Apple			
2315		Crab Apple			
2316		Crab Apple			
2318		Elm		Yes	
2319	26	Box Elder			2x trunk 16, 10
2320	38	Cottonwood	Х		
2321	16	Cottonwood	X		
2322	45	Cottonwood			3x trunk 18, 15, 12
2323	64	Cottonwood		Yes	4x trunk 16, 16, 16, 16
2324		Cottonwood	Х		
2325		Ash			
2326		Ash			
2327					
امممما		Cottonwood	X		
2328	14	Cottonwood	Х		
2329	14 15	Cottonwood Cottonwood	X X		
2329 2330	14 15 18	Cottonwood Cottonwood Cottonwood	X X X		
2329 2330 2331	14 15 18 12	Cottonwood Cottonwood Cottonwood Cottonwood	X X		
2329 2330 2331 2332	14 15 18 12 17	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood	X X X	Yes	
2329 2330 2331 2332 2334	14 15 18 12 17 38	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood	X X X	Yes	
2329 2330 2331 2332 2334 2335	14 15 18 12 17 38 19	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood	X X X	Yes Yes	
2329 2330 2331 2332 2334 2335 2336	14 15 18 12 17 38 19	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood	X X X	Yes Yes Yes	
2329 2330 2331 2332 2334 2335 2336 2337	14 15 18 12 17 38 19 23	Cottonwood	X X X	Yes Yes Yes Yes	
2329 2330 2331 2332 2334 2335 2336 2337 2338	14 15 18 12 17 38 19 23 18	Cottonwood Ash	X X X	Yes Yes Yes Yes Yes Yes	
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339	14 15 18 12 17 38 19 23 18 17	Cottonwood Ash Maple	X X X	Yes Yes Yes Yes Yes Yes Yes	3x trunk 39 29 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340	14 15 18 12 17 38 19 23 18 17 18	Cottonwood Ash Maple Cottonwood	X X X	Yes Yes Yes Yes Yes Yes Yes Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341	14 15 18 12 17 38 19 23 18 17 18 96	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342	14 15 18 12 17 38 19 23 18 17 18 96 14	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343	14 15 18 12 17 38 19 23 18 17 18 96 14	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23 23	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood Cottonwood	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2344	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23 23	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2399	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23 23 23 16 40	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood Cottonwood Cottonwood	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2399 2400	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23 23 16 40	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood	X X X	Yes	3x trunk 39, 29, 28
2329 2330 2331 2332 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2399 2400 2572	14 15 18 12 17 38 19 23 18 17 18 96 14 19 16 23 23 16 40 4	Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Cottonwood Ash Maple Cottonwood Hackberry Maple Hackberry Cottonwood	X X X	Yes	3x trunk 39, 29, 28



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AMERICAN SQUARE APARTMENTS
BLOOMINGTON, MN
AMERICAN BOULEVARD E. AND 34TH AVE SOUTH
3601 AMERICAN BOULEVARD EAST
FINAL DEVELPOMENT PLAN

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

TREE INVENTORY

12-30-19	
Date	License No.
OHALITY	ACCUDANCE /CONTROL
QUALITY	ASSURANCE/CONTROL

DAVID NASH, PE

DATE ISSUE

01-29-20 CITY SUBMITTAL

03-27-20 PROGRESS PLOT

05-06-20 REVISED CITY SUBMITTAL

PROJECT TEAM DATA
DESIGNED: DMS/DJN

DESIGNED:

DRAWN:

PROJECT NO:

C-2.1

KDB/DMS

190123

DEMOLITION NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY. THE GEOTECHNICAL AND EVALUATION REPORTS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCY BETWEEN GEOTECHNICAL AND EVALUATION REPORTS & PLANS, ETC.
- NOTIFY GOPHER ONE 48 HOURS PRIOR TO ANY SITE DEMOLITION. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, CONTACT GOPHER STATE ONE CALL (1-800-252-1166) FOR UTILITY LOCATION PRIOR TO DEMOLITION AND CONSTRUCTION.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. DEMOLITION CONTRACTOR SHALL ALSO FILE FOR ALL NECESSARY PERMITS FOR DEMOLITION WITH THE CITY OF BLOOMINGTON.
- 4. CONTRACTOR TO COORDINATE THE REMOVAL OF THE EXISTING UTILITIES WITH THE RESPECTIVE UTILITY COMPANIES.
- 5. DEMOLITION CONTRACTOR SHALL PROVIDE AIR QUALITY CONTROL MEASURES AT THE REQUEST OF COUNTY/CITY HEALTH INSPECTOR/INSPECTIONS OFFICER. DEMOLITION CONTRACTOR SHALL TAKE ALL NECESSARY MEÁSURES TO KEEP DUST LEVELS TO A
- 6. CONTRACTOR SHALL FURNISH ALL NECESSARY FENCING BARRICADES AND SIGNING NEEDED TO PROTECT PEDESTRIANS AND VEHICULAR TRAFFIC FROM HAZARDS RESULTING FROM DIRECTLY OR INDIRECTLY FROM CONSTRUCTION.
- 7. ALL ITEMS CALLED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE IN A LOCATION APPROVED BY THE STATE.
- 8. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION & REMOVAL OF ALL EXISTING STRUCTURES WHICH INTERFERE WITH NEW WORK AS SHOWN IN PROPOSED CONSTRUCTION DRAWINGS.
- 9. CONTRACTOR SHALL PROTECT ADJOINING PROPERTIES & STRUCTURES FROM HAZARDS ASSOCIATED WITH HIS CONSTRUCTION ACTIVITIES & SHALL BE RESPONSIBLE FOR ALL DAMAGES TO PROPERTIES & STRUCTURES THAT OCCUR AS A RESULT OF THESE
- 10. CONTRACTOR SHALL NOT IMPEDE EXISTING TRAFFIC CIRCULATION TO ADJACENT BUSINESSES.
- 11. PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH THE MOST CURRENT EDITION OF THE MINNESOTA TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD
- 12. DEMOLITION CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE ENVIRONMENTAL REPORTS INCLUDING THE PHASE I REPORT AND FOLLOW REPORT RECOMMENDATIONS.

LEGEND

PROPERTY LINE EASEMENTS

REMOVE TREE REMOVE CURB AND GUTTER REMOVE EXISTING UTILITY **-**CLEARING LIMITS

REMOVE BITUMINOUS PAVEMENT/PATH

SOUTH

ALLIANT ENGINEERING

733 Marquette Avenue

Suite 700

Minneapolis, MN 55402

612.758.3080

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DEMOLITION

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

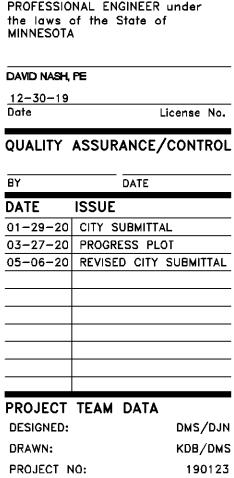
DAVID NASH, PE 12-30-19 Date

DATE ISSUE 01-29-20 CITY SUBMITTAL 03-27-20 PROGRESS PLOT 05-06-20 REVISED CITY SUBMITTAL

PROJECT TEAM DATA DESIGNED: DRAWN:

KDB/DMS 190123

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1. SEE ARCHITECTURAL PLANS FOR PARKING REQUIREMENTS

PL202000083

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> SOUTH AVE

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APARTI

QUAR

l 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

DAVID NASH, PE 12-30-19

License No. QUALITY ASSURANCE/CONTROL

DATE ISSUE 01-29-20 CITY SUBMITTAL 03-27-20 PROGRESS PLOT 05-06-20 REVISED CITY SUBMITTAL

PROJECT TEAM DATA DESIGNED: DRAWN:

PROJECT NO: 190123

KDB/DMS

PL202000083

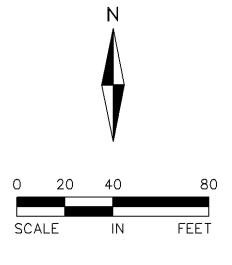
GRADING NOTES

- 1. ALL FINISHED GRADES SHALL SLOPE AWAY FROM PROPOSED BUILDINGS.
- THE CONTRACTOR SHALL KEEP THE ADJACENT ROADWAYS FREE OF DEBRIS AND PREVENT THE OFF-SITE TRACKING OF SOIL IN ACCORDANCE WITH THE REQUIREMENTS OF COUNTY, CITY AND WATERSHED.
- 3. NOTIFY GOPHER STATE ONE CALL, AT (800)252-1166, 48 HOURS PRIOR TO START OF CONSTRUCTION.
- 4. ALL IMPROVEMENTS TO CONFORM WITH CITY CONSTRUCTION STANDARDS SPECIFICATION, LATEST EDITION.
- 5. ROCK CONSTRUCTION ENTRANCES SHALL BE PROVIDED AT ALL CONSTRUCTION ACCESS POINTS.
- 6. REFER TO GEOTECHNICAL REPORT AND PROJECT MANUAL, FOR SOIL CORRECTION REQUIREMENTS AND FREQUENT TESTING REQUIREMENTS.
- 7. STRIP TOPSOIL PRIOR TO ANY CONSTRUCTION. REUSE STOCKPILE ON SITE. STOCKPILE PERIMETERS MUST BE PROTECTED WITH SILT FENCE.
- 8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 9. IMMEDIATELY FOLLOWING GRADING OF (3:1 OR GREATER) SIDE SLOPES AND DRAINAGE SWALES, WOOD FIBER BLANKET OR OTHER APPROVED SOIL STABILIZING METHOD (APPROVED BY ENGINEER) SHALL BE APPLIED OVER APPROVED SEED MIXTURE AND A MINIMUM OF 4" TOPSOIL.
- 10. THE GENERAL CONTRACTOR MUST DISCUSS DEWATERING PLANS WITH ALL SUBCONTRACTORS TO VERIFY NPDES REQUIREMENTS. IF DEWATERING IS REQUIRED DURING CONSTRUCTION, CONTRACTOR SHOULD CONSULT WITH EROSION CONTROL INSPECTOR AND ENGINEER TO DETERMINE APPROPRIATE METHOD.
- 11. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR ALL EROSION AND SEDIMENT CONTROL DEVICE LOCATION, DESCRIPTIONS, NOTES AND DETAILS INCLUDING CONCRETE WASHOUT STATION INSTRUCTIONS.
- 12. BUILDING PERMITS ARE REQUIRED FOR ALL RETAINING WALLS 4 FEET IN HEIGHT OR GREATER AND THE WALLS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER WITH DESIGN REVIEWED AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
- 13. A 4 FOOT SAFETY RAILING IS REQUIRED ATOP ALL WALLS 30" IN HEIGHT OR GREATER.

LEGEND:

	EXISTING CONTOUR PROPOSED CONTOUR PROPOSED SPOT ELEVATION TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION DIRECTION OF DRAINAGE
	EMERGENCY OVERFLOW ROUTING RETAINING WALL PROPOSED LUMINARIES
■ ● >	EXISTING CATCH BASINS EXISTING STORM SEWER PROPOSED CATCH BASINS PROPOSED STORM SEWER PROPOSED LIMITS OF CONSTRUCTION PROPOSED EASEMENT PROPERTY LINE
<u>DD</u> 	DRAINAGE DIVIDE HEAVY DUTY SILT FENCE INLET PROTECTION
	ROCK CONSTRUCTION EXIT EROSION CONTROL BLANKET







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AD FROSION CONTROL P

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

DAVID NASH, PE 12-30-19 Date

DATE

DATE

ISSUE

01-29-20 CITY SUBMITTAL

03-27-20 PROGRESS PLOT

05-06-20 REVISED CITY SUBMITTAL

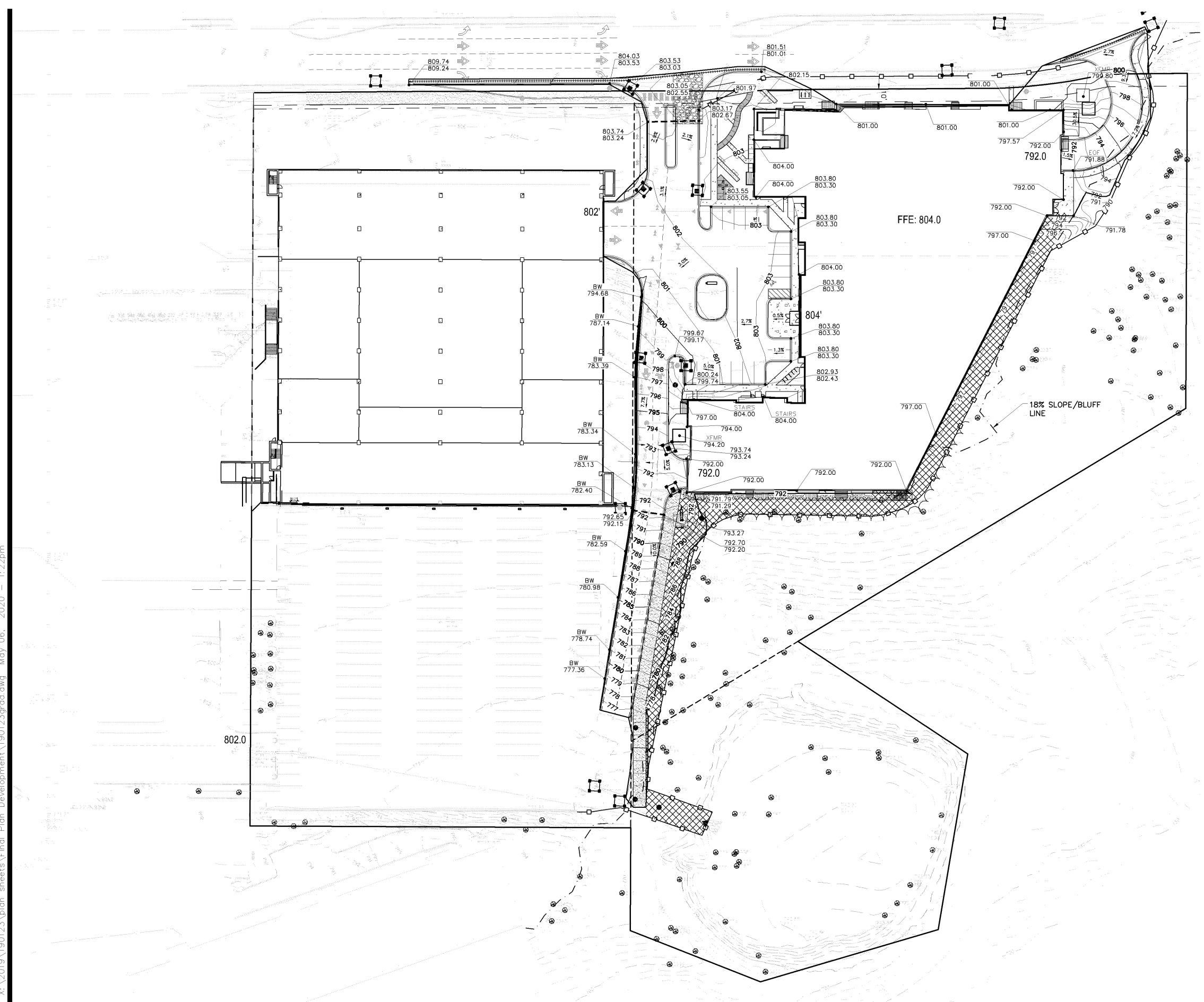
QUALITY ASSURANCE/CONTROL

PROJECT TEAM DATA
DESIGNED:
DRAWN:

PROJECT NO: 190123

KDB/DMS

C-5.0



USGS TOPOGRAPHIC MAP

<u>EROSION CONTROL GENERAL NOTES:</u>

NO LAND DISTURBING ACTIVITY SHALL OCCUR UNTIL A GRADING PERMIT HAS BEEN ISSUED FROM THE

2. BEST MANAGEMENT PRACTICES (BMP'S) REFER TO EROSION AND SEDIMENT CONTROL PRACTICES

DEFINED BY THE MPCA PROTECTING WATER QUALITY IN URBAN AREAS AND THE MINNESOTA CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PLANNING HANDBOOK.

ALL BMP'S SELECTED SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND ESTIMATED DURATION OF USE.

ALL WORK AND MATERIALS SHALL BE CONSTRUCTED ACCORDING TO THE APPROVED PLANS. AN

5. A COPY OF THESE PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

WHEREVER POSSIBLE, PRESERVE THE EXISTING TREES, GRASS, AND OTHER VEGETATIVE COVER TO HELP FILTER RUNOFF.

8. ESTABLISH A PERMANENT VEGETATIVE COVER ON ALL EXPOSED SOILS WHERE LAND IS COMING OUT OF AGRICULTURAL PRODUCTION. PLANT AS SOON AS POSSIBLE TO ESTABLISH DENSE GRASS FILTER

9. ALL TREES NOT LISTED FOR REMOVAL SHALL BE PROTECTED. DO NOT OPERATE EQUIPMENT WITHIN

10. ALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) SHALL BE INSTALLED AND IN OPERATION PRIOR TO LAND DISTURBANCE ACTIVITIES AND THEY SHALL BE SATISFACTORILY MAINTAINED UNTIL

11. SILT FENCE IS REQUIRED AT DOWN GRADIENT PERIMETER OF DISTURBED AREAS AND STOCKPILES.

12. THE BMP'S SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED

13. THE BMP'S SHALL BE INSPECTED DAILY BY THE PERMITTEE/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. SILT FENCES SHALL BE CLEANED OR

REPLACED AT SEDIMENT BUILDUP OF 1/3 OF THE FENCE HEIGHT.

PROTECT ADJACENT WATERBODIES AND ADJACENT PROPERTIES FROM SEDIMENTATION AND STORM

CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE

THE PERMITTEE/CONTRACTOR SHALL ANTICIPATE THAT MORE BMP'S WILL BE NECESSARY TO ENSURE EROSION AND SEDIMENT CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT IS THE

RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE

14. LAND DISTURBING ACTIVITIES SHALL OCCUR IN INCREMENTS OF WORKABLE SIZE SUCH THAT ADEQUATE

15. OPERATE TRACK EQUIPMENT (DOZER) UP AND DOWN EXPOSED SOIL SLOPES ON FINAL PASS, LEAVIN

16. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED FROM EROSION WITHIN 7 DAYS OF SUBSTANTIAL COMPLETION OF GRADING IN THAT AREA. TEMPORARY SEED AND MULCH SHALL COVER ALL EXPOSED SOILS IF GRADING COMPLETION IS DELAYED LONGER THAN 7 DAYS. PERMANENT SEED

17. GENERAL TEMPORARY SEED SHALL BE MN STATE SEED MIX 22-112 @ 40 LBS. PER ACRE OR APPROVED EQUAL. PERMANENT SEED SHALL BE MN STATE SEED MIX 25-151 @ 120 LBS. PER

MNDOT TYPE 1 (CLEAN OAT STRAW) @ 2 TONS PER ACRE AND DISK ANCHORED IN PLACE OR

18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF

THE MPCA AND THE CITY OF BLOOMINGTON RULES AND REQUIREMENTS.

ACCORDANCE WITH STATE AND LOCAL PERMIT REQUIREMENTS.

FILTRATION BMP NOTES:

ACRE OR APPROVED EQUAL. (PLANTING DATES PER MNDOT SEED MIX MANUAL) MULCH SHALL BE

APPROVED EQUAL. FERTILIZER SHALL BE 10-10-10 NPK PER ACRE (UNLESS P RESTRICTIONS APPLY) AND INCORPORATED INTO THE SEED BED.

WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY

19. ALL CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER, AND SANITARY WASTE MUST BE PROPERLY MANAGED AND COMPLY WITH

1. IF UTILITY INSTALLATION WORK ENCOUNTERS GROUNDWATER, THE CONTRACTOR SHALL PROVIDE A PLAN TO

THE CITY AND PROJECT ENGINEER FOR REVIEW. THE PLAN MUST BE SUBMITTED TO THE CITY FOR APPROVAL AT LEAST 10 DAYS PRIOR TO DISCHARGING INTO RECEIVING WATERS. THE PLAN AT MINIMUM SHALL INCLUDING A DEWATERING SYSTEM, WATER ROUTING, STORAGE, AND DISCHARGE LOCATION. THE

DEWATERING PLAN MUST ENSURE THAT DISCHARGE WATER IS FREE OF SEDIMENT AND TURBID WATER IN

IF ANY TEMPORARY DEWATERING IS REQUIRED ONSITE THE CONTRACTOR SHALL DISPOSE OF STORMWATER OR GROUND WATER BY USE OF PUMPS AND HOSES TO ACCEPTABLE DISCHARGE POINTS APPROVED BY THE CITY AND PROJECT ENGINEER.

3. ANY ACCUMULATED SEDIMENT ALONG EXISTING CURB AND GUTTER THAT HAS COLLECTED AS A RESULT OF DISCHARGING DEWATERING HOSES SHALL BE IMMEDIATELY REMOVED AND PROPERLY DISPOSED OF AFTER EACH DISCHARGING EVENT.

INSTALLATION OF INFILTRATION/FILTRATION PRACTICES SHALL BE DONE DURING PERIODS OF DRY WEATHER AND COMPLETED BEFORE A RAINFALL EVENT. PLACEMENT OF ENGINEERED SOILS SHALL BE ON DRY

2. EXCAVATION OF INFILTRATION AREAS SHALL BE COMPLETED USING A BACKHOE WITH A TOOTHED BUCKET.

3. THE BOTTOM EXCAVATION SURFACE OF INFILTRATION AREAS SHALL BE LEVEL WITHOUT DIPS OR SWALES.

5. ENGINEERED SOIL SHALL REMAIN UNCONTAMINATED (NOT MIXED WITH OTHER SOIL) BEFORE AND DURING INSTALLATION.

4. DURING CONSTRUCTION, STORM WATER MUST BE ROUTED AROUND INFILTRATION AREAS UNTIL ALL

AND MULCH OR SOD IS REQUIRED WITHIN 3 DAYS OF COMPLETION OF FINAL GRADING.

TRACK GROOVES PERPENDICULAR TO THE SLOPE. DO NOT BACK-BLADE. LEAVE A SURFACE ROUGH TO

CREATED BY CONSTRUCTION ACTIVITIES AND/OR CLIMATIC EVENTS AND TO PROVIDE ADDITIONAL BMP'S OVER AND ABOVE THE MINIMUM REQUIREMENTS SHOWN ON THE PLANS, AS MAY BE NEEDED TO PROVIDE EFFECTIVE PROTECTION OF WATER AND SOIL RESQUECES.

PRIOR TO CONSTRUCTION AND TO MINIMIZE WEED GROWTH.

THE DRIPLINE, ROOT ZONES OR WITHIN TREE PROTECTION FENCE AREAS.

CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR EROSION HAS PASSED

6. THE BOUNDARIES OF THE LAND DISTURBANCE LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY

DEVIATION FROM THE APPROVED PLANS SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER OF

FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. NO DISTURBANCE ALLOWED BEYOND THE DISTURBED

- MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. a. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS THAT
 - WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS. b. IF THE DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENT), THE
- SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS AND BE LOCATED UPGRADIENT OF ANY BUFFER ZONES. THE PERIMETER SEDIMENT CONTROL PRACTICE MUST BE IN PLACE BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PART IV.G. A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY PERIMETER CONTROL REQUIREMENTS IN THIS PART EXCEPT WHEN WORKING ON A SHORELINE AND BELOW THE WATERLINE. IN THOSE CASES, A FLOATING SILT CURTAIN CAN BE USED AS A PERIMETER CONTROL PRACTICE IF THE FLOATING SILT CURTAIN IS INSTALLED AS CLOSE TO SHORE AS POSSIBLE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G.
- 3. THE CONTRACTOR SHALL RE-INSTALL ALL SEDIMENT CONTROL PRACTICES THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. THE CONTRACTOR SHALL COMPLETE ANY SHORT-TERM ACTIVITY THAT REQUIRES REMOVAL OF SEDIMENT
- . STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURI CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A HAS BEEN IDENTIFIED BY THE CONTRACTOR OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER). THE CONTRACTOR MUST
- d. THE CONTRACTOR MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE. EXAMPLES OF VEHICLE TRACKING BMPS INCLUDE (BUT ARE NOT LIMITED TO) ROCK PADS, MUD MATS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT
- b. THE CONTRACTOR MUST USE STREET SWEEPING IF SUCH VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET (SEE PART IV.E.5.D.).
- FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.
- IS INFEASIBLE ON THE SITE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FFFT OF THE PROJECT'S FARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. NATURAL SEDIMENT BASINS. THE CONTRACTOR IS/ARE NOT REQUIRED TO ENHANCE THE QUALITY OF THE VEGETATION THAT ALREADY EXISTS IN THE BUFFER OR PROMDE VEGETATION IF NONE EXIST. HOWEVER, CONTRACTOR CAN IMPROVE THE NATURAL BUFFER WITH VEGETATION
- 10. IF THE CONTRACTOR INTEND TO USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ON THE PROJECT SITE, THE CONTRACTOR MUST COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:
- a. THE CONTRACTOR MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION TO ENSURE EFFECTIVE TREATMENT. CHEMICALS MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A EDIMENT CONTROL SYSTEM WHICH ALLOWS FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.
- b. CHEMICALS MUST BE SELECTED THAT ARE APPROPRIATELY SUITED TO THE
- THE APPLICABLE CHEMICALS.

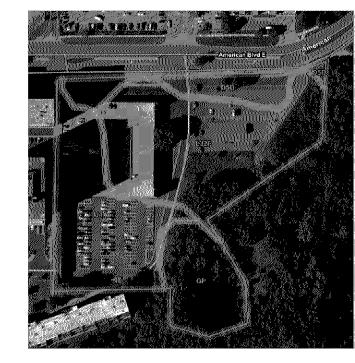
EROSION CONTROL SCHEDULE: 1. PRIOR TO ANY CONSTRUCTION OR DEMOLITION, SILT FENCE AND FILTERS SHALL BE INSTALLED AS

2. CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES AS INDICATED ON THIS EROSION CONTROL PLAN AND ANY ADDITIONAL REQUIRED BASED ON MEANS, METHODS AND SEQUENCES OF CONSTRUCTION

ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION THE CONTRACTOR UNTIL THE SITE HAS BEEN RE-VEGETATED. CONTRACTOR MAY REMOVE NECESSARY SILT FENCING/FILTERS TO CONSTRUCT ROADWAYS, WHILE MAINTAINING ADEQUATE EROSION CONTROL IN

4. SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF 6" OF TOPSOIL FOR DISTURBED AREAS TO BE RE-VEGETATED. 5. SOIL COMPACTION SHALL BE MINIMIZED IN PROPOSED PERVIOUS AREAS ONSITE AND AVOID ALTOGETHER

IN PROPOSED INFILTRATION BASINS. SOIL SURFACES IN PROPOSED PERVIOUS AREAS COMPACTED DURING CONSTRUCTION SHALL BE DECOMPACTED THROUGH SOIL AMENDMENT OR DEEP RIPPING TO AN 18" DEPTH . THE CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND PAVEMENT CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. AREAS THAT WILL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC SHALL BE SEEDED (MN STATE SEED MIX 22-112 @ 40 LBS/AC AND MULCHED OR SODDED WITHIN SEVEN (7) DAYS OF BEING DISTURBED.



WEB SOIL SURVEY MAP

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
D5D	Dorset-Two Inlets complex, 12 to 18 percent slopes	0.9	10.3%
GP	Pits, gravel-Udipsamments complex.	1.3	15.4%
L32F	Hawick loamy sand, 20 to 40 percent slopes	3.8	44.1%
U4A	Urban land-Udipsamments (cut and fill land) complex, 0 to 2 percent slopes	2.6	30.2%
Totals for Area of Interest		8.7	100.0%

WEB SOIL SURVEY LEGEND

SEDIMENT CONTROL PRACTICES

REQUIRED IN PART III.B 1.-3.

- 1. THE CONTRACTOR MUST EMPLOY SEDIMENT CONTROL PRACTICES AS NECESSARY TO ARE DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES
- CONTRACTOR MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES AS
- INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE. AN UPLAND PERIMETER CONTROL PRACTICE MUST BE INSTALLED IF EXPOSED SOILS STILL DRAIN TO THE SURFACE WATER.
- CONTROL PRACTICES AS QUICKLY AS POSSIBLE. THE CONTRACTOR MUST REINSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
- PARTICULAR INLET IE A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.
- TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER FEFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN ANY NATURAL BUFFERS OF SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND BUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER
- 6. WHERE VEHICLE TRAFFIC LEAVES ANY PART OF THE SITE (OR ONTO PAVED ROADS
- 7. THE CONTRACTOR MUST INSTALL TEMPORARY SEDIMENTATION BASINS AS REQUIRED
- 8. THE CONTRACTOR MUST MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE
- THE CONTRACTOR MUST PRESERVE A 50 FOOT NATURAL BUFFER OR (IF A BUFFER BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND
- TYPES OF SOILS LIKELY TO BE EXPOSED DURING CONSTRUCTION, AND TO THE EXPECTED TURBIDITY, PH. AND FLOW RATE OF STORMWATER FLOWING INTO THE
- CHEMICALS MUST BE USED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, AND WITH DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR PROVIDER/SUPPLIER OF

WINTER STABLIZATION:

- GRADING CONTRACTOR REQUIREMENTS IN THE CASE WHERE THE ONSET OF WINTER DOES NOT ALLOW FOR COMPLETION OF MASS GRADING AND FINAL SOIL STABLIZATION IN THE FALL:

 1. MASS GRADING ACTIVITIES SHALL BE PLANNED AND PHASED IN A MANNER TO AVOID ANY
- 2. ALL FINAL GRADED AREAS SHALL BE STABILIZED PERMANENTLY BY GRADING CONTRACTOR WITH SEEDING, MULCHING, BLANKET, ETC. IN ACCORDANCE WITH PLANS PRIOR TO CONTRACTOR LEAVING THE SITE AT WINTER SHUT DOWN.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL TEMPORARY OR INCOMPLETE GRADING AREAS INCLUDING ALL STOCKPILES ARE STABILIZED WITH TEMPORARY SEEDING (MN STATE SEED MIX 22-112 @ 40/AC, MULCH (MNDOT TYPE 1)
- 4. ALL SIGNIFICANT DRAINAGE SWALES (TEMPORARY OR PERMANENT) SHALL BE STABILIZED WITH MNDOT CATEGORY 3 EROSION CONTROL BLANKET BY GRADING CONTRACTOR PRIOR TO LEAVING THE SITE AT WINTER SHUT DOWN.

INSPECTIONS AND MAINTENANCE

- 1. THE CONTRACTOR MUST ENSURE THAT A TRAINED PERSON (AS IDENTIFIED IN ITEM 2221.2.b) WILL ROUTINELY 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 0.5 INCHES IN 24 HOURS. FOLLOWING AN INSPECTION THAT OCCURS WITHIN 24 HOURS AFTER A RAINFALL EVENT, THE NEXT INSPECTION MUST BE CONDUCTED WITHIN SEVEN (7) DAYS AFTER THE RAINFALL EVENT.
- 2. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED WITHIN 24 HOURS IN WRITING AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP IN ACCORDANCE WITH PART III.E. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
- a.DATE AND TIME OF INSPECTIONS
- b. NAME OF PERSON(S) CONDUCTING INSPECTIONS c. FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE
- CORRECTIVE ACTIONS ARE NEEDED d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY
- COMPLETING MAINTENANCE ACTIVITIES) e. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCH (0.5 INCHES) IN 24 HOURS. RAINFALL AMOUNTS MUST BE OBTAINED BY A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN 1 MILE OF YOUR LOCATION OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
- f. IF ANY DISCHARGE IS OBSERVED TO BE OCCURRING DURING THE INSPECTION. A RECORD OF ALL POINTS OF THE PROPERTY FROM WHICH THERE IS A DISCHARGE MUST BE MADE, AND THE DISCHARGE SHOULD BE DESCRIBED (I.E., COLOR, ODOR, FLOATING, SETTLED, OR SUSPENDED SOLIDS, FOAM, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS) AND PHOTOGRAPHED.
- g. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS.
- 3.INSPECTION FREQUENCY ADJUSTMENT
- a. WHERE PARTS OF THE PROJECT SITE HAVE PERMANENT COVER, BUT WORK REMAINS ON OTHER PARTS OF THE SITE, THE CONTRACTOR MAY REDUCE INSPECTIONS OF THE AREAS WITH PERMANENT COVER TO
- IN WHERE CONSTRUCTION SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AREAS AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE. THE SITE MILIST BE INSPECTED DURING NON-FROZEN GROUND. CONDITIONS AT LEAST ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS. FOLLOWING THE TWELFTH MONTH OF PERMANENT COVER AND CONSTRUCTION ACTIVITY, INSPECTIONS MAY BE TERMINATED UNTIL CONSTRUCTION ACTIVITY IS ONCE AGAIN INITIATED UNLESS THE CONTRACTOR S/ARE NOTIFIED IN WRITING BY THE MPCA THAT EROSION ISSUES HAVE BEEN DETECTED AT THE SITE AND INSPECTIONS NEED TO RESUME. & WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS.
- MAINTENANCE SCHEDULE MUST BEGIN WITHIN 24 HOURS AFTER RUNOFF OCCURS AT THE SITE OR 24 HOURS PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.
- 4. THE CONTRACTOR IS/ARE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS, AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS, UNTIL ANOTHER PERMITTEE HAS OBTAINED COVERAGE UNDER THIS PERMIT OR IE PROJECT HAS UNDERGONE FINAL STABILIZATION, AND HAS NOT BEEN SUBMITTED TO THE MPCA.
- 5. THE CONTRACTOR MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS DURING ALL ROUTINE AND POST-RAINFALL EVENT INSPECTIONS. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY TI END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED BELOW. THE CONTRACTOR MUST INVESTIGATE AND COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS:
- a. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-HALF (1/2) OF THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

b. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED.

- AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES ONE-HALF (1/2) THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS (SEE PART IV.D.).
- c. SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION DURING EACH INSPECTION. THE CONTRACTOR 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. THE REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. THE CONTRACTOR SHALL USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) CALENDAR DAYS OF OBTAINING ACCESS. THE CONTRACTOR IS/ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.
- CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OF SITE WITHIN 24 HOURS OF DISCOVERY, OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. d. STREETS AND OTHER AREAS ADJACENT TO THE PROJECT MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE ACCUMULATIONS OF SEDIMENT, IF SEDIMENT IS PRESENT, IT MUST BE REMOVED IN A MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT IN STREETS COULD BE WASHED INTO STORM SEWERS BY THE NEXT RAIN AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC
- 6. ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.

SPECIAL REQUIREMENT

IMPAIRED WATER

A RIVER IS CLASSIFIED AS AN IMPAIRED THE FOLLOWING REQUIREMENTS APPLY FOR PERMITTES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4, AND E STABILIZATION WITHIN SEVEN (7) CALENDAF HE CONSTRUCTION ACTIVITY IN THAT PORTION TEMPORARILY OR PERMANENTLY CEASES.

LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME. ALSO, A MANDATORY STORMWATER POLLUTION PREVENTION ALSO, A MANDATORY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REVIEW IS REQUIRED BY THE MPCA IF THE PROJECT WILL DISTURB OVER 50 ACRES AND HAS A DISCHARGE POINT ON THE PROJECT WITHIN 1 MILE (AERIAL RADIUS MEASUREMENT) OF, AND FLOWS TO THE IMPAIRED WATER. OWNERS MUST SUBMIT THE APPLICATION FOR COVERAGE AND THE SWPPP AT LEAST 30—DAYS BEFORE THE CONSTRUCTION START DATE. THE SWPPP CAN BE ATTACHED ELECTRONICALLY WHEN USING THE ONLINE APPLICATION.

POLLUTION PREVENTION MANAGEMENT MEASURES

- THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:
- 1 STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTES: THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING TO MINIMIZE THE EXPOSURE TO STORMWATER OF ANY OF THE PRODUCTS, MATERIALS, OR WASTES. PRODUCTS OR WASTES WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER ARE NOT HELD TO THIS REQUIREMENT:
- a BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF UTÀNTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
- LANDSCAPE MATERIALS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. C HAZARDOUS MATERIALS TOXIC WASTE (INCLUDING OIL DIESEL FUEL GASOLINE HYDRAULIC

b. PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND

- FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS VASTE OR HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
- d. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY IN COMPLIANCE
- e. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN, R. CH. 7041.
- 2 FLIFLING AND MAINTENANCE OF EQUIPMENT OR VEHICLES: SPILL PREVENTION AND RESPONSE HE CONTRACTOR SHALL TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. THE CONTRACTOR MUST CONDUCT FUELING IN A CONTAINED AREA UNLESS NFEASIBLE. THE CONTRACTOR MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD. IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. THE CONTRACTOR MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. § 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
- 3. VEHICLE AND EQUIPMENT WASHING: IF THE CONTRACTOR WASH THE EXTERIOR OF VEHICLES OR EQUIPMENT ON THE PROJECT SITE, WASHING MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OF SIMILARLY EFFECTIVE CONTROLS AND WASTE FROM THE WASHING ACTIVITY MUST BE PROPERLY DISPOSED OF. THE CONTRACTOR MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS. NO ENGINE DEGREASING IS ALLOWED ON SITE.
- 4. CONCRETE AND OTHER WASHOUTS WASTE: THE CONTRACTOR MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. THE LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND. AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILIT THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.

FINAL STABLIZATION

- THE CONTRACTOR MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL REQUIREMENTS OF ITEMS 13.2-13.7 BELOW:
- 13.2 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.
- 13.3 PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED. 13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO
- SUBMITTING THE NOTICE OF TERMINATION (NOT). 13.5 PERMITTEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS PRIOR TO

SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPS DESIGNED TO DECOMPOSE ON-SITE IN

- 13.6 FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE. THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO
- 13.7 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.

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

SEDIMENT BARRIERS SILT FENCE (MnDOT 3886) . CURB LOG

ROCK WEEPER 4. SEDIMENT LOGS INLET PROTECTION DEVICES

WIMCO (MnDOT TYPE A & C) 2. INFRASÀFE STORM DRAIN/CÚLVERT

(RESIDENTIAL TURF) ANTI-TRACKING CONTROL I. 2" CRUSHED CLEAR ROCK (LAND DEVELOPMENT)

STABILIZATION BMP'S
I. EROSION CONTROL BLANKET MnDOT CATEGORY

CONCRETE WASHOUT IS DONE TRUCK BY TRUCK WITH A MOBILE WASHOUT SYSTEM PROVIDED AND COMPLETED BY THE CONCRETE CONTRACTOR.

PERTINENT PERMITS:

1. CITY OF BLOOMINGTON GRADING PERMIT NPDES

CONSTRUCTION SEQUENCE

- THE INTENDED SEQUENCING OF MAJOR SITE CONSTRUCTION ACTIVITIES IS AS FOLLOWS:
- INSTALL STABILZED ROCK CONSTRUCTION ENTRANCE.

TEMPORARY SEED MIX

I. MN STATE SEED MIX 21-112

2. MN STATE SEED MIX 22-III

I. MN STATE SEED MIX 25-151

(OATS COVER CROP)

(WINTER WHEAT COVER CROP)

PERMANENT SEED MIX/STABILIZATION

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

SWPPP BMP QUANTITIES (PER PLAN):

271 LF SILT FENCE INLET PROTECTION 23 EA ROCK CONSTRUCTION ENTRANCE 1 EA SEED/SOD POST GRADING AREA

EROSION CONTROL RESPONSIBLE PARTIES:

OWNER/DEVELOPER: KAEDING & RON CLARK

SWPPP INSPECTION:

ENGINEER: CONTRACTOR: DAVE NASH LISCENSE NO. 40922 ALLIANT ENGINEERING, INC

233 PARK AVE S. STE 300 MINNEAPOLIS, MN 55415 DNASH@ALLIANT-INC.COM

ALLIANT ENGINEERING

733 Marquette Avenue Suite 700 Minneapolis, MN 55402 612.758.3080 www.alliant-inc.com

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I

PROFESSIONAL ENGINEER under

the laws of the State of

am a duly Licensed

DAVID NASH, PE

MINNESOTA

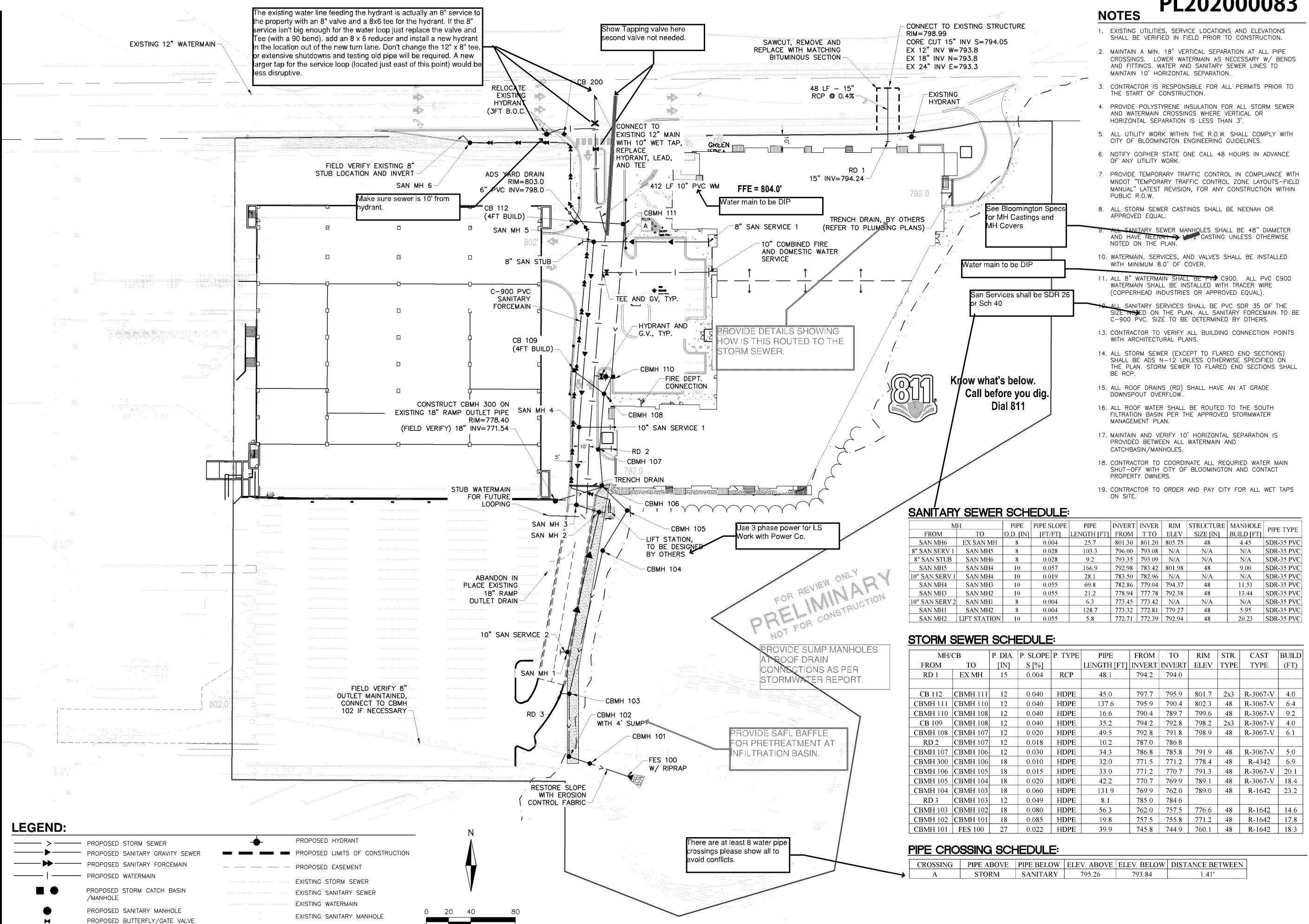
License No. QUALITY ASSURANCE/CONTROL

DATE DATE ISSUE 01-29-20 CITY SUBMITTAL 03-27-20 PROGRESS PLOT 05-06-20 REVISED CITY SUBMITTAL

DESIGNED: DMS/DJN KDB/DMS DRAWN: PROJECT NO:

PROJECT TEAM DATA

190123



EXISTING STORM MANHOLE/CATCH BASIN

EXISTING EASEMENTS

PROPOSED SUBGRADE DRAINTILE

IN

PL202000083



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> SOUT 34TH

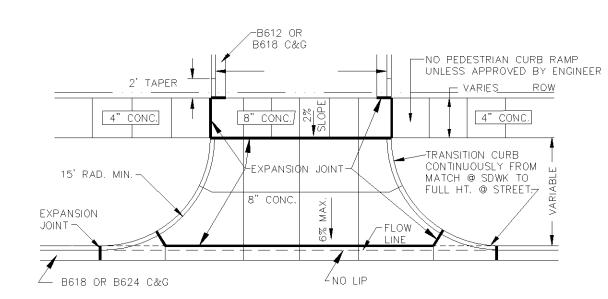
hereby certify that this plan specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed PROFESSIONAL ENGINEER under the laws of the State of MINNESOTA

DAVID NASH, PE	
12-30-19	21836
Date	License No.
QUALITY ASSURA	NCE/CONTROL

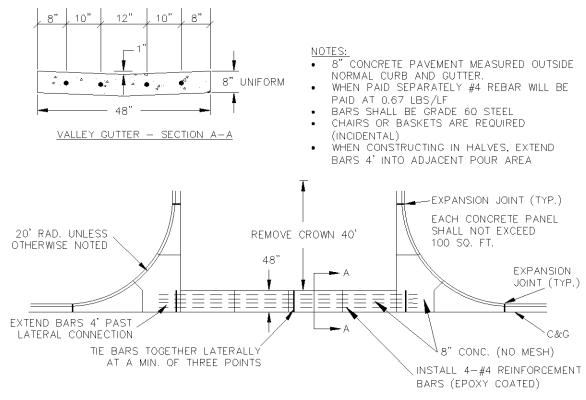
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Υ	DATE
ATE	ISSUE
1-29-20	CITY SUBMITTAL
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5-06-20	REVISED CITY SUBMITTAL

PROJECT TEAM DATA DESIGNED: DMS/DJN DRAWN: KDB/DMS PROJECT NO: 190123

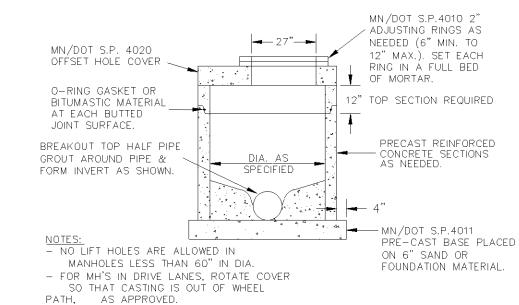
C-6.0



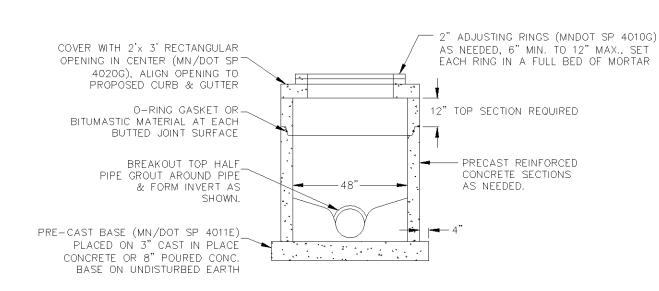
100 - NONRESIDENTIAL DRIVEWAY APPROACH WITH BOULEVARD SIDEWALK
NOT TO SCALE 100 - Drwy (Commercial).dwg 5/2015



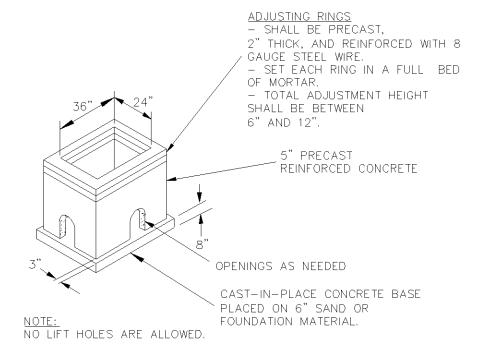




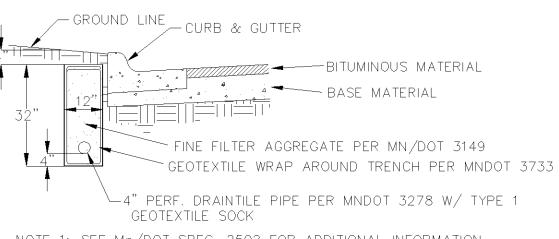








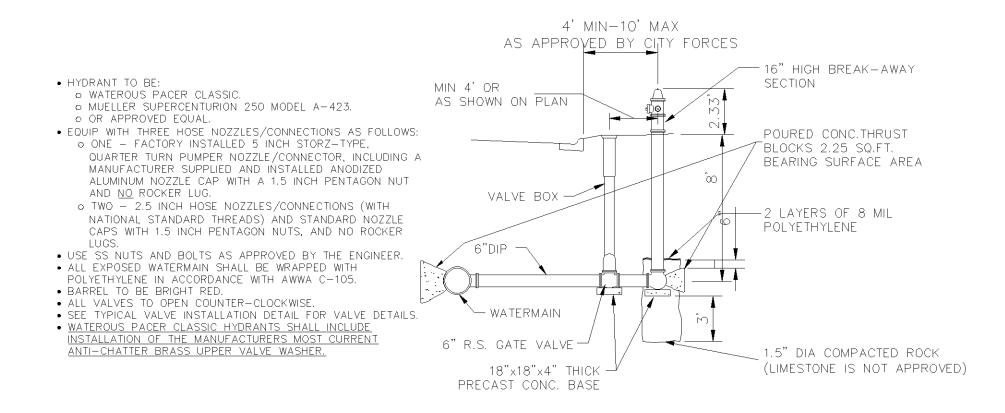




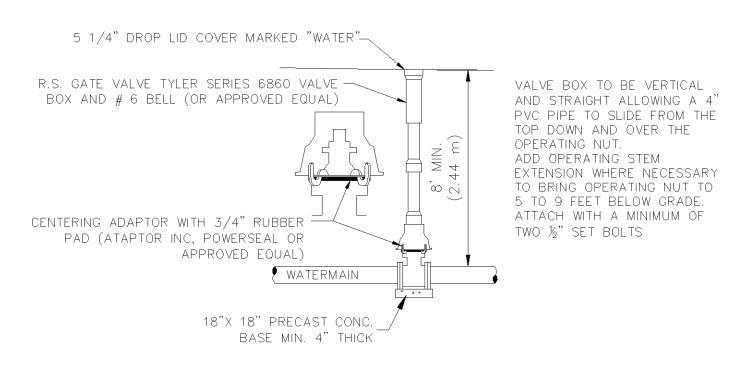
NOTE 1: SEE Mn/DOT SPEC. 2502 FOR ADDITIONAL INFORMATION

NOTE 2: INSTALL 20 LF AT CATCH BASINS AS NOTED ON THE PLANS

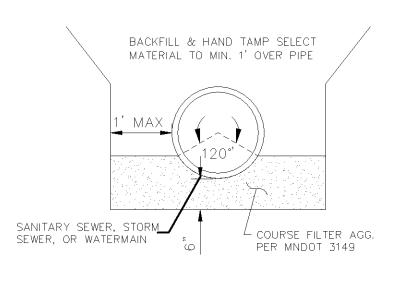




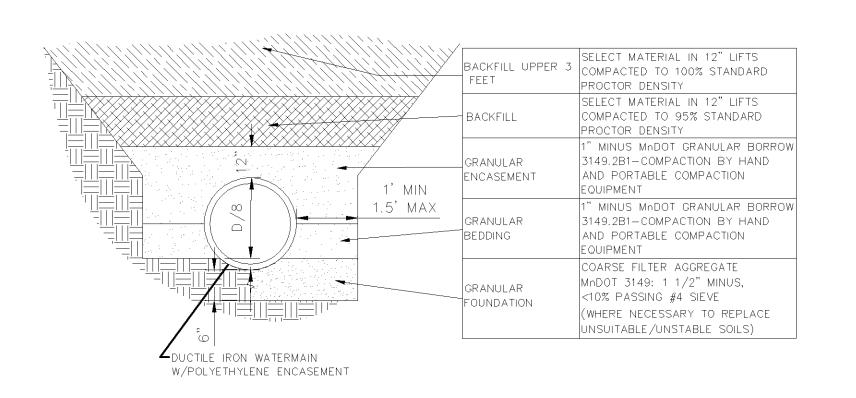




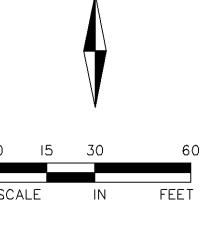














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BOULEVARD E. AND 34TH AVE SOUTH

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Date	License

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BY	DATE
DATE	ISSUE
01-29-20	CITY SUBMITTAL
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05-06-20	REVISED CITY SUBMITTAL
PROJECT	TEAM DATA

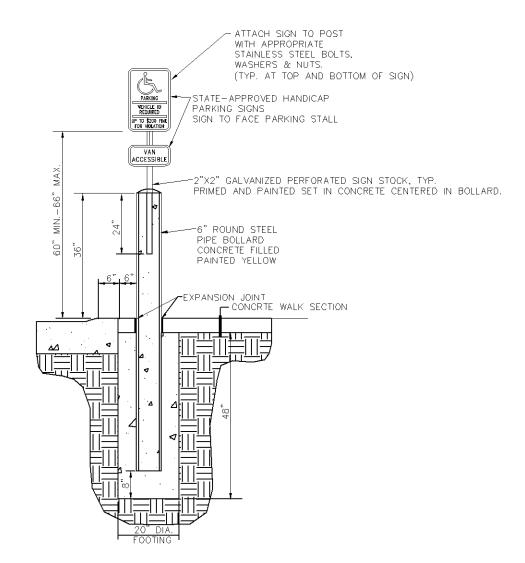
PROJECT TEAM DATA

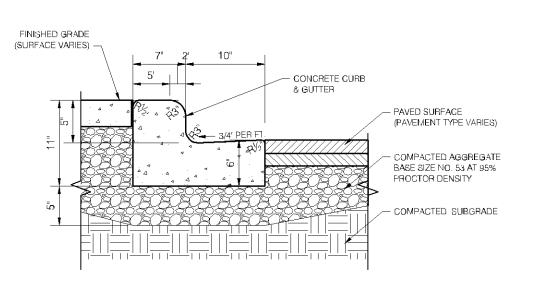
DESIGNED: DMS/DJN

DRAWN: KDB/DMS

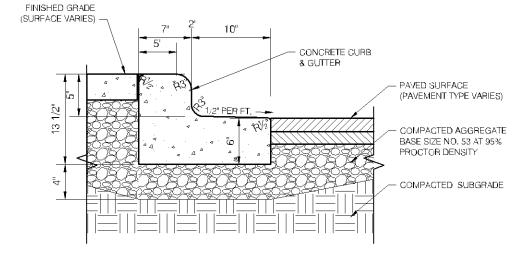
PROJECT NO: 190123

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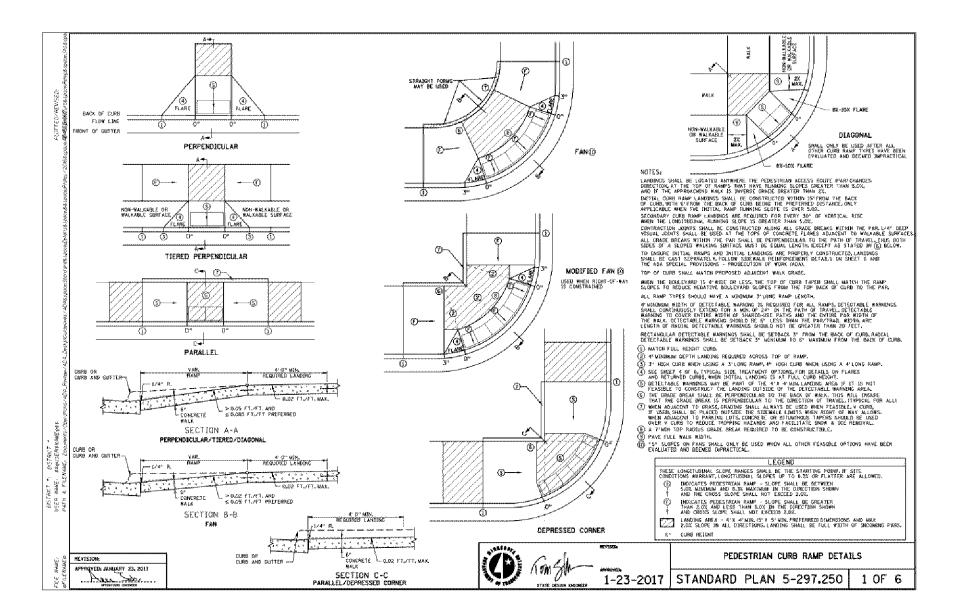


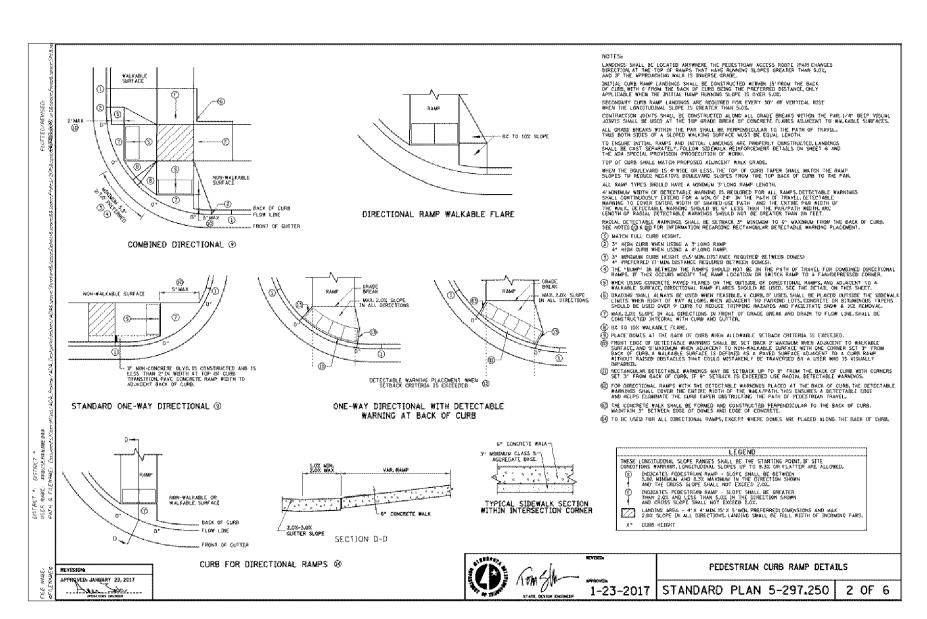
2 B612 CURB AND GUTTER

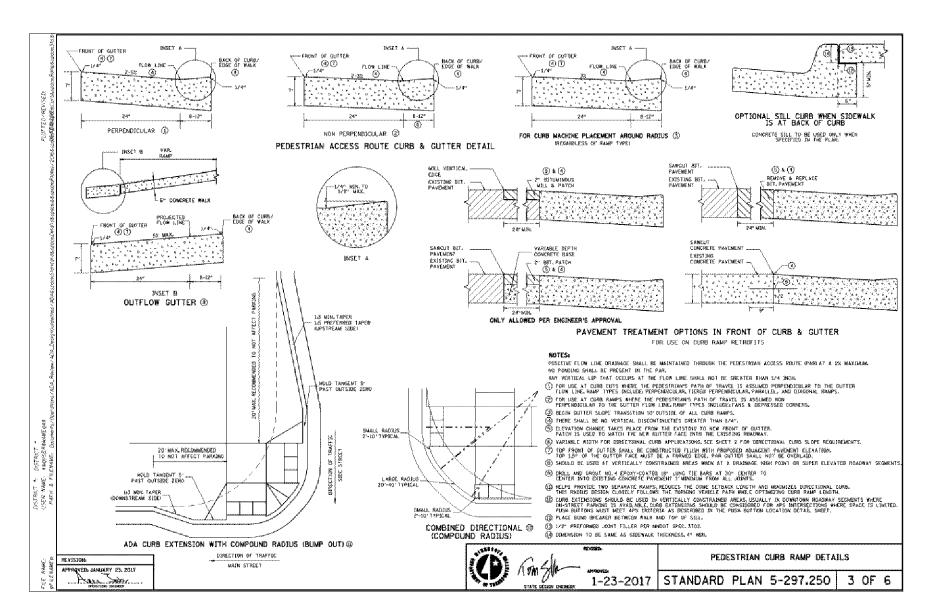


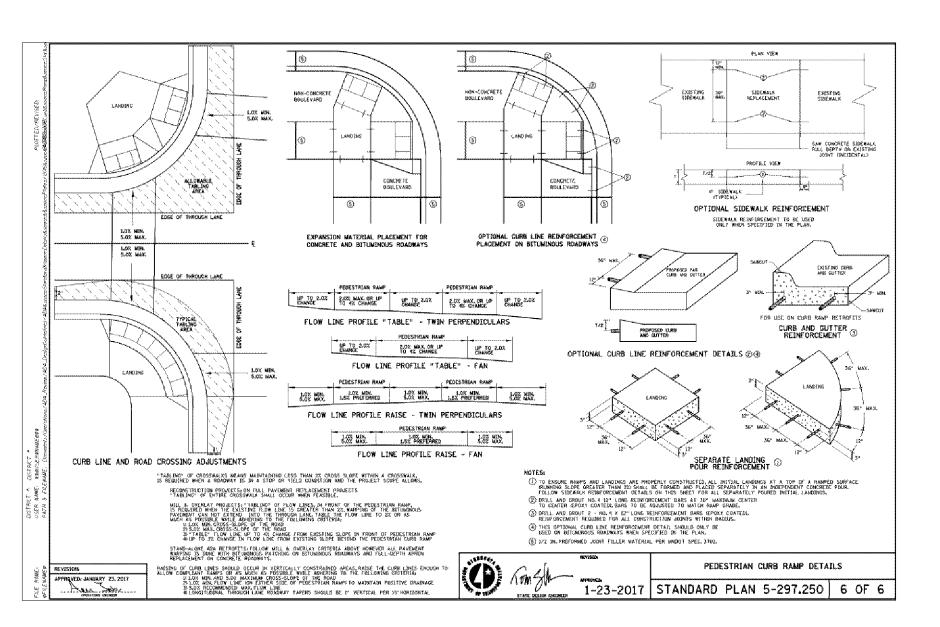
B612 CURB AND GUTTER - OUTFALL

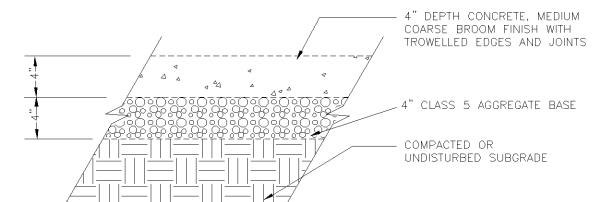




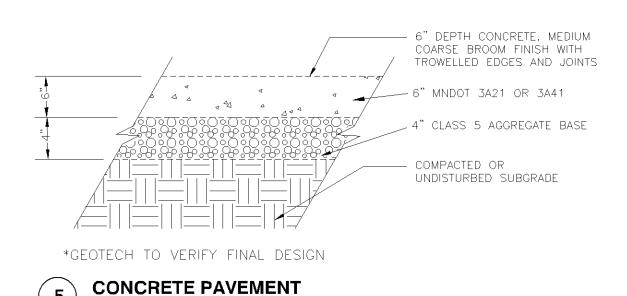


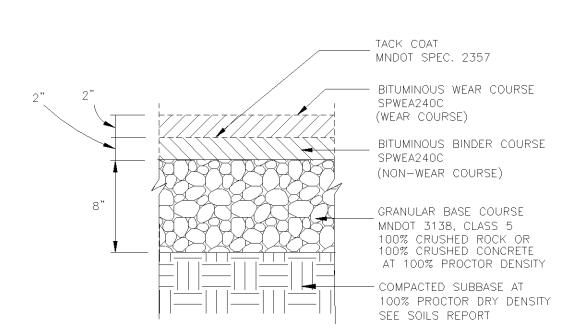




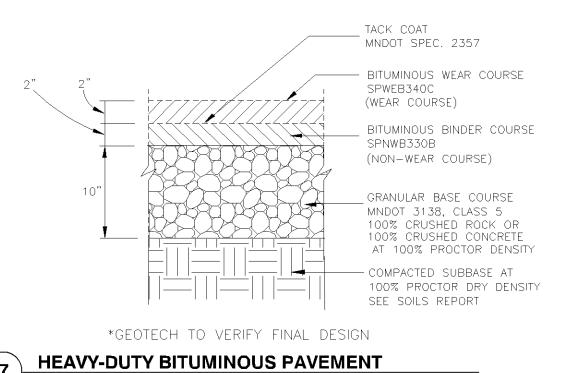


CONCRETE SIDEWALK NOT TO SCALE

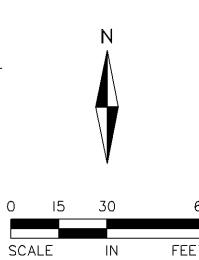




*GEOTECH TO VERIFY FINAL DESIGN LIGHT-DUTY BITUMINOUS PAVEMENT



SOILS REPORT SUPERSEDES ABOVE SPEC





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PROJECT TEAM DATA DESIGNED: DRAWN:

PROJECT NO:

C-7.1

DMS/DJN

KDB/DMS

190123

PEDESTRIAN CURB RAMP

1 MN/DOT S.P.4010 2" ADJUSTING RINGS AS NEEDED [6" MIN. TO 12" MAX.]. SET EACH RING IN FULL BED OF MORTAR. 2 MN/DOT S.P.4010 TYPE C ALTERNATE SHORT CONE SECTION.

4 USE ONLY PRECAST SECTIONS, NO BRICK OR BLOCK 5 8" CAST IN-PLACE CONCRETE OR 6" PRECAST REINFORCED CONCRETE (64" MINIMUM OD)

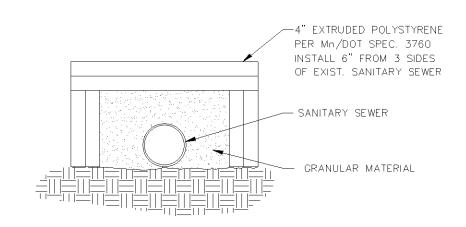
7 LEAN CONCRETE TO BEAR AGAINST FIRM UNDISTURBED SOIL

8 PROVIDE WATER TIGHT PIPE CONNECTIONS SEE DETAIL THIS SHEET 9 > O-RING GASKET

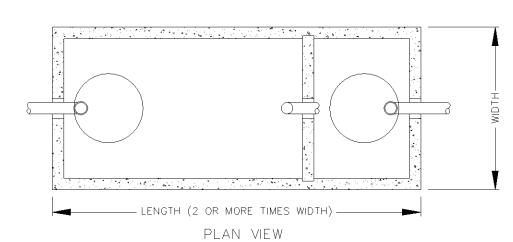
11 > 6" SAND OR FOUNDATION MATERIAL 12 UNDISTURBED SOIL OR COMPACTED SUBGRADE

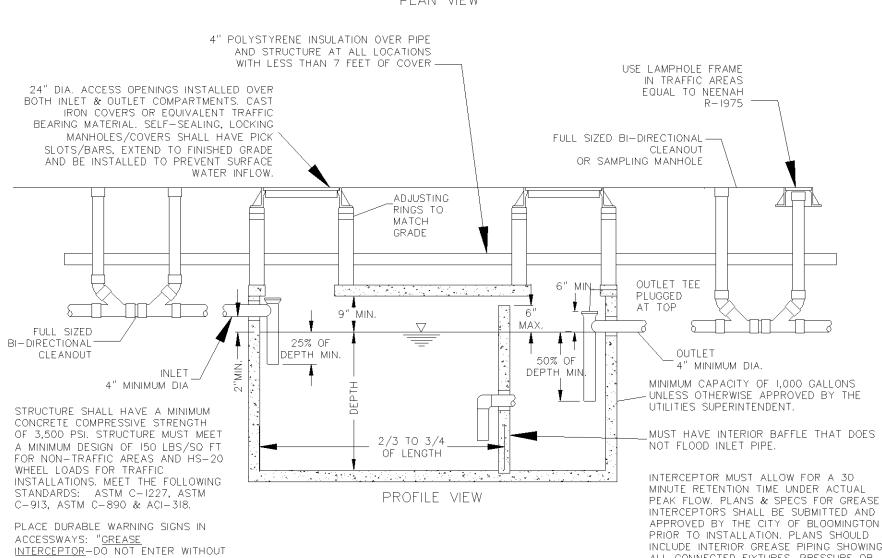
400 - STANDARD SANITARY SEWER MANHOLE 400 - Std San MH.dwg 6/2015

<u>PLAN</u>



411 - SANITARY SEWER INSULATION DETAIL 411 - Std San MH.dwg 6/2015



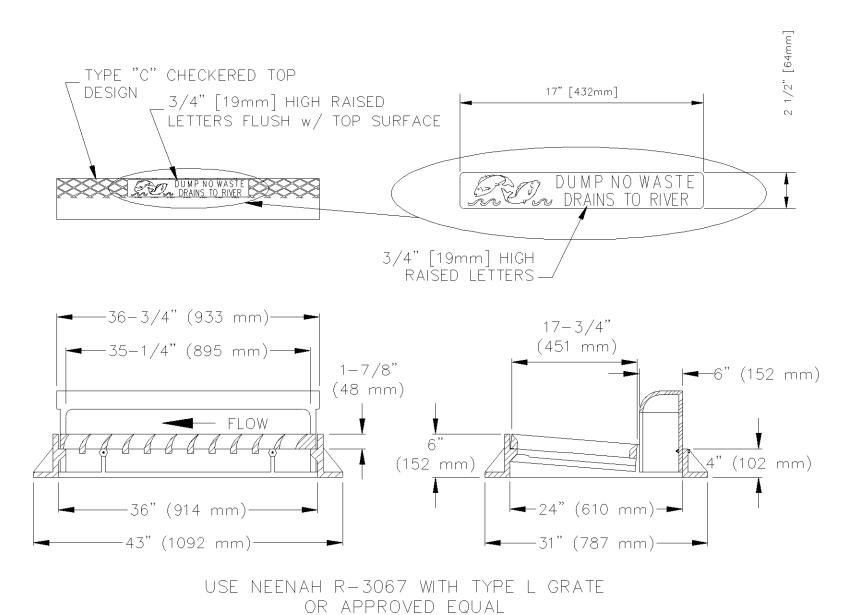


PROPER SAFETY EQUIPMENT"

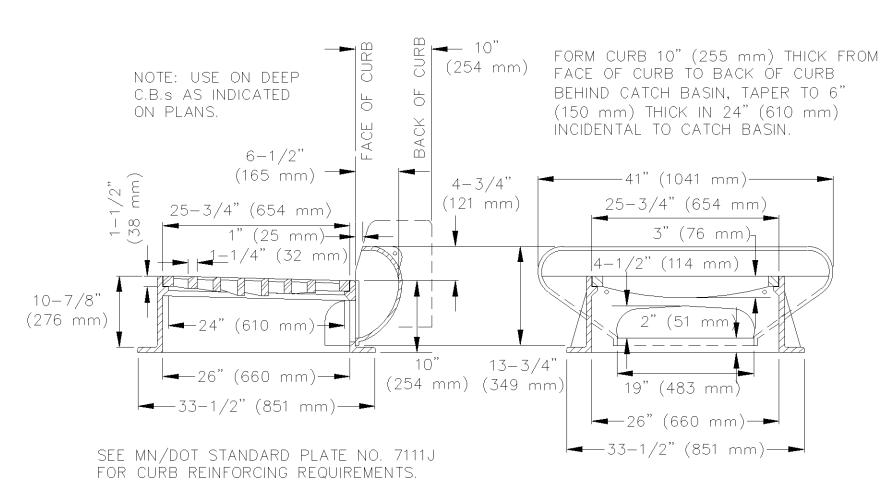
412 - GREASE INTERCEPTOR EXAMPLE NOT TO SCALE - FOR INFORMATIONAL PURPOSES ONLY 412 - Typical Grease Interceptor.dwg 12/2019

INCLUDE INTERIOR GREASE PIPING SHOWING ALL CONNECTED FIXTURES, PRESSURE OR

VACUUM TEST TO BE WITNESSED BY CITY.

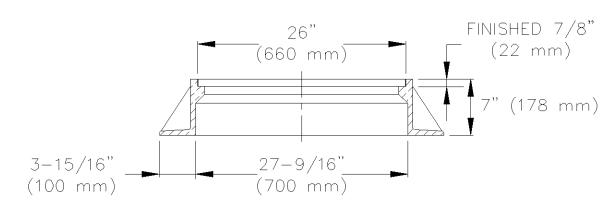


504 - RECTANGULAR CATCH BASIN CASTING ASSEMBLY 504 - Rect. CB.dwg 5/2015 NOT TO SCALE



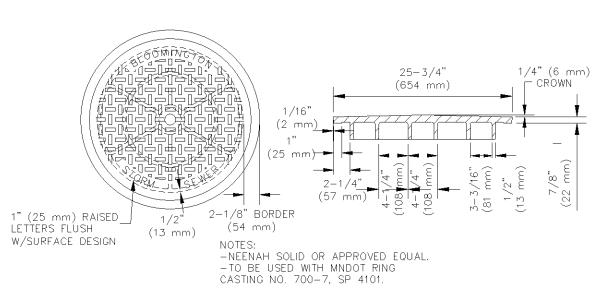
FRAME: MN/DOT STD PLATE 4126F CASTING 801 GRATE: MN/DOT STD PLATE 4149C CASTING 810 CURB BOX WITH 41" OPENING: AS SHOWN ABOVE (USE NEENAH R-3250-1 OR APPROVED EQUAL)

505 - ROUND CATCH BASIN CASTING ASSEMBLY 505 - Round CB.dwg 5/2015

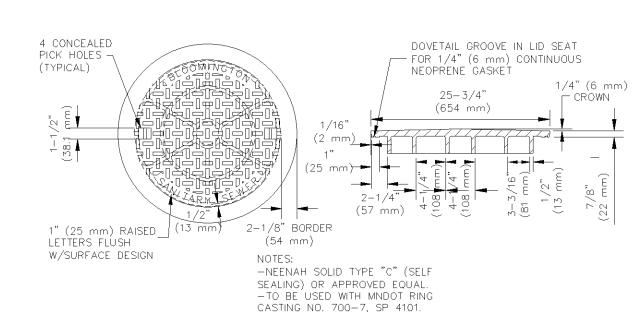


MN/DOT S.P. 4101D CASTING NO. 700-7

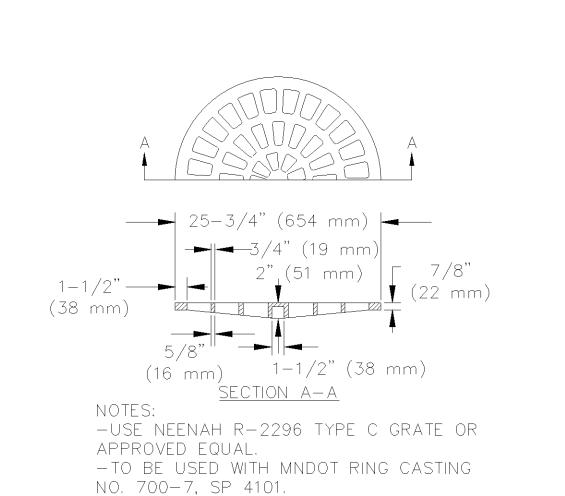




500 - STANDARD STORM SEWER MANHOLE COVER 500 - Storm Cov (Solid).dwg 5/2015



501 - STANDARD SANITARY MANHOLE COVER 501 - Sanitary Cov.dwg 5/2015



502 - RADIAL GRATE STORM MANHOLE COVER 502 - Radial Grate.dwg 4/2009 NOT TO SCALE



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SOUTH

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12-30-1	9
Date	License No.

DATE ISSUE 01-29-20 CITY SUBMITTAL 03-27-20 PROGRESS PLOT 05-06-20 REVISED CITY SUBMITTAL PROJECT TEAM DATA DESIGNED: DMS/DJN

DRAWN: KDB/DMS PROJECT NO: 190123

C-7.2

600 - ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS

600 - Rock Const. Ent.dwg 5/2015

EXISTING CB
AND GRATE

MODIFY BACK TO PROVIDE
OVERFLOW PROTECTION AT
LOW POINTS

FILTER ASSEMBLY
PERFORATED 8" PVC
WITH GEOTEXTILE SOCK

EXISTING
CVENTURY

FILTER ASSEMBLY
PERFORATED 8" PVC
WITH GEOTEXTILE SOCK

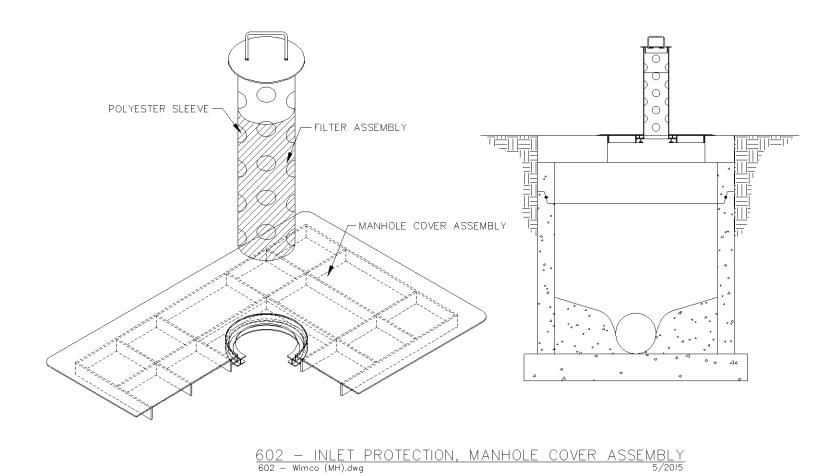
EXISTING
CURB

601 — INLET PROTECTION, METAL BASKET TYPE
601 — Wimco (CB) dwg

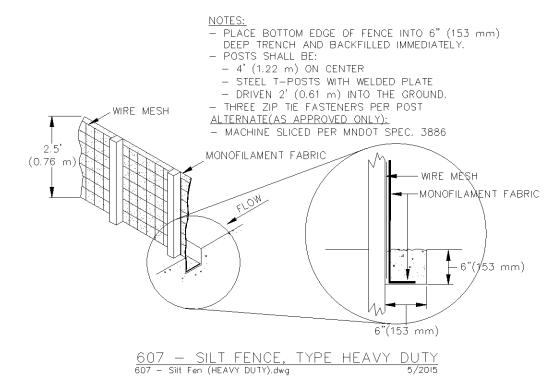
5/2015

2 601 - INLET PROTECTION, METAL BASKET TYPE

NOT TO SCALE 601 - Wimco (CB).dwg 5/2015



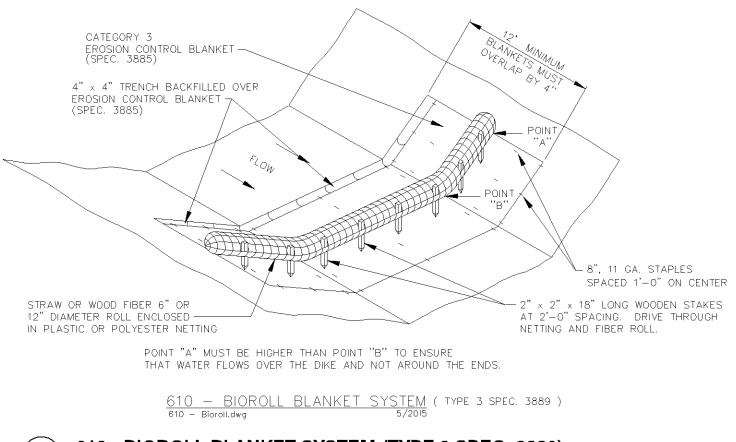
3 602 - INLET PROTECTION, MANHOLE COVER ASSEMBLY
NOT TO SCALE 6012 - Wimco (MH).dwg 5/2015



607 - SILT FENCE, TYPE HEAVY DUTY

NOT TO SCALE

607 - SILT FENCE, TYPE HEAVY DUTY).dwg 5/2015



610 - BIOROLL BLANKET SYSTEM (TYPE 3 SPEC. 3889)



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> N, MN OULEVARD E. AND 34TH AVE SOUTH CAN BOULEVARD EAST

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QUALITY ASSURANCE/CONTRO				
BY	DATE			
DATE	ISSUE			
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03-27-20	PROGRESS PLOT			
05-06-20	REVISED CITY SUBMITTAL			

License No.

<u>12-30-19</u> Date

PROJECT NO:

PROJECT TEAM DATA
DESIGNED: DMS/DJN
DRAWN: KDB/DMS

C-7.3





733 Marquette Avenue Suite 700 Minneapolis, MN 55402 612.758.3080 www.alliant-inc.com

SCOOMINGTON, MN

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

QUALITY ASSURANCE/CONTROL

DATE ISSUE

01-29-20 CITY SUBMITTAL

03-27-20 PROGRESS PLOT

05-06-20 REVISED CITY SUBMITTAL

PROJECT TEAM DATA

DESIGNED: DMS/DJN
DRAWN: KDB/DMS
PROJECT NO: 190123

L-1.0

PUBLIC PARK/PLAZA REQUIREMENTS

25 SEATS

25 SEATS

TOTAL PLAZA AREA REQUIRED:	5,000 SF	
PROVIDED:	5,000 SF	
ABUTTING PUBLIC WAY REQUIRED (350 LF X 25%): PROVIDED (25%):	87.5 LF 88 LF	Is there a public park agreem
LANDSCAPE/WATER FEATURE REQUIRED (30%): PROVIDED (60%):	1,500 SF 3,019 SF	

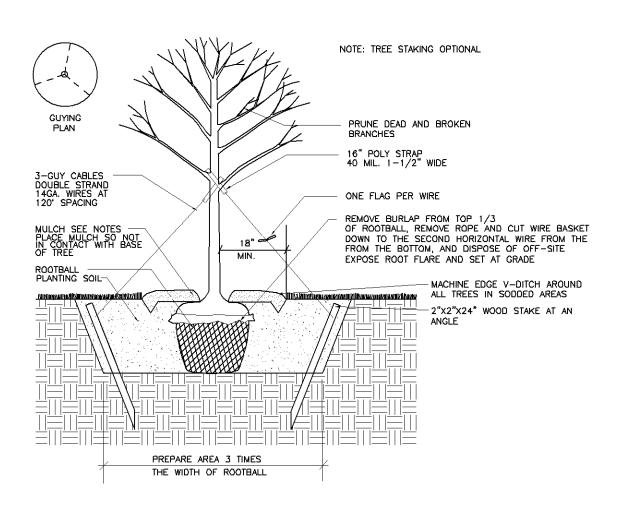
LANDSCAPE NOTES:

SEATING REQUIREMENT

REQUIRED (5,000/200 SF):

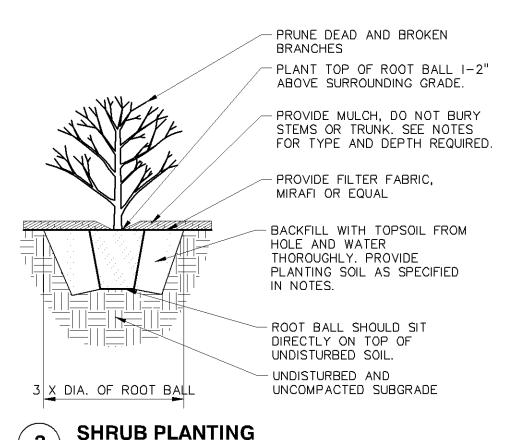
PROVIDED (5,000/200 SF):

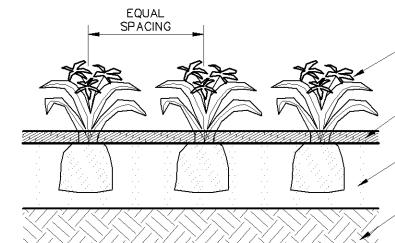
- CALL GOPHER STATE ONE CALL AT 651-454-0002 FOR LOCATING ALL UNDERGROUND UTILITIES AND TO AVOID DAMAGE TO UTILITIES DURING THE COURSE OF THE WORK.
- 2. INSTALL 4" MIN. TOP SOIL TO ALL SOD AND SHRUB AREAS. FINE GRADE ALL SOD AREAS. INSTALL 12" PLANTING (TOP) SOIL TO ALL ANNUAL/PERENNIAL AREAS.
- 3. STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. HAVE OWNERS REPRESENTATIVE APPROVE ALL STAKING PRIOR TO INSTALLATION.
- 4. ALL SHRUB AREAS UNLESS SPECIFIED AS OTHER ON THE PLAN, TO BE BED MULCHED WITH 4" DEPTH OF HARDWOOD MULCH, DARK BROWN COLOR, OVER FILTER FABRIC, POLY-EDGER TO BE VALLEY VIEW BLACK DIAMOND OR APPROVED.
- 5. ALL MULCH AND ROCK (BOULDERS, COBBLESTONE, ETC) TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 6. INSTALL 4-6" DEPTH SHREDDED HARDWOOD MULCH AROUND ROOT SAUCER OF ALL TREES ISOLATED FROM PLANT BEDS. DO NOT PLACE LANDSCAPE FABRIC OR MULCH ONTO TREE TRUNK.
- 7. PLANTING SOIL SHALL BE 1:1:1 CONSISTING OF 33% SELECT LOAMY TOPSOIL, 33% PEAT MOSS, 33% PIT RUN SAND.
- 8. COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE. MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).
- 9. ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN.
- 10. ALL TREE TRUNKS SHALL BE WRAPPED WITH BROWN CREPE TREE WRAP. APPLY WRAP IN NOVEMBER AND REMOVE IN APRIL.
- 11. MAINTAIN ALL PLANT MATERIALS, INCLUDING WATERING, UNTIL THE TIME OF ACCEPTANCE.
- 12. COORDINATE LANDSCAPE INSTALLATION WITH GENERAL CONTRACTOR.
- 13. STAKING AND GUYING OF TREES OPTIONAL: MAINTAIN PLUMBNESS OF TREES FOR DURATION OF WARRANTY PERIOD.
- 14. SWEEP AND WASH ALL PAVED SURFACES AND REMOVE ALL DEBRIS RESULTING FROM LANDSCAPE OPERATIONS DAILY.
- 15. SUPPLY DESIGN AND INSTALLATION FOR NEW IRRIGATION SYSTEM WITH 100% COVERAGE OF SOD AND PLANTING AREAS INCLUDING PLANTINGS ON THE POOL DECK (SEE SHEET L-2.0). USE RAINBIRD OR APPROVED EQUAL. COORDINATE INSTALLATION WITH G.C. SOD AND SHRUB AREAS TO BE ON SÉPARATE ZONES. PROVIDE RAIN SENSOR.



CONTRACTOR IS RESPOSIBLE TO MAINTAIN TREES IN A

TREE PLANTING





BARRIER/FILTER FABRIC 12" PLANTING SOIL AS SPECIFIED UNDISTURBED AND UNCOMPACTED SUBGRADE

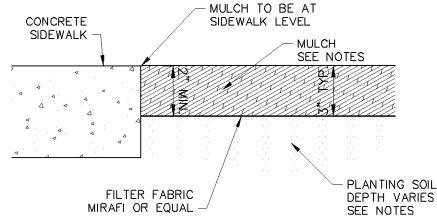
PERENNIALS (TYP.), PLANT IN STAGGERED ROWS

UNLESS OTHERWISE SHOWN

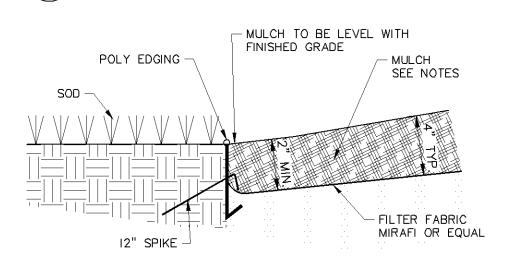
- 4" HARDWOOD MULCH OVER WEED

ON PLAN

PERENNIAL PLANTINGS NOT TO SCALE









LANDSCAPE SCHEDULE

QUANTITY	KEY	COMMON NAME	SCIENTIFIC NAME	SIZE / ROOT TYPE	NOTES
OVERSTORY TR	REES	<u> </u>			
8	HL	Northern Acclaim Honey Locust	Gleditisia Tricanthos var. inermis 'Harve'	2.5" cal. B&B	Straight Trunk, No V-Crotch
9	NH	New Horizon Elm	Ulmus carpinifolia 'New Horizon'	2.5" cal. B&B	Straight Trunk, No V-Crotch
7	SM	Autumn Spire Maple	Acer rubrum 'Autumn Spire'	2.5" cal. B&B	Straight Trunk, No V-Crotch
5	PB	Paper Birch	Betula paperifera	10' ht. B&B	Clump Form
4	RB	River Birch	Betula nigra	12' ht. B&B	Clump Form
EVERGREEN TR	EES				
5	BS	Black Hills Spruce	Picea densata 'Black Hills'	10' ht. B&B	Clump Form
ORNAMENTAL	TREES				
6	AD	Adirondak Flowering Crab	Malus 'Adirondack'	1.5" cal. B&B	Straight Trunk, No V-Crotch
SHRUBS					
78	BH	Dwarf Bush Honeysuckle	Diervilla lonicera	18" ht. cont.	Min. 5 canes at ht. spec.
51	GM	Goldmound Spirea	Spirea x 'Goldmound'	18" ht. cont.	Min. 5 canes at ht. spec.
9	HA	Holmstrup Arborvitae	Thuja occidentalis 'Holmstrup'	6' ht. B&B	Full Form
58	LH	Lime Light Hydrangea	Hydrangea paniculata 'Limelight'	18" ht. cont.	Min. 5 canes at ht. spec.
6	RD	Red Twig Dogwood	Cornus Alba	36" ht cont.	Min. 5 canes at ht. spec.
8	SJ	Scandia Juniper	Juniperus sabina 'Skandia'	18" ht. cont.	Min. 5 canes at ht. spec.
58	TY	Taunton Yew	Taxus x media 'Taunton'	24" ht. cont.	Full Form
PERENNIALS &	ORNAME	NTAL GRASSES			
65	CBL	Champagne Coral Bells	Heuchera 'Champagne'	1 gal cont.	
8	GRZ	Miscanthus Graziella	Miscanthus sinensis 'Graziella'	3 gal cont.	
55	LBS	Little Bluestem	Schizachyrium scoparium	1 gal cont.	
32	MFG	Miscanthus Flame	Miscanthus sinensis 'Purpurascens'	3 gal cont.	
72	RUS	Little Spire Russian Sage	Perovskia atriplicifolia 'Little Spire'	1 gal cont.	
25	SAG	Sagae Hosta	Hosta 'Sagae'	1 gal cont.	
10	SSD	Stella Supreme Daylily	Hemerocalis 'Stella Supreme'	1 gal cont.	
84	WLC	Walker's Low Catmint	Nepeta x faasenii 'Walker's Low'	1 gal cont.	

PL202000083

LANDSCAPE REQUIREMENTS

DEVELOPABLE AREA:

TOTAL DEVELOPABLE AREA: APPLE TREE 4TH ADD. LOT 1 BLK 1 OUTLOT A

LANDSCAPE CALCULATIONS: TREES REQUIRED: 44 TREES (1/2,500 SF DEVELOPABLE)44 TREES TREES PROVIDED: SHRUBS REQUIRED: 109 SHRUBS (1/1,000 SF DEVELOPABLE) SHRUBS PROVIDED: 268 SHURBS

NOTE: TREES NOT REQUIRED IN PARKING LOTS WITH 50 OR FEWER SPACES.



SEED PLANTING NOTES:

WOODLAND SEED MIX: MN STATE SEED MIX #36-711 WOODLAND EDGE CENTRAL SEEDING RATE TO BE 35.5 LBS/ACRE (PURE LIVE SEED)

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

SEEDING SHALL BE APPLIED FROM APRIL 15 - JUNE 30 OR NOVEMBER I - FREEZE UP. IF HYDROSEEDING UTILIZE APPROXIMATELY 500 GALLONS OF WATER PER ACRE. REFER TO MN/DOT SPEC 3884 FOR PROPER INSTALLATION OF HYDRO-SEED. ALL NATIVE SEEDS USED ON THIS PROJECT SHALL BE CERTIFIED TO BE OF MINNESOTA ORIGIN BY THE MINNESOTA CROP IMPROVEMENT ASSOCIATION (MCIA). SITE TO BE PREPARED BY LOOSENING TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES. THE SITE TO BE HARROWED OR RAKED FOLLOWING SEEDING, AND THEN PACKED USING A CULTI-PACKER OR EQUIVALENT. SEE MNDOT SEEDING MANUAL FOR REFERENCE.

MAINTAIN SEEDED AREAS BY WATERING, REMULCHING AND REPLANTING AS NECESSARY TO ESTABLISH A UNIFORMLY DENSE STAND OF THE SPECIFIED GRASSES UNTIL ACCEPTED. ANY AREAS FAILING TO ESTABLISH A STAND SHALL BE RESEEDED, REFERTILIZED AND REMULCHED WHENEVER 70% VEGETATIVE COVER IS NOT ACHIEVED. RESEEDING SHALL CONFORM IN ALL RESPECTS TO THESE SPECIFICATIONS. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE WORK AREAS RESULTING FROM EROSION AND/OR EQUIPMENT. THE CONTRACTOR SHALL REPAIR DAMAGE, INCLUDING REGRADING, RESEEDING, ETC. AS NECESSARY, BEFORE SIGNIFICANT DAMAGE OCCURS.

REFER TO MINNESOTA STATE SEED MIX MANUAL.

SOIL PREPARATION:

- PRIOR TO THE INSTALLATION OF THE LANDSCAPE AND IRRIGATION SYSTEM, CONTRACTOR TO PREPARE SOIL TO ENSURE A PROPER ENVIRONMENT FOR PLANT ROOT DEVELOPMENT.
- 2. CONTRACTOR TO DE-COMPACT SOILS IN PLANTING AREAS BY ROTO-TILLING, DISKING OR RIPPING TO DEPTH OF 6-8" MINIMUM AND PREFERABLE A DEPTH OF 12-18". DE-COMPACTION OF SMALL PLANTER AREAS, SUCH AS THOSE IN PARKING LOT AREAS. MAY REQUIRE THE REMOVAL OF THE COMPACTED SOIL TO A DEPTH OF 18" OR MORE AND THEN RE-INSTALLED LOOSELY WITH REQUIRED AMENDMENTS. ALWAYS REMOVE DEBRIS OVER 2" IN SIZE FROM THE SOIL.
- 3. WHEN PERFORMING SOIL DE-COMPACTION, MULTIPLE PASSES ACROSS THE AREA WILL BE REQUIRED AND, WHEN POSSIBLE, SHOULD BE AT VARYING ANGLES TO ENSURE ADEQUATE COVERAGE. WHEN USING DISC OR RIPPING EQUIPMENT, IT IS REQUIRED THAT THE FINAL PASSES OVER THE AREA BE MADE WITH A ROTO-TILLER TO BREAK UP ANY LARGE CLUMPS TO MAKE FINAL GRADING EASIER.
- 4. AFTER INITIAL SOIL DE-COMPACTION PROCEDURES ARE PERFORMED, SOIL AMENDMENTS SHOULD BE ADDED. THE ADDITION OF SOIL AMENDMENTS IS DETERMINED FROM SOIL TESTS CONDUCTED PRIOR TO WORK COMMENCING. SOIL AMENDMENT MAY INCLUDE INORGANIC MATERIAL SUCH AS SAND, SILT OR CLAY, WHICH HELP IMPROVE SOIL TEXTURE. ORGANIC MATERIAL SUCH AS COMPOST, MANURE, AND PEAT MOSS MAY ALSO BE USED AND HELP IMPROVE SOIL STRUCTURE OTHER AMENDMENTS SUCH AS FERTILIZER IMPROVE NUTRIENT CONTENT AND SULFUR ADJUSTS THE SOIL PH LEVEL. SULFUR SHALL BE INCORPORATED AT THE RATE OF ONE POUND OF SULFUR PER 100 SQUARE FEET.
- 5. ALL AMENDMENTS SHOULD BE MIXED THOROUGHLY WITH EXISTING SOIL AND AN ADDITIONAL SOIL TEST WILL BE TAKEN TO ENSURE PROPER SOIL CONDITIONS PRIOR



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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

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DAVID NASH, PE		
12-30-19		
Date	License	١

QUALITY ASSURANCE/CONTROL

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PROJECT TEAM DATA

DESIGNED: DRAWN: KDB/DMS PROJECT NO: 190123