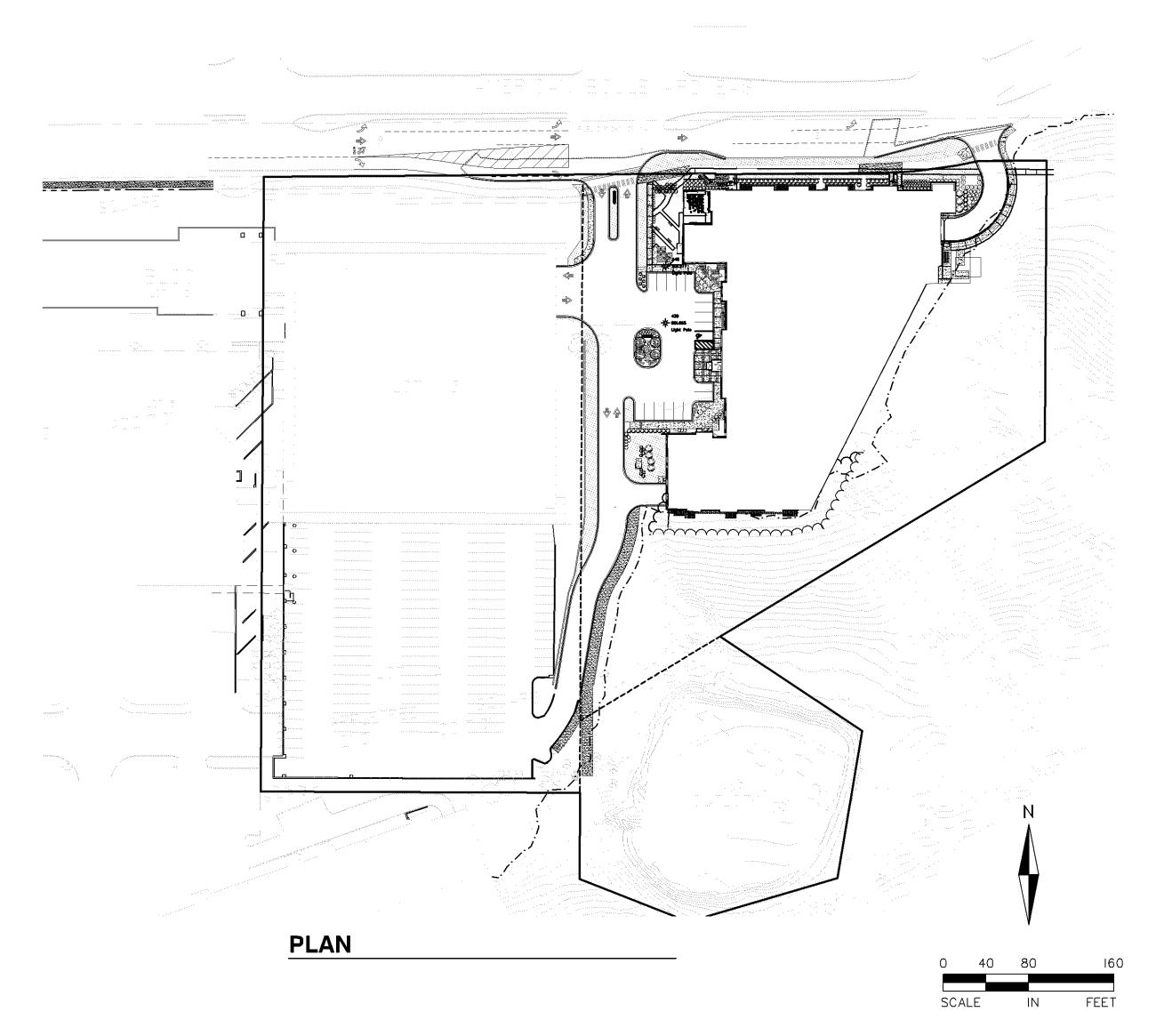
# AMERICAN BOULEVARD E AND 34TH AVE SOUTH BLOOMINGTON, MINNESOTA FINAL DEVELOPMENT PLAN





## SITE VICINITY MAP

L-2.0

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L-1.0	LANDSCAPE PLAN

LANDSCAPE DETAILS



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

KAEDING MANAGEMENT / RON CLARK CONSTRUCTION

#### **ARCHITECT**

**DEVELOPER** 

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

#### **SURVEYOR**

HARRY JOHNSON HARRY S. JOHNSON CO., INC. LAND SURVEYORS 9063 LYNDALE AVENUE SOUTH BLOOMINGTON, MN 55437 PH: 952-88-4-5341 www.hsjsurveyors.com

#### **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

the laws of the State o MINNESOTA DAVID NASH, PE

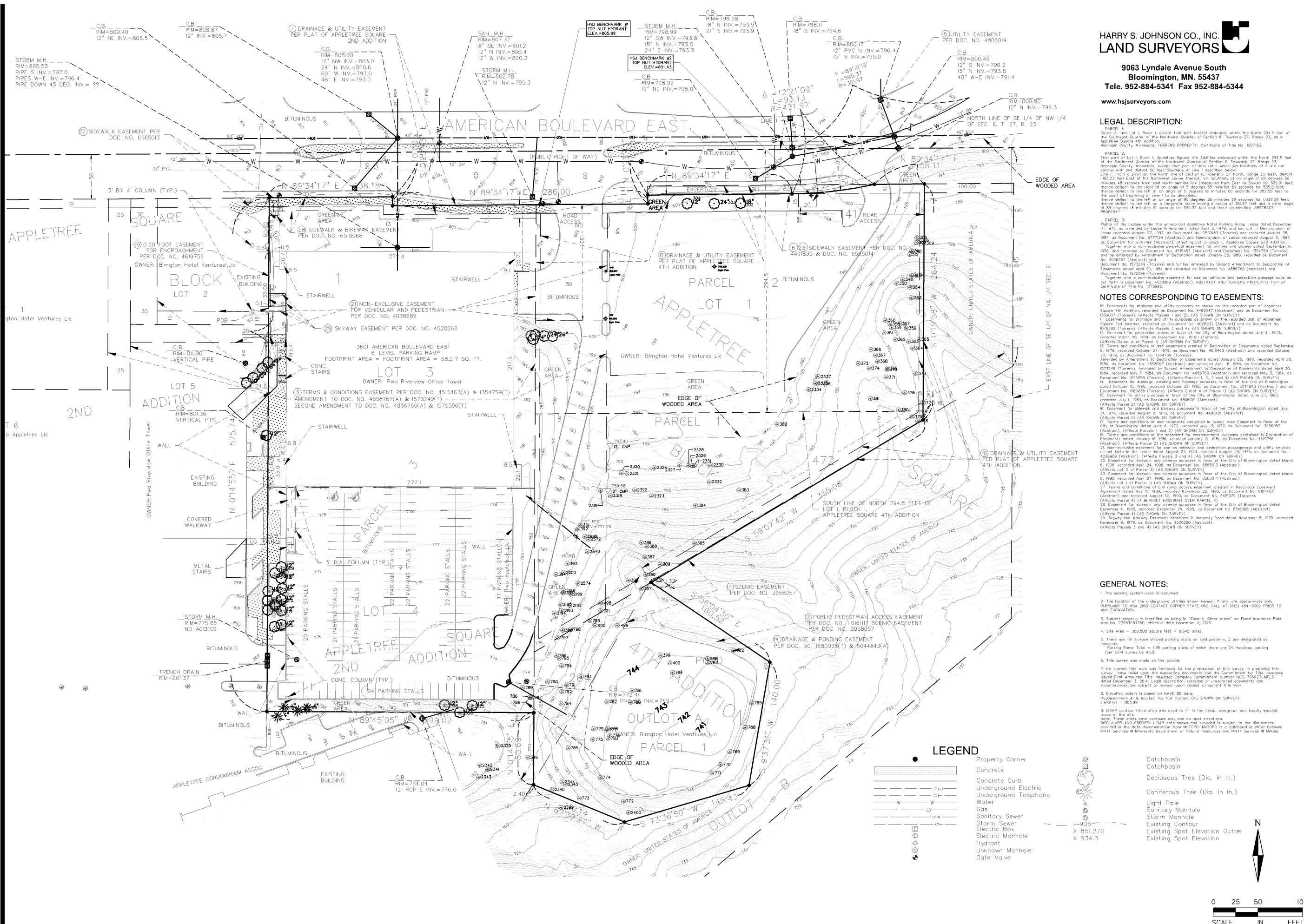
04-04-22 QUALITY ASSURANCE/CONTROL

BY	DATE
DATE	ISSUE
5-20-22	100% GMP
7-22-22	CITY PERMIT
7-27-22	LIFT STATION
8-16-22	EASEMENT REVISION
8-18-22	TITLE UPDATE
8-23-22	CITY GRADING PERMIT

PROJECT TEAM DATA DRAWN:

PROJECT NO:

C-1.0





733 Marquette Avenue Suite 700 Minneapolis, MN 55402 612.758.3080

ENGINEERING

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QUALITY ASSURANCE/CONTROL



C-2.0

## TREE INVENTORY

Table   Dill						
365   15   Extended   X				Remove	Located in the Bluff	
300   15   Destroy   No.						2x trunk 15, 11
300   5   Indicatory   Yes						
S00   S   Indeberry   Yes   1   1   1   1   1   1   1   1   1					Yes	
2008   J   Sectionry   Yes   Yes						
309   10   Isabetery   Yes						
Solid   16   Indicatory   Yes						
91.						
313   4   Handberry   Yes   344   14   Handberry   Yes   345   14   Handberry   Yes   345   14   Handberry   Yes   350   11   Handberry   Yes   350   11   Handberry   Yes   351   12   Handberry   Yes   352   12   Handberry   Yes   353   353   361   12   Handberry   Yes   355   361   12   Handberry   Yes   355   361   12   Handberry   Yes   355   361   12   Handberry   Yes   352   77   Handberry   Yes   352   78   Handberry   Yes   352   79   Handberry   Yes   352   12   Handberry   Yes   353   16   Handberry   Yes   354   16   Handberry   Yes   356   16   Handberry   Yes   357   15   Icoust   Yes   357   16   Icoust   Yes   357   17   Icousterry   Yes   357   17   Icousterry   Yes   358   16   Icoust   Yes   358   16						
11   S   Machinerry   Yes	312	15	Hackberry		Yes	
349   2.1   stokerry   Yes						
350   12   Reckberry   Yes						
3-83   1.1   Incoherry   Yes						
356   37   Cossab   Yes   1   1   1   1   1   1   1   1   1			•			
157   6   Leaset   Yes   158   158   14   Markiterry   Yes   159   159   Leaset   Yes   159   Hackberry   Yes   159   Hackberry   Yes   150   Hackbe						
338						
359   27   Locast   Yes   360   Hacchery   Yes   361   3   Locast   Yes   361   3   Locast   Yes   362   3   Locast   Yes   363   3   Hacchery   Yes   363   6   Hacchery   Yes   365   6   Hacchery   Yes   365   6   Locast   Yes   365   6   Locast   Yes   365   6   Locast   Yes   366   4   Locast   Yes   367   15   Locast   Yes   368   4   Locast   Yes   370   36   Locast   Yes   370   36   Locast   Yes   370   36   Locast   Yes   370   36   Locast   Yes   370						
362   S   Doctet   Yes   363   G   Hackberry   Yes   363   G   Hackberry   Yes   363   G   Hackberry   Yes   365   G   Hackberry   Yes   365   G   Hackberry   Yes   366   G   Doctet   Yes   367   G   Doctet   Yes   367   G   Doctet   Yes   368   G   Doctet   Yes   368   G   Doctet   Yes   368   G   Doctet   Yes   368   G   Doctet   Yes   369   G   Em   Yes   370   G   Em   Yes   371   G   Em   Yes   372   G   Doctet   Yes   373   G   Em   Yes   373   G   Em   Yes   373   G   Em   Yes   373   G   Em   Yes   374   G   Docket   Yes   375   G   Docket   Yes   375   G   Docket   Yes   375   G   Docket   Yes   375   G   Em   Yes   375   G   Em   Yes   376   G   Em   Yes   377   G   Em   Yes   378   G   Em   Yes   379   G   Docket   Yes   379   G   Docket   Yes   G   G   Doc			•			
362	360				Yes	
363						
364   G   dackberry   Yes				1		
365   6   4   Cuk   Yes			·			
366			i			
368	366	4	Oak			
369    4   8   m						2
370						2x trunk 18, 23
371   10   tlm						
373						
375		4	Oak			
376						
376						
377   9   Hackberry   Yes						
379						
SABO						
381   30 Elm						
382						3v tmmk 10, 13
383   20   Russian Olive   Yes   2x trunk 10, 10						2x trunk 18, 12
386						2x trunk 10, 10
386			·			
388	200		l I I a a lula a mar			
Section   Sect						2v. tm mls 15 - 5
390	386	20	Hackberry		Yes	2x trunk 15, 5
391   25   Russian Olive   Yes   3x trunk 7, 10, 8	386 387	20 7	Hackberry Hackberry		Yes Yes	2x trunk 15, 5
392	386 387 388 389	20 7 11 8	Hackberry Hackberry Elm Elm		Yes Yes Yes Yes	2x trunk 15, 5
393	386 387 388 389 390	20 7 11 8 10	Hackberry Hackberry Elm Elm Elm		Yes Yes Yes Yes Yes Yes	
394	386 387 388 389 390 391	20 7 11 8 10 25	Hackberry Hackberry Elm Elm Elm Russian Olive		Yes Yes Yes Yes Yes Yes Yes	
396   5   Hackberry   Yes   397   6   Elm   Yes   398   7   Elm   Yes   399   4   Hackberry   Yes   400   4   Hackberry   Yes   400   4   Hackberry   Yes   400   6   Hackberry   Yes   400   100	386 387 388 389 390 391 392	20 7 11 8 10 25	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry	X	Yes Yes Yes Yes Yes Yes Yes Yes Yes	
397   6   Elm	386 387 388 389 390 391 392 393	20 7 11 8 10 25 4	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust		Yes Yes Yes Yes Yes Yes Yes Yes Yes	
398	386 387 388 389 390 391 392 393 394 395	20 7 11 8 10 25 4 7 4	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry		Yes	
399	386 387 388 389 390 391 392 393 394 395 396	20 7 11 8 10 25 4 7 4 4	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry		Yes	
400	386 387 388 389 390 391 392 393 394 395 396	20 7 11 8 10 25 4 7 4 4 5	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry 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           773         4         Elm         Yes           774         4         Elm         Yes           775         19         Elm         Yes           776         6         Hackberry         Yes           777         7         Elm         Yes           778         19         Elm         Yes           779         4         Elm         Yes           780         17         Elm         Yes           781         6         Elm         Yes           782         6         Elm         Yes           783         5         Elm         Yes	386 387 388 389 390 391 392 393 394 395 396 397	20 7 11 8 10 25 4 7 4 4 5 6	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Hackberry		Yes	
765	386 387 388 389 390 391 392 393 394 395 396 397 398	20 7 11 8 10 25 4 7 4 4 5 6 7	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Hackberry		Yes	
766         9         Elm         Yes         2x trunk 5, 4           767         9         Elm         Yes         2x trunk 5, 4           768         5         Elm         Yes           769         8         Elm         Yes           770         6         Elm         Yes           771         5         Elm         Yes           772         9         Elm         Yes           773         4         Elm         Yes           774         4         Elm         Yes           775         19         Elm         Yes           776         6         Hackberry         Yes           777         7         Elm         Yes           778         19         Elm         Yes           779         4         Elm         Yes           780         17         Elm         Yes           781         6         Elm         Yes           782         6         Elm         Yes           783         5         Elm         Yes           784         5         Hackberry         X         Yes           785	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402	20 7 11 8 10 25 4 7 4 5 6 7 4	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Elm Elm Hackberry Hackberry Hackberry Hackberry		Yes	
767         9         Elm         Yes         2x trunk 5, 4           768         5         Elm         Yes           769         8         Elm         Yes           770         6         Elm         Yes           771         5         Elm         Yes           772         9         Elm         Yes           773         4         Elm         Yes           774         4         Elm         Yes           775         19         Elm         Yes           776         6         Hackberry         Yes           778         19         Elm         Yes           779         4         Elm         Yes           780         17         Elm         Yes           781         6         Elm         Yes           782         6         Elm         Yes           783         5         Elm         Yes           784         5         Hackberry         X         Yes           785         5         Elm         Yes           785         6         Elm         X         Yes           786 <td< td=""><th>386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764</th><td>20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8</td><td>Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Hackberry Elm Elm Hackberry</td><td></td><td>Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes</td><td></td></td<>	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Hackberry Elm Elm Hackberry		Yes	
768       5       Elm       Yes         769       8       Elm       Yes         770       6       Elm       Yes         771       5       Elm       Yes         772       9       Elm       Yes         773       4       Elm       Yes         774       4       Elm       Yes         775       19       Elm       Yes         776       6       Hackberry       Yes         777       7       Elm       Yes         778       19       Elm       Yes         779       4       Elm       Yes         780       17       Elm       Yes         781       6       Elm       Yes         782       6       Elm       Yes         783       5       Elm       Yes         784       5       Hackberry       X       Yes         785       5       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X <t< td=""><th>386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764 765</th><td>20 7 11 8 10 25 4 7 4 5 6 7 4 4 6 8 8</td><td>Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Hackberry Hackberry Elm Elm Hackberry Hackberry Hackberry</td><td></td><td>Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes</td><td></td></t<>	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764 765	20 7 11 8 10 25 4 7 4 5 6 7 4 4 6 8 8	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Hackberry Hackberry Elm Elm Hackberry Hackberry Hackberry		Yes	
770       6 Elm       Yes         771       5 Elm       Yes         772       9 Elm       Yes         773       4 Elm       Yes         774       4 Elm       Yes         775       19 Elm       Yes         776       6 Hackberry       Yes         777       7 Elm       Yes         778       19 Elm       Yes         779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764 765 766	20 7 11 8 10 25 4 7 4 5 6 7 4 4 6 8 8	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Hackberry Hackberry Elm Elm Hackberry Hackberry Hackberry Hackberry		Yes	3x trunk 7, 10, 8
771       5       Elm       Yes         772       9       Elm       Yes         773       4       Elm       Yes         774       4       Elm       Yes         775       19       Elm       Yes         776       6       Hackberry       Yes         777       7       Elm       Yes         778       19       Elm       Yes         779       4       Elm       Yes         780       17       Elm       Yes         781       6       Elm       Yes         782       6       Elm       Yes         783       5       Elm       Yes         784       5       Hackberry       X       Yes         785       5       Elm       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767	20 7 11 8 10 25 4 7 4 5 6 7 4 4 6 8 8 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Elm Elm Elm Elm Elm Hackberry Hackberry Hackberry Hackberry Hackberry Elm Elm Elm Elm Elm Elm		Yes	3x trunk 7, 10, 8
772       9 Elm       Yes         773       4 Elm       Yes         774       4 Elm       Yes         775       19 Elm       Yes         776       6 Hackberry       Yes         777       7 Elm       Yes         778       19 Elm       Yes         779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Hackberry Hackberry Hackberry Hackberry Elm Elm Elm Elm Elm Elm Elm		Yes	3x trunk 7, 10, 8
773       4 Elm       Yes         774       4 Elm       Yes         775       19 Elm       Yes         776       6 Hackberry       Yes         777       7 Elm       Yes         778       19 Elm       Yes         779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 8 9 9 5 8 6	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Hackberry Elm Elm Hackberry Hackberry Hackberry Hackberry Hackberry Elm Elm Elm Elm Elm Elm Elm Elm		Yes	3x trunk 7, 10, 8
774       4       Elm       Yes         775       19       Elm       Yes         776       6       Hackberry       Yes         777       7       Elm       Yes         778       19       Elm       Yes         779       4       Elm       Yes         780       17       Elm       Yes         781       6       Elm       Yes         782       6       Elm       Yes         783       5       Elm       Yes         784       5       Hackberry       X       Yes         785       5       Elm       X       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 6	Hackberry Hackberry Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Elm Hackberry Hackberry Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
776       6 Hackberry       Yes         777       7 Elm       Yes         778       19 Elm       Yes         779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
777       7 Elm       Yes         778       19 Elm       Yes         779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 768 769 770 771 772 773	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
778       19       Elm       Yes         779       4       Elm       Yes         780       17       Elm       Yes         781       6       Elm       Yes         782       6       Elm       Yes         783       5       Elm       Yes         784       5       Hackberry       X       Yes         785       5       Elm       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
779       4 Elm       Yes         780       17 Elm       Yes         781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776	20 7 111 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 9 4 4 4 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
781       6 Elm       Yes         782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 776	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
782       6 Elm       Yes         783       5 Elm       Yes         784       5 Hackberry       X       Yes         785       5 Elm       Yes         786       6 Elm       X       Yes         787       10 Elm       X       Yes         788       10 Elm       X       Yes         789       7 Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776	20 7 11 8 10 25 4 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 9 4 4 7 4 4 6 7 7 4 4 6 7 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
783       5       Elm       Yes         784       5       Hackberry       X       Yes         785       5       Elm       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 778	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 8 8 9 9 9 5 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
784       5       Hackberry       X       Yes         785       5       Elm       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781	20 7 11 8 10 25 4 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 9 4 4 19 6 7 7 4 4 6 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
785       5       Elm       Yes         786       6       Elm       X       Yes         787       10       Elm       X       Yes         788       10       Elm       X       Yes         789       7       Elm       X       Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 778 779 780 781	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 6 7 7 4 4 6 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm Elm Elm Elm Hackberry Hackberry Elm		Yes	3x trunk 7, 10, 8
787         10 Elm         X         Yes           788         10 Elm         X         Yes           789         7 Elm         X         Yes	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 778 779 780 781 782 783	20 7 11 8 10 25 4 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 4 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm	X	Yes	3x trunk 7, 10, 8
788         10 Elm         X         Yes           789         7 Elm         X	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 768 769 770 771 772 773 774 775 778 777 778 778 779 780 781 782 783	20 7 111 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 8 9 9 5 8 6 7 4 4 4 6 7 7 4 4 6 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Hackberry Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Hackberry Elm Elm Elm Hackberry Elm	X	Yes	3x trunk 7, 10, 8
789 7 Elm X	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 778 779 780 781 782 783 784 785 786	20 7 11 8 10 25 4 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 9 4 4 19 6 7 19 6 7 19 19 19 19 19 19 19 19 19 19	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm	X	Yes	3x trunk 7, 10, 8
	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786	20 7 11 8 10 25 4 7 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 19 6 7 19 4 17 6 6 7 7 19 19 19 19 19 19 19 19 19 19	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Hackberry Elm	X	Yes	3x trunk 7, 10, 8
	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 778 779 780 781 782 783 784 785 786	20 7 11 8 10 25 4 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 7 4 4 19 6 7 19 4 17 6 6 5 5 6 10 10 10 10 10 10 10 10 10 10	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Elm Elm Elm Hackberry Hackberry Elm	X	Yes	3x trunk 7, 10, 8
	386 387 388 389 390 391 391 392 393 394 395 396 397 398 399 400 402 764 765 766 767 768 768 769 770 771 772 773 774 775 778 777 778 778 779 780 781 782 783 784 785 786	20 7 111 8 10 25 4 4 5 6 7 4 4 6 8 8 9 9 5 8 6 5 9 4 4 19 6 7 19 4 17 6 6 5 5 5 6 7 7 7 8 8 8 9 9 9 10 10 10 10 10 10 10 10 10 10	Hackberry Elm Elm Elm Russian Olive Hackberry Locust Locust Hackberry Elm Elm Elm Hackberry Elm	X X X X X	Yes	3x trunk 7, 10, 8

	Tag Number	DBH	Common Name	Remove	Located in the Bluff	Notes
İ	791	6	Elm		Yes	
Ī	792	6	Elm	Х	Yes	
Ì	793	5	Hackberry		Yes	
Ī	794		Elm		Yes	
Ī	795	6	Elm		Yes	
Ì	796	7	Elm		Yes	
Ì	797	12	Cottonwood		Yes	
Ì	798	9	Elm		Yes	
İ	799	6	Elm		Yes	
Ī	901	5	Elm		Yes	
Ī	1396	15	Box Elder		Yes	
Ī	1498	5	Elm		Yes	
	1499	5	Elm		Yes	
Ī	2193	15	Cottonwood		Yes	
	2194	10	Elm	X	Yes	
	2195	7	Elm		Yes	
	2196	12	Cottonwood		Yes	
	2199	16	Cottonwood		Yes	
	2200	10	Elm	х	Yes	
	2301	3	Colorado Green Spruce			11' tall
	2303	3	Colorado Green Spruce			11' tall
	2304	3	Colorado Green Spruce			11' tall
	2305	12	Crab Apple			
	2306	12	Crab Apple			
	2307	12	Crab Apple			
	2308		Crab Apple			
	2309	12	Crab Apple			
	2310	12	Crab Apple			
	2311		Crab Apple			
	2312	12	Crab Apple			
	2313	12	Crab Apple			
	2314	12	Crab Apple			
	2315	12	Crab Apple			
	2316		Crab Apple			
	2318		Elm		Yes	
	2319		Box Elder			2x trunk 16, 10
	2320		Cottonwood	X		
	2321		Cottonwood	X		
	2322		Cottonwood			3x trunk 18, 15, 12
	2323		Cottonwood		Yes	4x trunk 16, 16, 16, 16
	2324		Cottonwood	X		
	2325		Ash			
-	2326		Ash			
-	2327		Cottonwood	Х		
-	2328		Cottonwood	X		
-	2329		Cottonwood	X		
}	2330		Cottonwood	X		
-	2331		Cottonwood	X		
}	2332		Cottonwood		Yes	
-	2334		Cottonwood		Yes	
-	2335		Cottonwood		Yes	
ŀ	2336		Cottonwood		Yes	
-	2337		Cottonwood		Yes	
-	2338		Ash		Yes	
}	2339		Maple		Yes	2v. terrent 20, 20, 20
-	2340		Cottonwood		Yes	3x trunk 39, 29, 28
}	2341		Hackberry		Yes	
}	2342		Maple		Yes	
-	2343		Hackberry		Yes	
}	2344		Cottonwood		Yes	
-	2345		Cottonwood		Yes	
}	2399		Cottonwood		Yes	
}	2400		Cottonwood		Yes	
-	2572		Elm		Yes	
}	2573 2574		Cottonwood		Yes	
- 1	/5////	/ /		1	Y 05	1

Yes

2574

2698

7 Elm

10 Elm

## PL202200168



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BLOOMINGTON, MN
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Bavid Mash, PE

04-04-22 21836

Date License 1

Date License No.

QUALITY ASSURANCE/CONTROL

PROJECT TEAM DATA
DESIGNED:

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

C-2.1

## **DEMOLITION NOTES:**

- 1. 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.
- 3. 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 MEASURES TO KEEP DUST LEVELS TO A MINIMUM.
- 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 ACTIVITIES
- 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 MANUAL.
- 12. DEMOLITION CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE ENVIRONMENTAL REPORTS INCLUDING THE PHASE I REPORT AND FOLLOW REPORT RECOMMENDATIONS.

## **LEGEND**

REMOVE EXISTING UTILITY

CLEARING LIMITS

SAWCUT

REM

REMOVE BITUMINOUS PAVEMENT/PATH
REMOVE BITUMINOUS TRAIL

REMOVE CONCRETE SIDEWALK
REMOVE EXISTING LIGHT POLE

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ENGINEERING

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BOULEVARD EAST
PERMIT SET

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the laws of the State of MINNESOTA

David Mach

DAVID NASH, PE

04-04-22
Date License No.

QUALITY ASSURANCE/CONTROL

BY DATE

DATE ISSUE

5-20-22 100% GMP

7-22-22 CITY PERMIT

7-27-22 LIFT STATION

8-16-22 EASEMENT REVISION

8-18-22 TITLE UPDATE

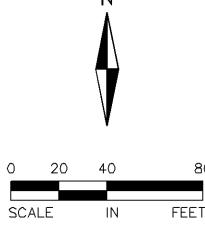
8-23-22 CITY GRADING PERMIT

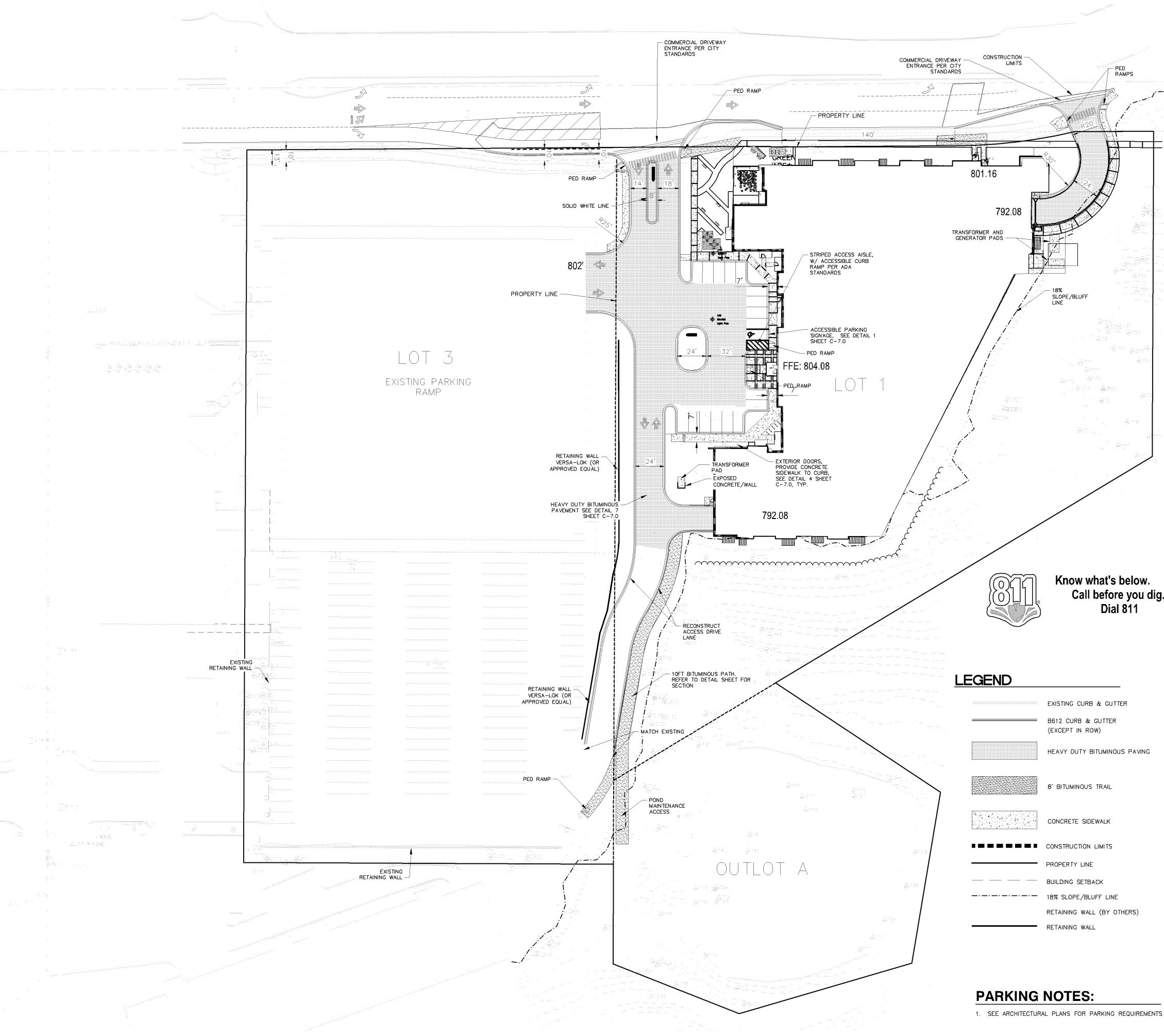
PROJECT TEAM DATA
DESIGNED:
DRAWN:

PROJECT NO:

C-3.0

DMS/DJN





#### NOTES

- DIMENSIONS ARE TO TOP FACE OF CURB, EDGE OF SIDEWALK OR EXTERIOR OF BUILDING UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND SPECIFICATION FOR LOCATION OF EXITS, RAMPS, CONCRETE APRONS AND STOOPS.
- 2. ALL CONCRETE CURB AND GUTTER ADJACENT TO CONCRETE WALK TO BE SEPARATED BY A 1/2 INCH EXPANSION JOINT.

STANDARDS AND SPECIFICATIONS, LATEST EDITION.

- 3. ALL STRIPING SHALL BE 4 INCH WHITE PAVEMENT STRIPING, PER GOVERNING AGENCY STANDARDS.
- 4. ALL WORK SHALL COMPLY WITH THE CITY OF BLOOMINGTON ENGINEERING DESIGN
- 6. ALL CURB AND GUTTER TO BE CONCRETE B612 CURB UNLESS NOTED OTHERWISE, PER CITY STANDARDS.
- 6. CONTINUOUS CONCRETE CURB & GUTTER WHICH CHANGES TYPE SHALL HAVE A FIVE FOOT TRANSITION.
- 7. BITUMINOUS PAVEMENT SECTION DESIGN TO BE IN ACCORDANCE WITH LOCAL CONSTRUCTION STANDARDS. REFER TO GEOTECHNICAL REPORT AND DETAIL SHEET.
- 8. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES, SUCH AS EXISTING GUTTER GRADES AT THE PROPOSED DRIVEWAYS, PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OF VARIATIONS FROM THE PLANS.
- 9. ACCESSIBLE ROUTE SHALL BE PROVIDED FROM ACCESSIBLE STALLS TO BUILDING ENTRANCE. (SEE MN ACCESSIBILITY CODE). POLE MOUNT APPROVED SIGNS, ONE VAN ACCESSIBLE, CENTER ON STALL, LOCATION PER GENERAL CONTRACTOR. PAINT INTERNATIONAL SYMBOL OF ACCESSIBILITY WHITE ON BLUE BACKGROUND. G.C. TO ENSURE SLOPE OF PAVEMENT AT ACCESSIBLE PARKING STALLS & ACCESS AISLE DOES NOT EXCEED 2% IN ALL DIRECTIONS.
- 10. REFER TO PHOTOMETRIC PLAN FOR LIGHT LOCATIONS, FOOTCANDLE PRINT OUT AND SPECIFICATIONS. FOUNDATION BY CONTRACTOR. CONTRACTOR TO FIELD VERIFY LOCATION OF PROPOSED LIGHT POLE WITH OWNER & G.C. AND THAT THERE ARE NO CONFLICTS WITH EXISTING & PROPOSED UTILITIES.
- 11. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL TRENCHING AND PVC SLEEVING UNDER ANY PAVEMENT AS REQUIRED FOR IRRIGATION, LIGHTING, SIGNS ETC. AS NEEDED PRIOR TO PAVING.

#### **GENERAL NOTES:**

- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND CITY OF BLOOMINGTON SPECIFICATIONS, LATEST EDITION.
- 3. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING STRUCTURES WHICH INTERFERE WITH NEW WORK AS SHOWN.
- 4. ALL DIMENSIONS, GRADES, EXISTING AND PROPOSED INFORMATION SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 5. CONTRACTOR SHALL PROTECT ADJOINING PROPERTIES AND STRUCTURES FROM HAZARDS ASSOCIATED WITH HIS CONSTRUCTION ACTIVITIES & SHALL BE RESPONSIBLE FOR ALL DAMAGES TO PROPERTIES AND STRUCTURES THAT OCCUR AS A RESULT OF THESE ACTIVITIES.
- 6. CONTRACTOR SHALL NOT IMPEDE EXISTING TRAFFIC CIRCULATION TO ADJACENT PROPERTIES.
- 7. CONTRACTOR SHALL PERFORM SWEEPING ON PRIVATE PARKING AREAS AND PUBLIC STREETS AT LEAST ONCE A WEEK, IF NEEDED. AND IN ADVANCE OF ALL RAIN EVENTS.
- CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE TO PREVENT AND ELIMINATE ANY DUST NUISANCE OCCASIONED BY AND DURING CONSTRUCTION, UNTIL THE PROJECT HAS BEEN COMPLETED.
- 9. CONTRACTOR SHALL PROVIDE TEMPORARY STREET SIGNS, LIGHTING, AND ADDRESSES DURING CONSTRUCTION PERIOD.
- 10. ALL PUBLIC SIDEWALKS SHALL NOT BE OBSTRUCTED DURING CONSTRUCTION UNLESS APPROVED BY CITY ENGINEER.
- 11. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT OF WAY.
- 12. CONTRACTOR TO PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH MnDOT "TEMPORARY TRAFFIC CONTROL ZONE LAYOUT—FIELD MANUAL, LATEST
- 13. ALL WORK TO BE COMPLETED PER THE GEOTECH REPORT.

EDITION, FOR ANY CONSTRUCTION IN PUBLIC ROW.



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SOUT

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

under the laws of the State of

MINNESOTA

Bavid Mash, PE

DAVID NASH, PE

04-04-22
Date License No.

QUALITY ASSURANCE/CONTROL

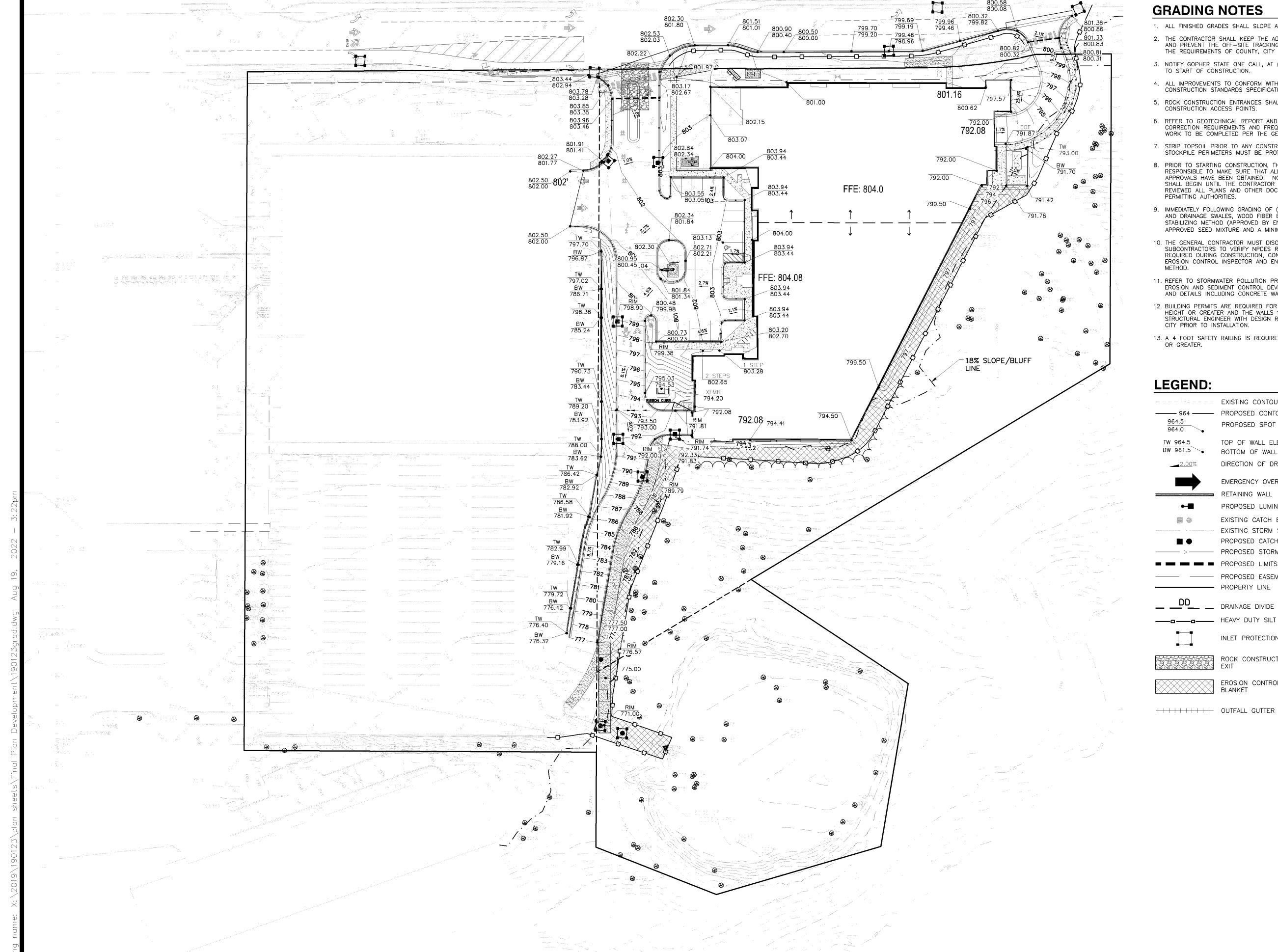
BY	DATE
DATE	ISSUE
5-20-22	100% GMP
7-22-22	CITY PERMIT
7-27-22	LIFT STATION
8-16-22	EASEMENT REVISION
8-18-22	TITLE UPDATE
8-23-22	CITY GRADING PERMIT

PROJECT TEAM DATA
DESIGNED: DMS/D

DRAWN: PROJECT NO:

0 20 40

C-40



#### **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 OF BLOOMINGTON 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. ALL WORK TO BE COMPLETED PER THE GEOTECH REPORT.
- 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
- 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.

	EXISTING CONTOON
	PROPOSED CONTOUR
964.5 964.0	PROPOSED SPOT ELEVATION
TW 964.5	TOP OF WALL ELEVATION
BW 961.5	BOTTOM OF WALL ELEVATION
2.00%	DIRECTION OF DRAINAGE
	EMERGENCY OVERFLOW ROUTING
gunonvuonvuonvuonvuonvuonvuonvuo	RETAINING WALL
•-	PROPOSED LUMINARIES
	EXISTING CATCH BASINS
	EXISTING STORM SEWER
	PROPOSED CATCH BASINS
>	PROPOSED STORM SEWER
	PROPOSED LIMITS OF CONSTRUCTION
	PROPOSED EASEMENT
	PROPERTY LINE
DD	DRAINAGE DIVIDE
<u> </u>	HEAVY DUTY SILT FENCE
	INLET PROTECTION
	ROCK CONSTRUCTION EXIT
	EROSION CONTROL BLANKET



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**EROSION** 

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

Jan Philad DAVID NASH, PE

21836 04-04-22 License No.

QUALITY ASSURANCE/CONTROL DATE ISSUE

5-20-22 100% GMP 7-22-22 CITY PERMIT 7-27-22 LIFT STATION 8-16-22 EASEMENT REVISION 8-18-22 TITLE UPDATE 8-23-22 CITY GRADING PERMIT

PROJECT TEAM DATA DESIGNED: DRAWN:

PROJECT NO: 190123

C-5.0

#### USGS TOPOGRAPHIC MAP

#### EROSION CONTROL GENERAL NOTES:

- 1. 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.
- S. ALL BMP'S SELECTED SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND
- 4. ALL WORK AND MATERIALS SHALL BE CONSTRUCTED ACCORDING TO THE APPROVED PLANS. ANY DEVIATION FROM THE APPROVED PLANS SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER OF
- 5. A COPY OF THESE PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 6. THE BOUNDARIES OF THE LAND DISTURBANCE LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. NO DISTURBANCE ALLOWED BEYOND THE DISTURBED
- 7. 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 PRIOR TO CONSTRUCTION AND TO MINIMIZE WEED GROWTH. 9. ALL TREES NOT LISTED FOR REMOVAL SHALL BE PROTECTED. DO NOT OPERATE EQUIPMENT WITHIN
- THE DRIPLINE, ROOT ZONES OR WITHIN TREE PROTECTION FENCE AREAS. 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 CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR EROSION HAS PASSED.
- 11. SILT FENCE IS REQUIRED AT DOWN GRADIENT PERIMETER OF DISTURBED AREAS AND STOCKPILES.
  PROTECT ADJACENT WATERBODIES AND ADJACENT PROPERTIES FROM SEDIMENTATION AND STORM
- 12. THE BMP'S SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE DITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE THE PERMITTEE/CONTRACTOR SHALL ANTICIPATE THAT MORE BMP'S WILL BE NECESSARY TO ENSURE EROSION AND SEDIMENT CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY CONSTRUCTION ACTIVITIES AND/OR CLIMATIC EVENTS AND TO PROVIDE ADDITIONAL BMP'S OVER AND ABOVE THE MINIMUM REQUIREMENTS SHOWN ON THE PLANS, AS MAY BE NEEDED TO PROVIDE EFFECTIVE PROTECTION OF WATER AND SOIL RESOURCES.
- 13. THE BMP'S SHALL BE INSPECTED DAILY BY THE PERMITTEE/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. SILT FENCES SHALL BE CLEANED OR REPLACED AT SEDIMENT BUILDUP OF 1/3 OF THE FENCE HEIGHT.
- 14. LAND DISTURBING ACTIVITIES SHALL OCCUR IN INCREMENTS OF WORKABLE SIZE SUCH THAT ADEQUATE BMP CONTROL CAN BE PROVIDED THROUGHOUT ALL PHASES OF CONSTRUCTION. THE SMALLEST PRACTICAL AREA SHALL BE EXPOSED OR OTHERWISE DISTURBED AT ANY ONE TIME.
- 15. OPERATE TRACK EQUIPMENT (DOZER) UP AND DOWN EXPOSED SOIL SLOPES ON FINAL PASS. LEAVING TRACK GROOVES PERPENDICULAR TO THE SLOPE. DO NOT BACK-BLADE. LEAVE A SURFACE ROUGH TO
- 16. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED FROM EROSION WITHIN 7 DAYS OF SUBSTANTIAL COMPLETION OF GRADING IN THAT AREA. TEMPORARY SEED AND MULCH SHALL COVER ALL EXPOSED SOILS IF GRADING COMPLETION IS DELAYED LONGER THAN 7 DAYS. PERMANENT SEED AND MULCH OR SOD IS REQUIRED WITHIN 3 DAYS OF COMPLETION OF FINAL GRADING.
- 17. GENERAL TEMPORARY SEED SHALL BE MN STATE SEED MIX 22-112 @ 40 LBS. PER ACRE OR APPROVED EQUAL. PERMANENT SEED SHALL BE MN STATE SEED MIX 25-151 @ 120 LBS. PER ACRE OR APPROVED EQUAL. (PLANTING DATES PER MNDOT SEED MIX MANUAL) MULCH SHALL BE MNDOT TYPE 1 (CLEAN OAT STRAW) @ 2 TONS PER ACRE AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, FERTILIZER SHALL BE 10-10-10 NPK PER ACRE (UNLESS P RESTRICTIONS APPLY)
- 18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- 19. ALL CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER, AND SANITARY WASTE MUST BE PROPERLY MANAGED AND COMPLY WITH THE MPCA AND THE CITY OF BLOOMINGTON RULES AND REQUIREMENTS.

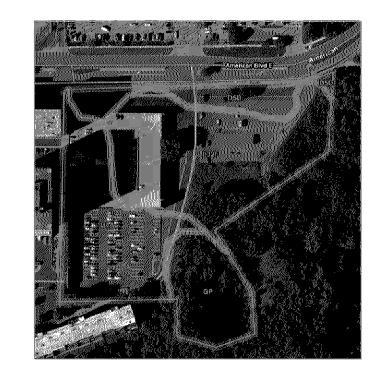
- IF UTILITY INSTALLATION WORK ENCOUNTERS GROUNDWATER, THE CONTRACTOR SHALL PROVIDE A PLAN TO THE CITY AND PROJECT ENGINEER FOR REVIEW. THE PLAN MUST BE SUBMITTED TO THE CITY FOR APPROVAL AT LEAST 10 DAYS PRIOR TO DISCHARGING INTO RECEIVING WATERS. THE PLAN AT MINIMUM SHALL INCLUDING A DEWATERING SYSTEM, WATER ROUTING, STORAGE, AND DISCHARGE LOCATION. THE DEWATERING PLAN MUST ENSURE THAT DISCHARGE WATER IS FREE OF SEDIMENT AND TURBID WATER IN ACCORDANCE WITH STATE AND LOCAL PERMIT REQUIREMENTS.
- 2. 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 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.

#### FILTRATION BMP NOTES:

- 1. 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 NATIVE SOIL ONLY.
- 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. 4. DURING CONSTRUCTION, STORM WATER MUST BE ROUTED AROUND INFILTRATION AREAS UNTIL ALL
- CONSTRUCTION ACTIVITY HAS CEASED AND TRIBUTARY SURFACES ARE CLEANED OF SEDIMENT. 5. ENGINEERED SOIL SHALL REMAIN UNCONTAMINATED (NOT MIXED WITH OTHER SOIL) BEFORE AND DURING

#### EROSION CONTROL SCHEDULE:

- 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 L EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY 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. 6. 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
GP	Pits, gravel-Udipsamments complex	1.3	15
L32F	Hawick loamy sand, 20 to 40 percent slopes	3.8	44
U4A	Urban land-Udipsamments (cut and fill land) complex, 0 to 2 percent slopes	2.6	30
Totals for Area of Interest		8.7	100

#### WEB SOIL SURVEY LEGEND

#### SEDIMENT CONTROL PRACTICES

- 1. THE CONTRACTOR MUST EMPLOY SEDIMENT CONTROL PRACTICES AS NECESSARY TO 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 ARE DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS.
- b. IF THE DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENT), THE CONTRACTOR MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES AS
- 2. 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 UNTL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PARTIV.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. 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.
- THE CONTRACTOR SHALL RE-INSTALL ALL SEDIMENT CONTROL PRACTICES THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. THE CONTRACTOR SHALL COMPLETE ANY SHORT-TERM ACTIVITY THAT REQUIRES REMOVAL OF SEDIMENT CONTROL PRACTICES AS OLLICKLY AS POSSIBLE. THE CONTRACTOR MUST REJUSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
- 4. ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SQURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE CONTRACTOR OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER). THE CONTRACTOR MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPI
- TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER FEFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN ANY NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB ANI SUTTER 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 WITHIN THE SITE):
- a. THE CONTRACTOR MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE. EXAMPLES OF VEHICLE TRACKING BMPS INCLUDE (BUT ARE NOT LIMITED TO) ROCK PADS, MUD MATS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT
- b. THE CONTRACTOR MUST USE STREET SWEEPING IF SUCH VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET (SEE PART IV.E.5.D.).
- 7. THE CONTRACTOR MUST INSTALL TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN PART III.C. OF THIS PERMIT
- 8. THE CONTRACTOR MUST MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.
- THE CONTRACTOR MUST PRESERVE A 50 FOOT NATURAL BUFFER OR (IF A BUFFER IS INFEASIBLE ON THE SITE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. THE CONTRACTOR IS JARE NOT REQUIRED TO ENHANCE THE QUALITY OF THE VEGETATION THAT ALREADY EXISTS IN THE BUFFER OR PROVIDE VEGETATION IF NONE EXIST. HOWEVER, CONTRACTOR CAN IMPROVE THE NATURAL
- 10. IF THE CONTRACTOR INTEND TO USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS ON THE PROJECT SITE, THE CONTRACTOR MUST COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:
- a. THE CONTRACTOR MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION TO ENSURE EFFECTIVE TREATMENT. CHEMICALS MAY ONLY BE APPLIED WHERE TREATED STORMWATER IS DIRECTED TO A SEDIMENT CONTROL SYSTEM WHICH ALLOWS FOR FILTRATION OR SETTLEMENT OF HE FLOC PRIOR TO DISCHARGE.
- b. CHEMICALS MUST BE SELECTED THAT ARE APPROPRIATELY SUITED TO THE TYPES OF SOILS LIKELY TO BE EXPOSED DURING CONSTRUCTION, AND TO THE EXPECTED TURBIDITY, PH, AND FLOW RATE OF STORMWATER FLOWING INTO THE CHEMICAL TREATMENT SYSTEM OR AREA.
- c. CHEMICALS MUST BE USED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, AND WITH DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR PROVIDER/SUPPLIER OF THE APPLICABLE CHEMICALS.

#### 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 UNNECESSARY SOIL DISTURBANCE PRIOR TO WINTER SHUT DOWN.
- 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.
- 3. 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) BEFORE LEAVING THE SITE AT WINTER SHUT DOWN.
- 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 CREATER 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 I MILE OF YOUR LOCATION OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR
- 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 OBMOUS INDICATORS OF POLLUTANTS) AND
- 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 ONCE PER MONTH.
- b. WHERE CONSTRUCTION SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AREAS AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, THE SITE MUST 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 NO CONSTRUCTION ACTIVITY, INSPECTIONS MAY BE TERMINATED UNTIL CONSTRUCTION ACTIVITY IS ONCE AGAIN INITIATED UNLESS THE CONTRACTOR IS/ARE NOTIFIED IN WRITING BY THE MPCA THAT EROSION ISSUES HAVE BÉEN DETECTED AT THE SITE AND INSPECTIONS NEED TO RESUME.
- c. WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, THE INSPECTIONS MAY BE SUSPENDED. THE REQUIRED INSPECTIONS AND OCCURS AT THE SITE OR 24 HOURS PRIOR TO RESUMING CONSTRUCTION,
- 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 HE PROJECT HAS UNDERGONE FINAL STABILIZATION, AND HAS NOT BEEN
- 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 TH 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
- CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED EDIMENT 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 ALL INFILITATION AREAS MUST BE INSPECTED TO ENSURE THAT EQUIPMENT IS

  ALL INFILITRATION AREAS MUST BE INSPECTED TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.

## SPECIAL REQUIREMENT

IMPAIRED WATER

TA RIVER IS CLASSIFIED AS AN IMPAIRED THE FOLLOWING REQUIREMENTS APPLY FOR J.J.:
TEE'S MUST IMMEDIATELY INITIATE STABILIZATION OF
ED SOIL AREAS, AS DESCRIBED IN ITEM 8.4, AND
ETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR
AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION
E SITE TEMPORARILY OR PERMANENTLY CEASES.

PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN AS DESCRIBED IN SECTION 14 FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

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

- . 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 FITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER ARE NOT HELD TO THIS REQUIREMENT:
- a. BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE
- b. PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
- C. HAZARDOUS MATERIALS, TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS. AND 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 WASTE OR HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
- d. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY IN COMPLIANCE
- 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. FUELING AND MAINTENANCE OF EQUIPMENT OR VEHICLES; SPILL PREVENTION AND RESPONSE: THE CONTRACTOR SHALL TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF 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 AL 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
- 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 HE SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OF OTHER 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 FACILITY HAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.

#### FINAL STABLIZATION

SEDIMENT CONTROL BMPS PRIOR TO

"HOMEOWNER FACT SHEET" TO

THE HOMEOWNER.

WITH MINN. R. CH. 7035.

- 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
- 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

NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.

- 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 RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S
- 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.

## PL202200168

CONSTRUCTION SEQUENCE	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APf
MULCH BERM													
FIBER ROLLS / MULCH SOCKS													
SILT FENCE													
TEMPORARY MULCH COVER													
TEMPORARY HYDROMULCH													
EROSION CONTROL BLANKET													
ROCK DRIVEWAY / ROCK PADS													
INLET PROTECTION DEVICES													
PAVEMENT (DRIVEWAY/ROADS)													
SOD													
STOCKPILES													

NOTE: CONTRACTOR, GENERAL CONTRACTOR OR SWPPP INSPECTOR TO COMPLETE TABLE AS GRADING PROGRESSES

#### SEDIMENT BARRIERS SILT FENCE (MnDOT 3886)

- 2. CURB LOG ROCK WEEPER
- 4. SEDIMENT LOGS
- INLET PROTECTION DEVICES WIMCO (MnDOT TYPE A & C) 2. INFRASAFE STORM DRAIN/CULVERT
- ANTI-TRACKING CONTROL 2" CRUSHED CLEAR ROCK (LAND DEVELOPMENT)
- TEMPORARY SEED MIX I. MN STATE SEED MIX 21-112 (WINTER WHEAT COVER CROP) 2. MN STATE SEED MIX 22-III (OATS COVER CROP)

PERMANENT SEED MIX/STABILIZATION

I. MN STATE SEED MIX 25-151

(RESIDENTIAL TURF)

SOD

- STABILIZATION BMP'S
  I. EROSION CONTROL BLANKET MnDOT CATEGORY
- PERTINENT PERMITS:

CITY OF BLOOMINGTON GRADING PERMIT

GRADING ACTIVITY

CONCRETE WASHOUT IS DONE TRUCK

BY TRUCK WITH A MOBILE WASHOUT

SYSTEM PROVIDED AND COMPLETED

BY THE CONCRETE CONTRACTOR.

NPDES

## CONSTRUCTION SEQUENCE

- THE INTENDED SEQUENCING OF MAJOR SITE CONSTRUCTION ACTIVITIES IS AS FOLLOWS:
- INSTALL STABILZED ROCK CONSTRUCTION ENTRANCE.
- . INSTALL SILT FENCE AROUND SITE, AS SHOWN ON PLAN. 3. INSTALL ORANGE CONSTRUCTION FENCE AROUND EXISTING TREES TO BE PROTECTED.
- 4. CLEAR AND GRUB SITE. 5. STRIP AND STOCKPILE TOPSOIL
- 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

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

AREAS DISTURBED BY THE REMOVAL.

KAEDING & RON CLARK

SILT FENCE	271 LF
INLET PROTECTION	23 EA
ROCK CONSTRUCTION ENTRANCE	1 EA
SEED/SOD POST GRADING AREA	0.52 AC

#### EROSION CONTROL RESPONSIBLE PARTIES: OWNER/DEVELOPER: 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

733 Marguette Avenue Suite 700 Minneapolis, MN 55402 612.758.3080

ENGINEERING

www.alliant-inc.com

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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

the laws of the State of MINNESOTA David Mal

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DAVID NASH, PE 04-04-22 License No

ISSUE 5-20-22 | 100% GMP 7-22-22 CITY PERMIT 7-27-22 | LIFT STATION 8-16-22 EASEMENT REVISION 8-18-22 |TITLE UPDATE

QUALITY ASSURANCE/CONTROL

PROJECT TEAM DATA

DESIGNED:

PROJECT NO:

DRAWN:

8-23-22 CITY GRADING PERMIT

#### 1. EXISTING UTILITIES, SERVICE LOCATIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.

- 2. MAINTAIN A MIN. 18" VERTICAL SEPARATION AT ALL PIPE CROSSINGS. LOWER WATERMAIN AS NECESSARY W/ BENDS AND FITTINGS. WATER AND SANITARY SEWER LINES TO MAINTAIN 10' HORIZONTAL SEPARATION.
- 3. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS PRIOR TO THE START OF CONSTRUCTION.
- 4. PROVIDE POLYSTYRENE INSULATION FOR ALL STORM SEWER AND WATERMAIN CROSSINGS WHERE VERTICAL OR HORIZONTAL SEPARATION IS LESS THAN 3'.
- 5. ALL UTILITY WORK SHALL COMPLY WITH THE CITY OF BLOOMINGTON ENGINEERING SPECIFICATIONS, LATEST EDITION.
- 6. NOTIFY GOPHER STATE ONE CALL 48 HOURS IN ADVANCE OF ANY UTILITY WORK.
- 7. PROVIDE TEMPORARY TRAFFIC CONTROL IN COMPLIANCE WITH MNDOT "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS-FIELD MANUAL" LATEST REVISION, FOR ANY CONSTRUCTION WITHIN PUBLIC R.O.W.
- 8. ALL STORM SEWER CASTINGS SHALL BE NEENAH OR APPROVED EQUAL.
- 9. ALL SANITARY SEWER MANHOLES PER CITY OF BLOOMINGTON STANDARDS.
- 10. WATERMAIN, SERVICES, AND VALVES SHALL BE INSTALLED WITH MINIMUM 8.0' AND A MAXIMUM OF 10.0' OF COVER.
- 11. ALL WATERMAIN SHALL BE DIP WITH POLYWRAP PER CITY OF BLOOMINGTON STANDARDS.
- 12. ALL SANITARY BUILDING SERVICES SHALL BE PVC SDR 26, SDR 35 ALLOWED ON MAINS WHERE DEPTH PERMITS. ALL SANITARY FORCEMAIN TO BE C-900 PVC. SIZE TO BE DETERMINED BY OTHERS.
- 13. CONTRACTOR TO VERIFY ALL BUILDING CONNECTION POINTS WITH ARCHITECTURAL PLANS.
- 14. ALL ROOF DRAINS (RD) SHALL HAVE AN AT GRADE DOWNSPOUT OVERFLOW.
- 15. ALL ROOF WATER SHALL BE ROUTED TO THE SOUTH FILTRATION BASIN PER THE APPROVED STORMWATER MANAGEMENT PLAN.
- 16. MAINTAIN AND VERIFY 10' HORIZONTAL SEPARATION IS PROVIDED BETWEEN ALL WATERMAIN AND CATCHBASIN/MANHOLES.
- 17. CONTRACTOR TO COORDINATE ALL REQURIED WATER MAIN SHUT-OFF WITH CITY OF BLOOMINGTON AND CONTACT PROPERTY OWNERS.
- 18. CONTRACTOR TO ORDER AND PAY CITY FOR ALL WET TAPS ON SITE.
- 19. INSTALL INTERIOR CHIMNEY SEALS ON ALL SANITARY SEWER MANHOLES.
- 20. UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION
- 21. COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.
- 22. 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 PIPE IS NOT ALLOWED.
- 23. ALL WORK TO BE COMPLETED PER THE GEOTECH REPORT.

#### SANITARY SEWER SCHEDULE:

МН		PIPE	PIPE SLOPE	PIPE LENGTH	INVERT	INVERT	RIM	STRUCTURE	MANHOLE	
FROM	TO	O.D. [IN]	[FT/FT]	[FT]	FROM	TO	ELEV	SIZE [IN]	BUILD [FT]	PIPE TYPE
12" SAN SERVICE	LIFT STATION	12	0.004	68.9	775.00	774.72	N/A	N/A	N/A	C-900 PVC

#### STORM SEWER SCHEDULE:

	O I O I IIVI U		<u> </u>		<u> </u>							
	MH/CB		P. DIA.	P. SLOPE	P. TYPE	PIPE	FROM	TO	RIM	STR.	CAST	BUILD
	FROM	TO	[IN]	S [%]		LENGTH [FT]	INVERT	INVERT	ELEV	TYPE	TYPE	(FT)
	RD 1	EX MH	15	0.004	RCP	48.1	794.2	794.0				
	CB 112	CBMH 111	12	0.005	HDPE	45.0	798.3	798.1	802.3	2x3	R-3067-V	4.0
	CBMH 111	CBMH 110	12	0.025	HDPE	137.0	797.4	794.0	801.4	48	R-3067-V	4.0
	CBMH 110	CBMH 105	15	0.056	HDPE	100.0	792.0	786.4	798.9	48	R-1642	6.9
١.	CB 106	CBMH 105	12	0.015	RCP	48.0	787.8	787.1	791.8	2x3	R-1642	4.0
,	CBMH 105	CBMH 104	15	0.053	RCP	38.0	786.0	784.0	792.0	48	R-1642	6.0
	RD 2	CBMH 104	18	0.018	HDPE	54.0	785.0	784.1				
	CBMH 104	CBMH 103	18	0.074	RCP	159.0	783.0	771.2	789.8	48	R-1642	10.8
	CBMH 103	CBMH 102	18	0.108	RCP	56.3	770.9	764.8	776.6	48	R-1642	5.7
	CBMH 102	CBMH 101	18	0.086	RCP	19.8	757.5	755.8	771.0	48	R-1642	17.5
	CBMH 101	FES 100	21	0.023	RCP	39.9	745.8	744.9	760.1	48	R-1642	18.3
	EX. LOT CB	CBMH 102	15	0.015	HDPE	33.0	768.4	767.9	772.4	48	R-4342	4.0

#### PIPE CROSSING SCHEDULE:

-	CROSSING	PIPE ABOVE	PIPE BELOW	INV. (ABOVE)	TOP PIPE (BELOW)	DISTANCE BETWEEN	LOWER WATERMAIN
	Α	STORM	WATER	797.48	794.3	3.18	

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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 Jan Phrus a DAVID NASH, PE

21836 04-04-22 License No.

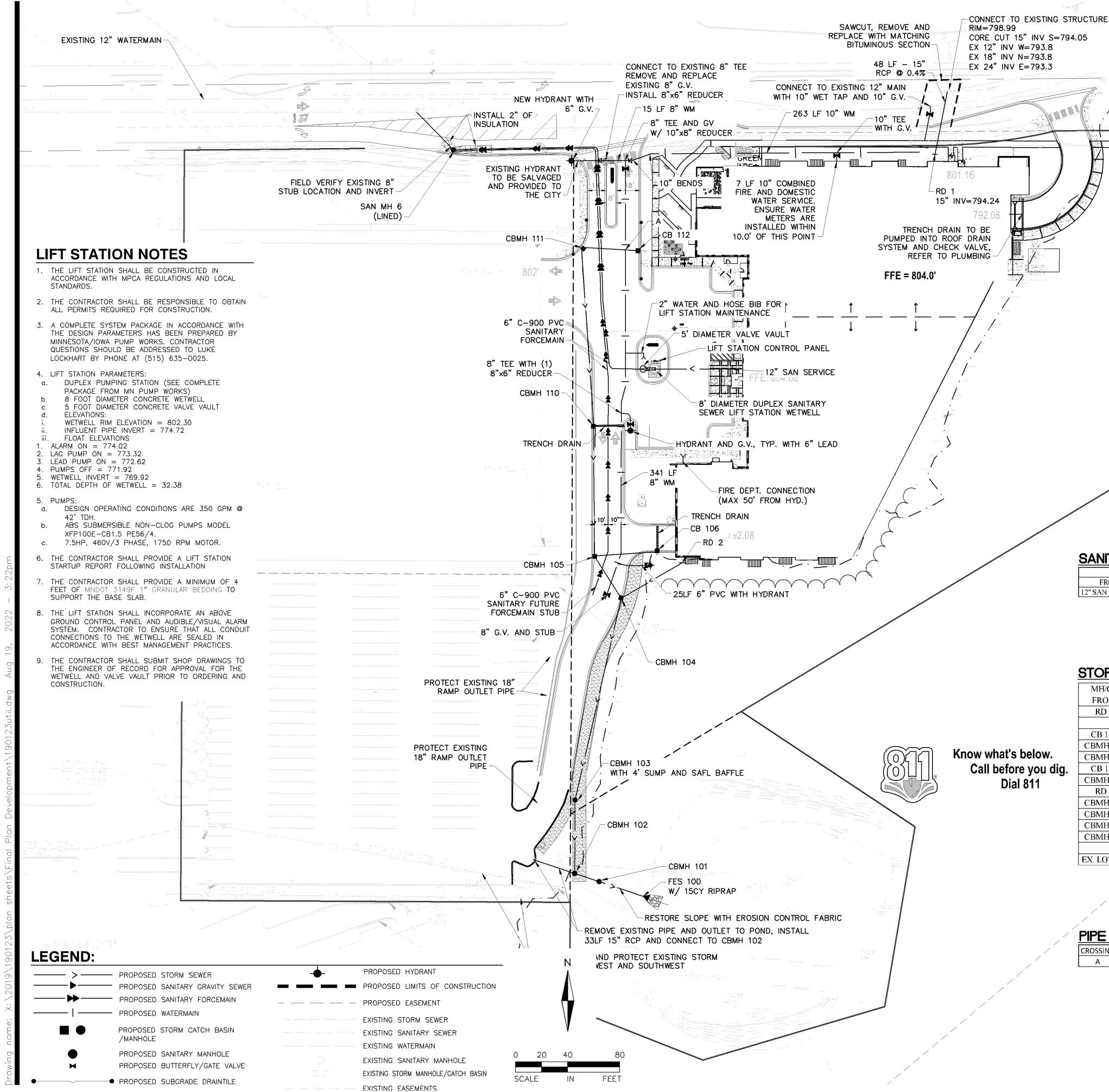
QUALITY ASSURANCE/CONTROL

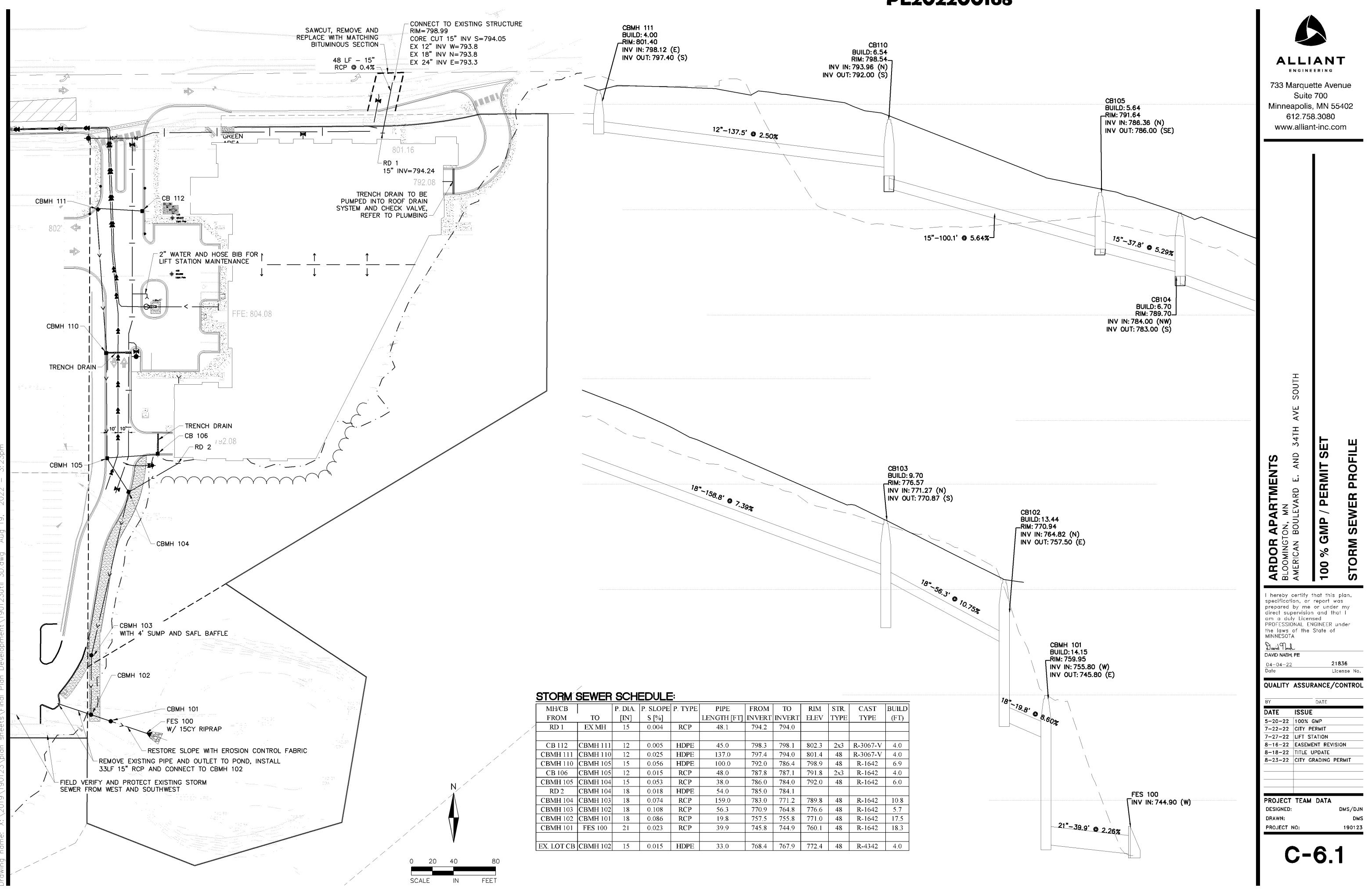
DATE ISSUE 5-20-22 100% GMP 7-22-22 CITY PERMIT 7-27-22 LIFT STATION 8-16-22 EASEMENT REVISION 8-18-22 TITLE UPDATE 8-23-22 CITY GRADING PERMIT

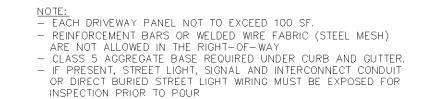
PROJECT TEAM DATA DESIGNED:

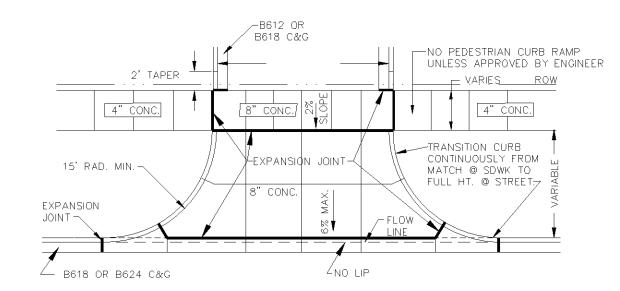
DMS/DJN DRAWN: PROJECT NO: 190123

C-6.0





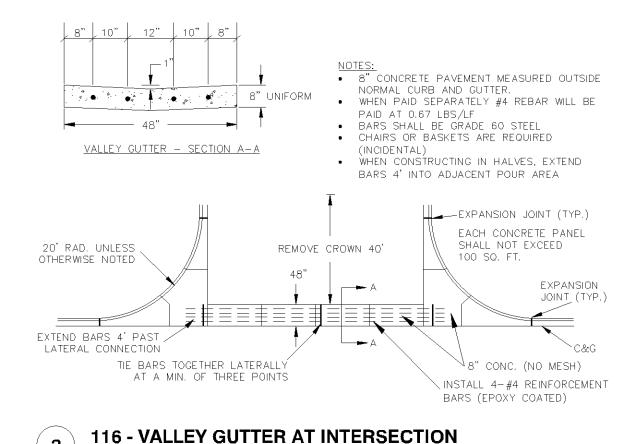




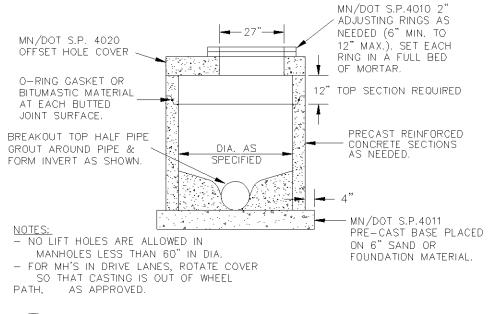
100 - NONRESIDENTIAL DRIVEWAY APPROACH WITH BOULEVARD SIDEWALK

NOT TO SCALE

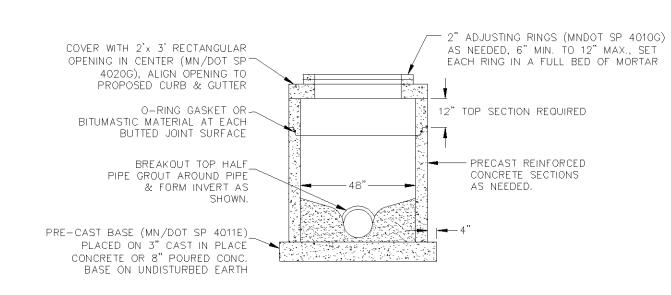
100 - Drwy (Commercial).dwg 5/2015



NOT TO SCALE

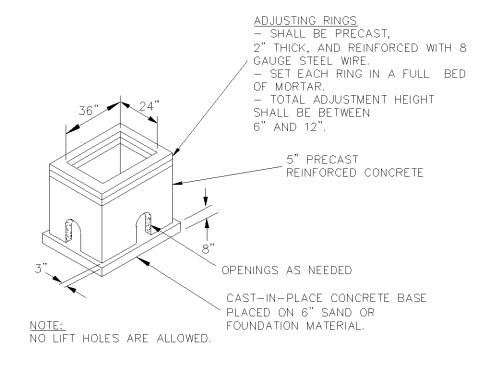




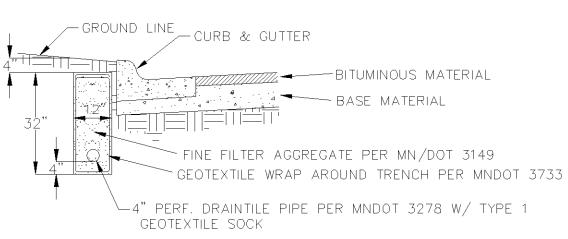


4 203 - STANDARD MANHOLE (CB-MH)

NOT TO SCALE 203 - STD\_MH (CB-MH).DWG 9/2016



5 206 - STANDARD CATCH BASIN
NOT TO SCALE 206 - STD CB.DWG 9/2016

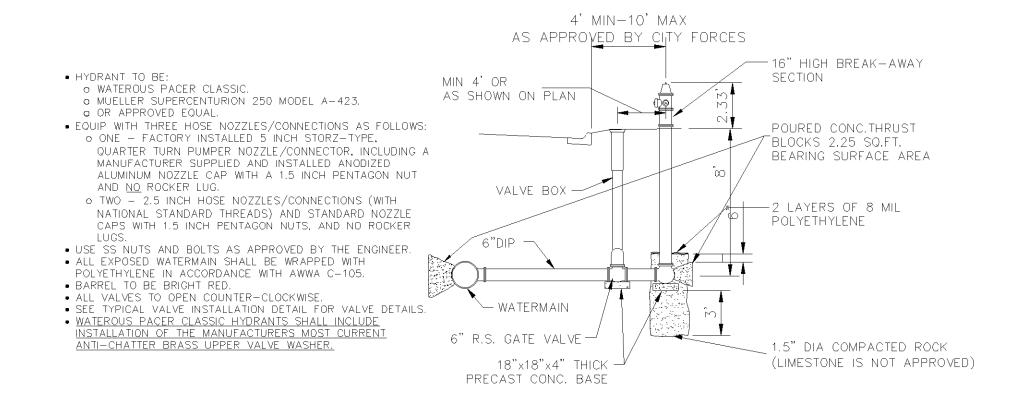


116 - Valley Gutter.dwg 5/2015

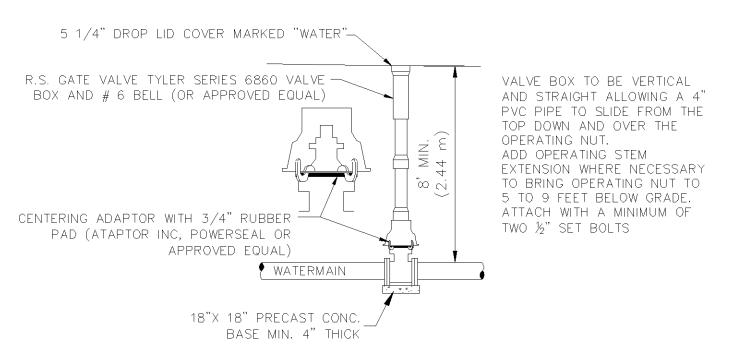
NOTE 1: SEE Mn/DOT SPEC. 2502 FOR ADDITIONAL INFORMATION

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

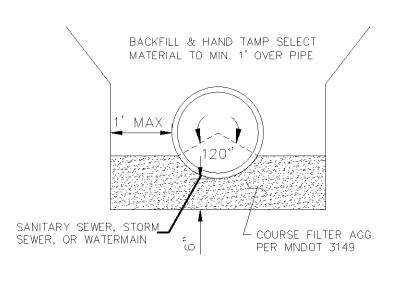




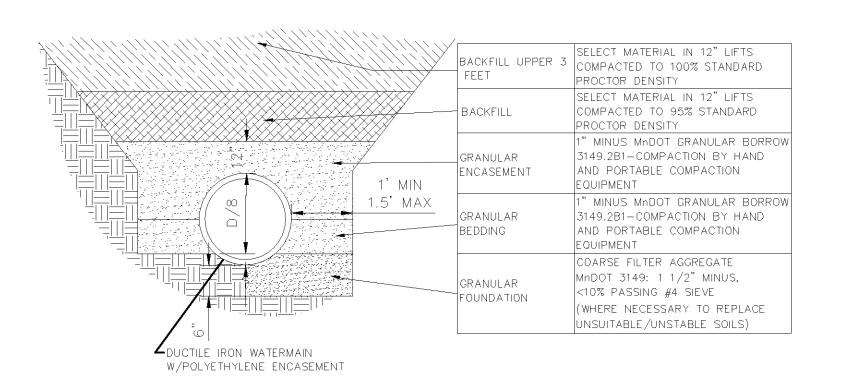




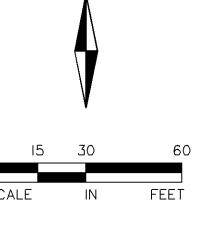














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CAN BOULEVARD EAST

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DAVID NASH, PE

04-04-22

Date License No.

the laws of the State of

MINNESOTA

QUALITY ASSURANCE/CONTROL			
BY	DATE		
DATE	ISSUE		
5-20-22	100% GMP		
7-22-22	CITY PERMIT		
7-27-22	LIFT STATION		
8-16-22	EASEMENT REVISION		
8-18-22	TITLE UPDATE		
8-23-22	CITY GRADING PERMIT		
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PROJECT TEAM DATA

DESIGNED: DMS/DJN

DRAWN: DMS

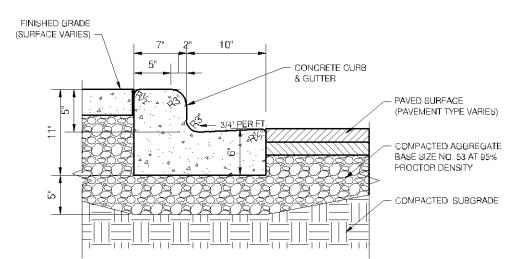
PROJECT NO: 190123

C-7.0

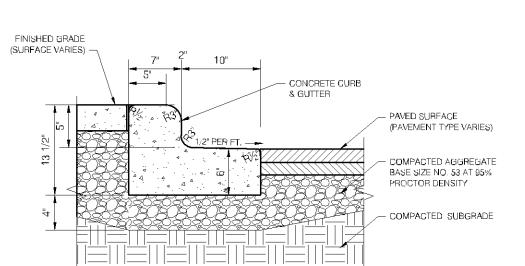
ROUND BOLLARD WITH ACCESSIBLE SIGNAGE

FRONT OF CARTEEN ..

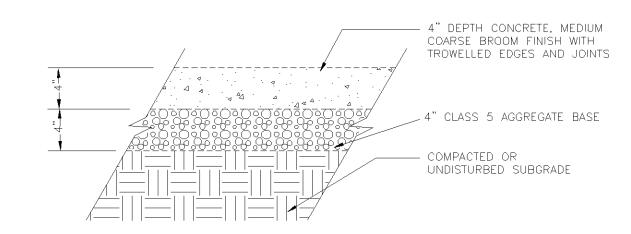
E DUMB AND GUTTER-



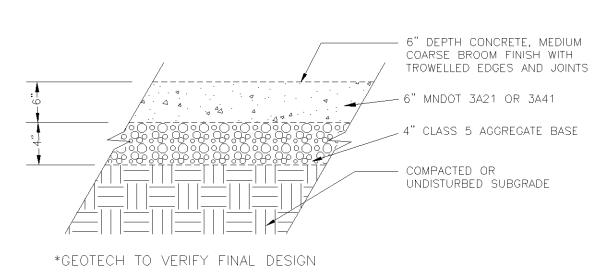
**B612 CURB AND GUTTER** NOT TO SCALE



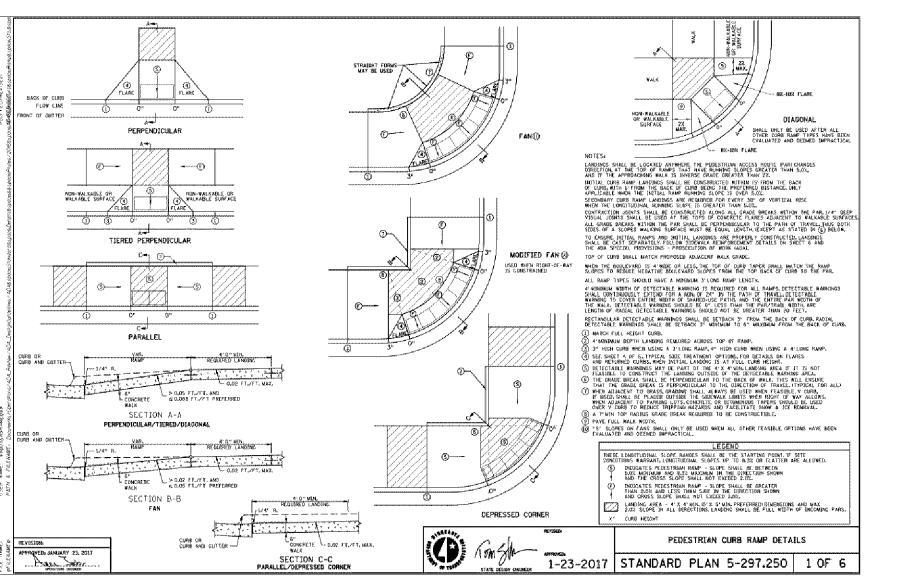
**B612 CURB AND GUTTER - OUTFALL** NOT TO SCALE

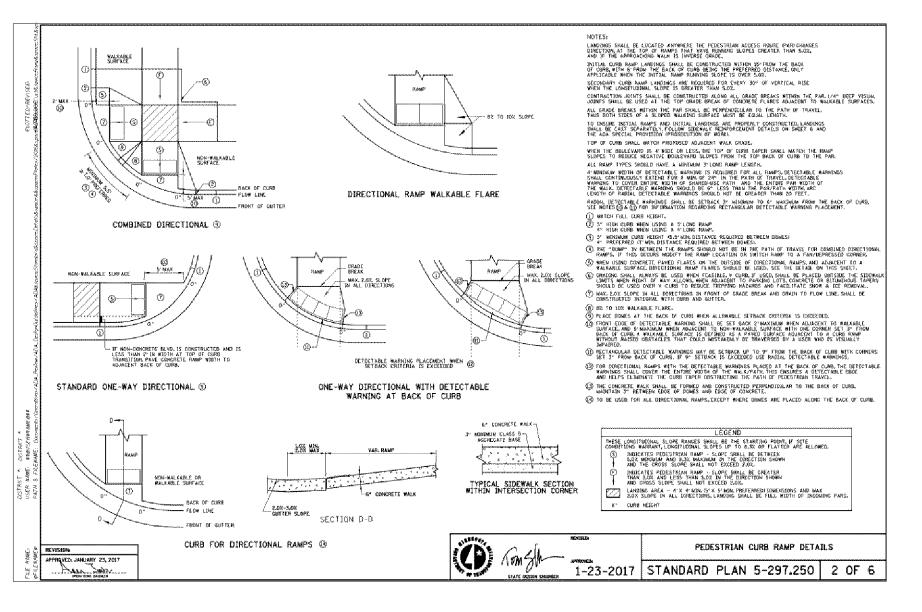


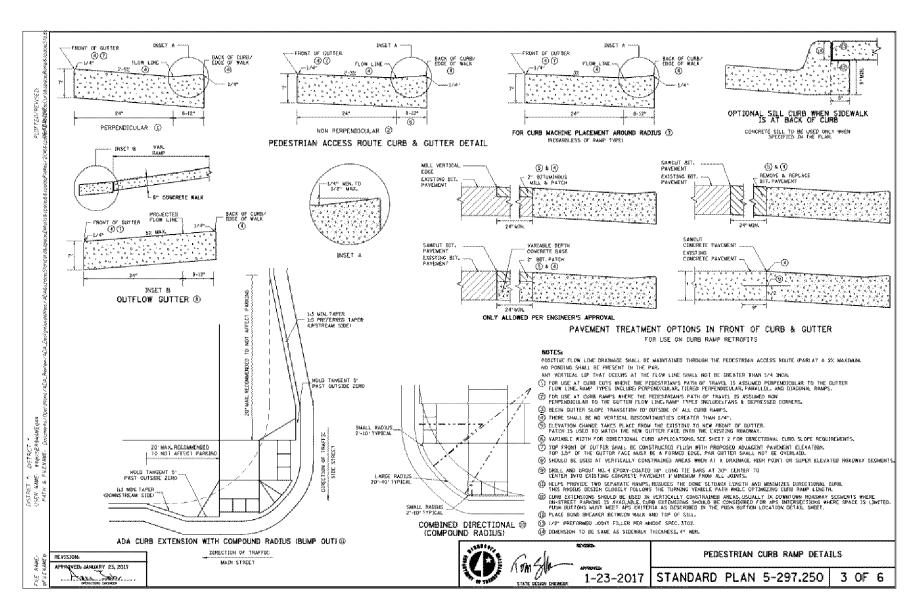
**CONCRETE SIDEWALK** NOT TO SCALE

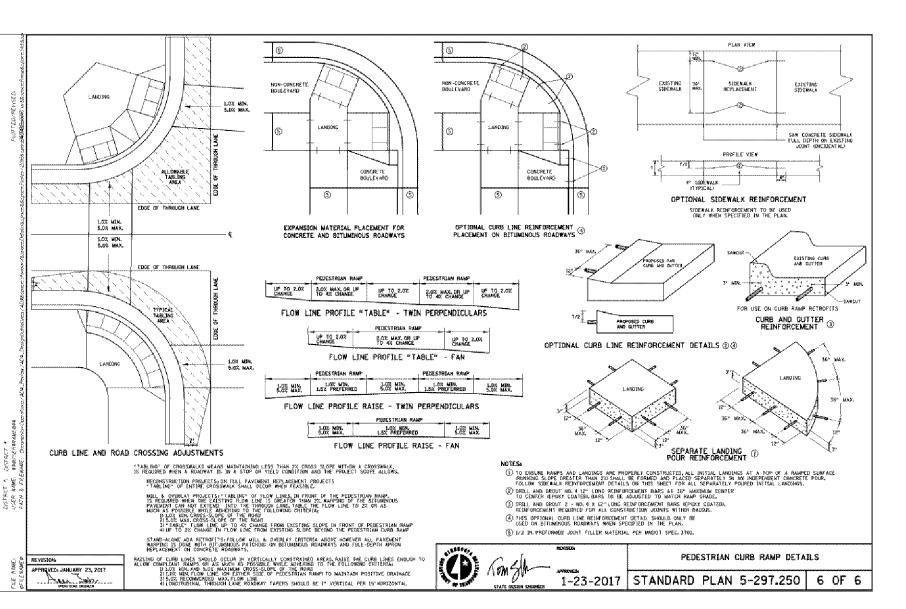


**CONCRETE PAVEMENT** NOT TO SCALE

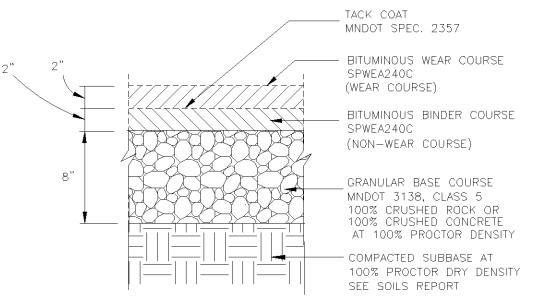






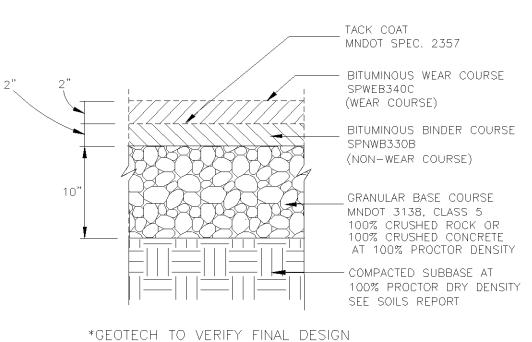


## PL202200168

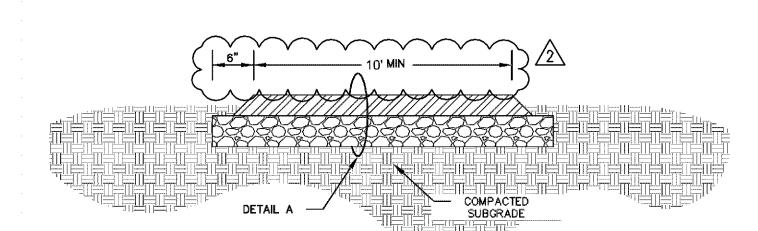


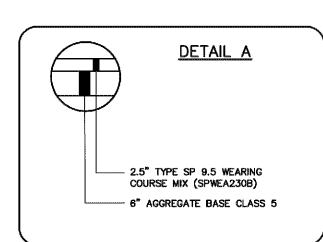
\*GEOTECH TO VERIFY FINAL DESIGN

## LIGHT-DUTY BITUMINOUS PAVEMENT



HEAVY-DUTY BITUMINOUS PAVEMENT





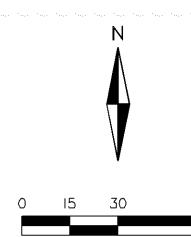
PLACE ALL ASPHALT IN ONE LIFT TO PROVIDE A MINIMUM OF 2.5" COMPACTED DEPTH.

PROVIDE A MINIMUM BASE OF 6" COMPACTED AGGREGATE. IMPORT ADDITIONAL MATERIALS IF MILLING FAILS TO PRODUCE ADEQUATE BASE MATERIAL.

TAMP ALL TRAIL EDGES AT A 45° BEVEL.

CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING EDGES OF TRAIL CORRIDOR WITH ON-SITE MATERIAL. HOLD GRADES 3" LOWER THAN FINISHED TRAIL SURFACE TO ALLOW FOR ADDITIONAL TOPSOIL PLACEMENT AND SEED. SLOPE OF BITUMINOUS TRAIL SHALL BE A MINIMUM OF 1% TO A MAXIMUM OF 2% TO THE DOWNHILL EDGE.





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DAVID NASH, PE 04-04-22

License No. QUALITY ASSURANCE/CONTROL

DATE ISSUE 5-20-22 | 100% GMP 7-22-22 CITY PERMIT 7-27-22 LIFT STATION 8-16-22 EASEMENT REVISION 8-18-22 TITLE UPDATE 8-23-22 CITY GRADING PERMIT

PROJECT TEAM DATA DESIGNED: DMS/DJN DRAWN:

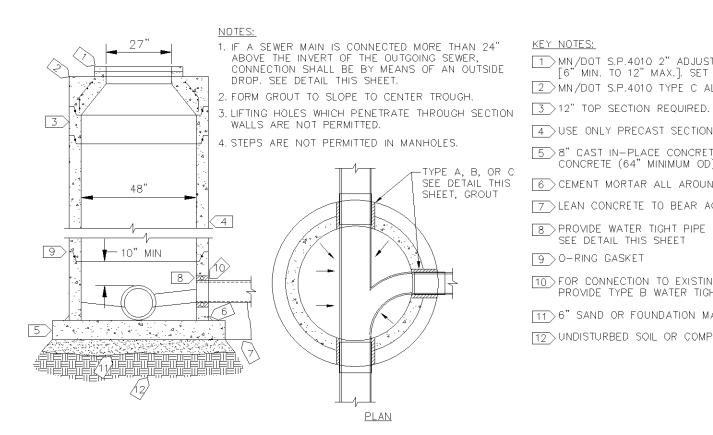
PROJECT NO:

C-7.1

190123

PEDESTRIAN CURB RAMP NOT TO SCALE

PROPER SAFETY EQUIPMENT"



KEY NOTES:

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)

6 CEMENT MORTAR ALL AROUND

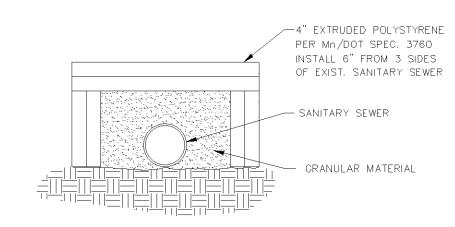
7 LEAN CONCRETE TO BEAR AGAINST FIRM UNDISTURBED SOIL 8 PROVIDE WATER TIGHT PIPE CONNECTIONS SEE DETAIL THIS SHEET

9 > 0-ring gasket

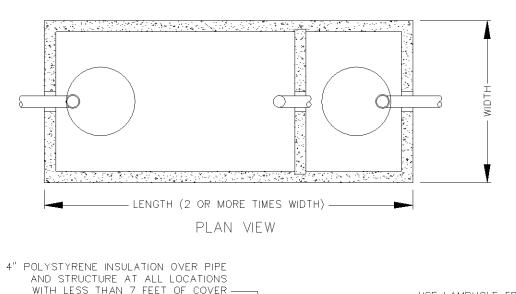
10 FOR CONNECTION TO EXISTING MH'S, CORE DRILL OPENING AND PROVIDE TYPE B WATER TIGHT CONNECTOR

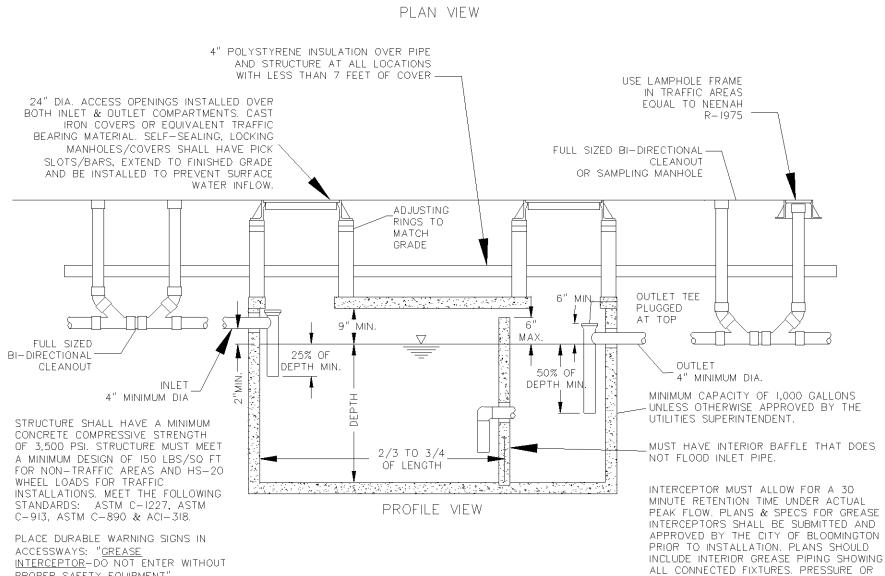
11>6" SAND OR FOUNDATION MATERIAL 12 UNDISTURBED SOIL OR COMPACTED SUBGRADE

**400 - STANDARD SANITARY SEWER MANHOLE** NOT TO SCALE 400 - Std San MH.dwg 6/2015



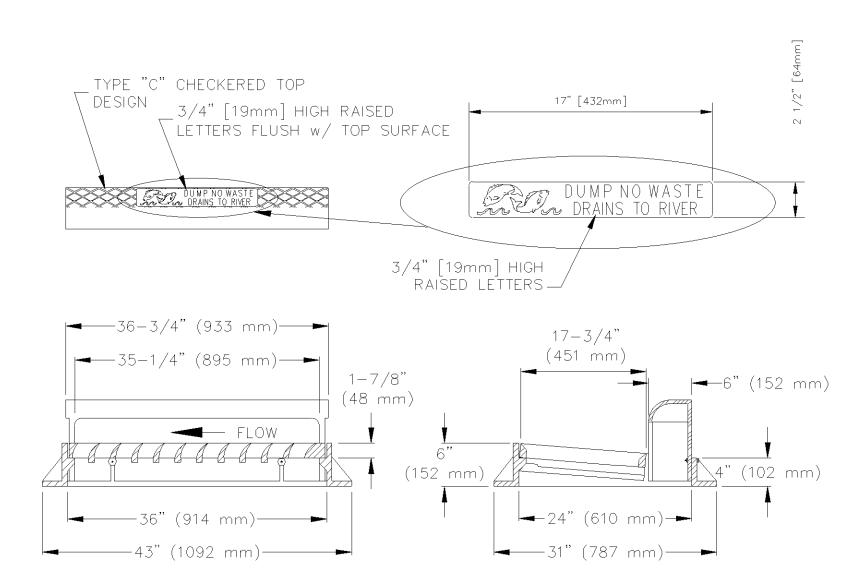
411 - SANITARY SEWER INSULATION DETAIL **(2**) 411 - Std San MH.dwg 6/2015 NOT TO SCALE







VACUUM TEST TO BE WITNESSED BY CITY.



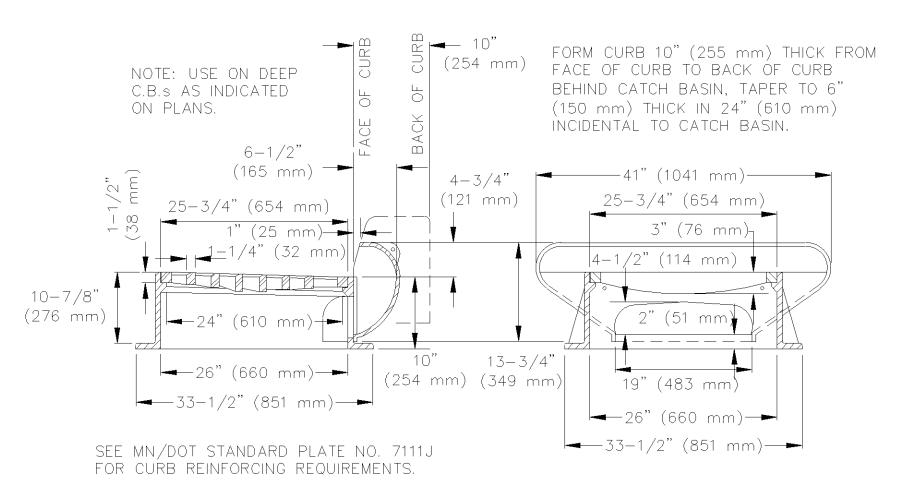
USE NEENAH R-3067 WITH TYPE L GRATE

OR APPROVED EQUAL

504 - Rect. CB.dwg 5/2015

504 - RECTANGULAR CATCH BASIN CASTING ASSEMBLY

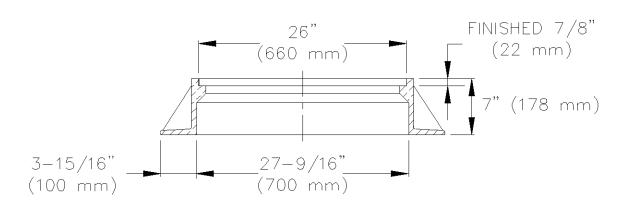
NOT TO SCALE



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)

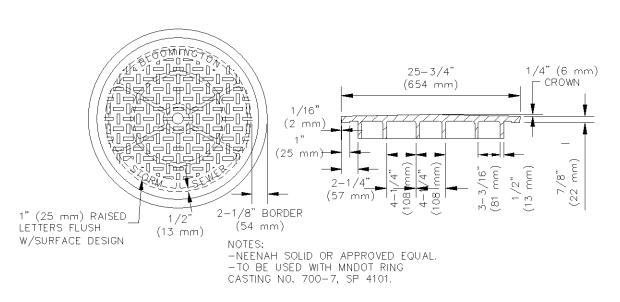
**505 - ROUND CATCH BASIN CASTING ASSEMBLY** 505 - Round CB.dwg 5/2015

## PL202200168

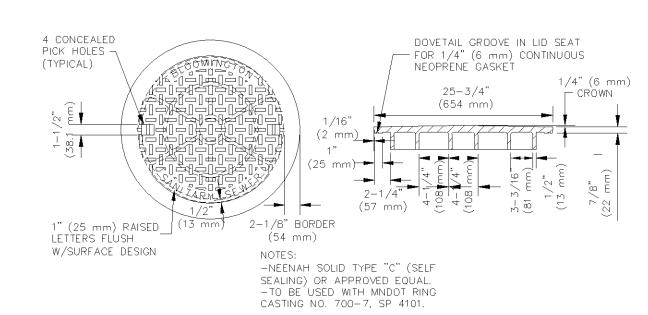


MN/DOT S.P. 4101D CASTING NO. 700-7

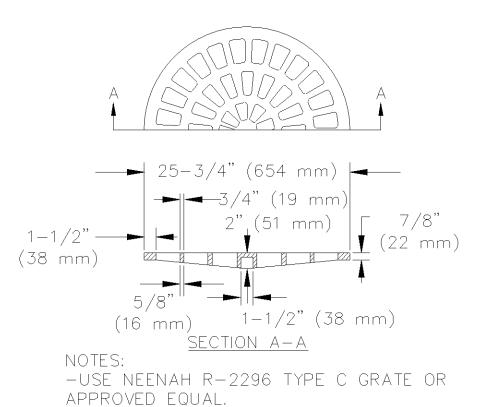




500 - STANDARD STORM SEWER MANHOLE COVER 500 - Storm Cov (Solid).dwg 5/2015



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



-TO BE USED WITH MNDOT RING CASTING NO. 700-7, SP 4101.





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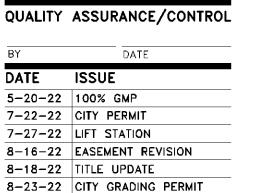
SOUTH

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**DO** 

MINNESOTA

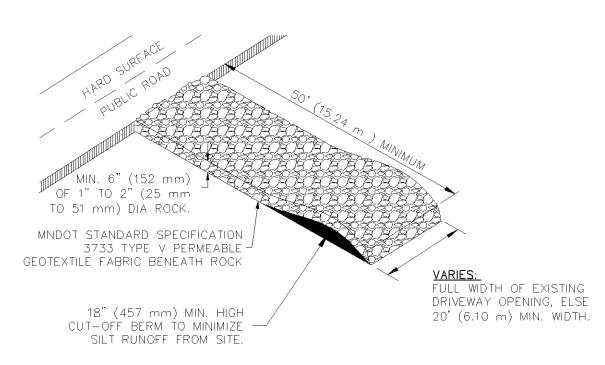
DAVID NASH, PE 04-04-22 License No.



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

C-7.2

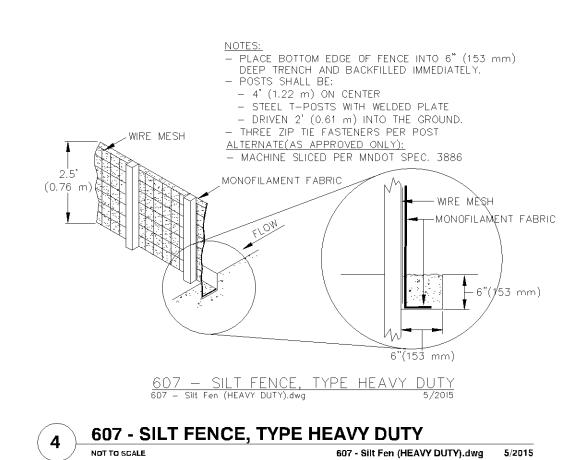
DMS

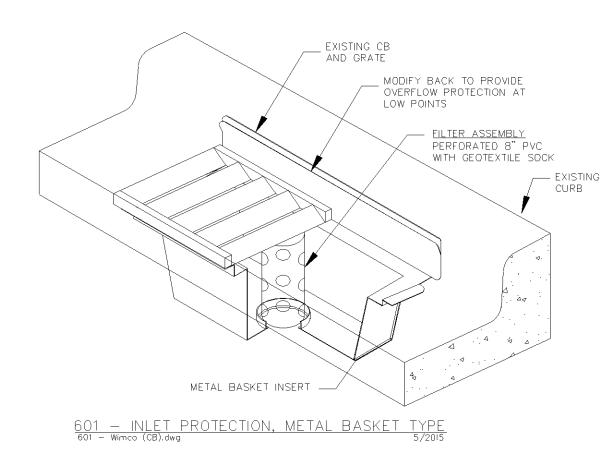


600 - ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS
600 - Rock Const. Ent.dwg 5/2015

1 600 - ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS

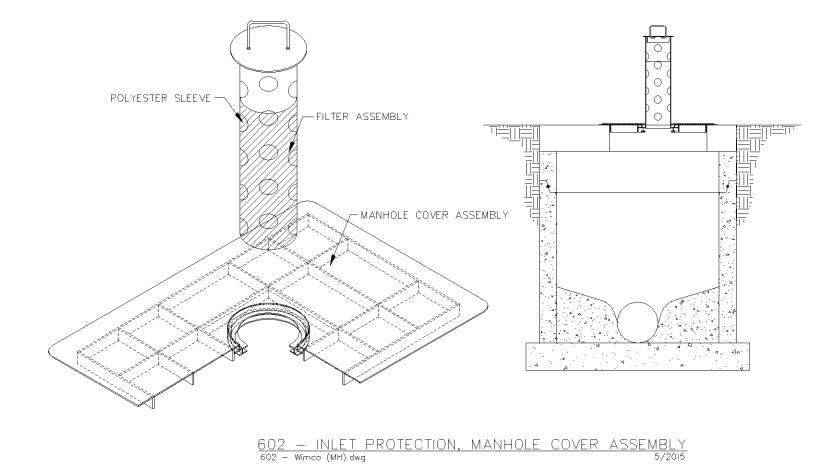
NOT TO SCALE 600 - Rock Const. Ent.dwg 5/2015



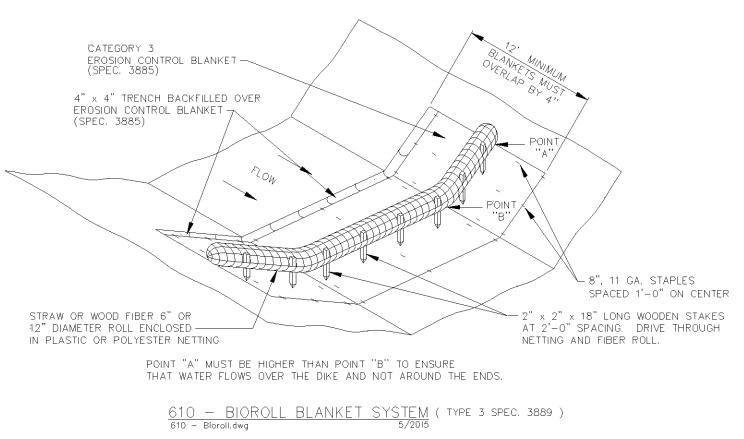


2 601 - INLET PROTECTION, METAL BASKET TYPE

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



602 - INLET PROTECTION, MANHOLE COVER ASSEMBLY



5 610 - BIOROLL BLANKET SYSTEM (TYPE 3 SPEC. 3889)
NOT TO SCALE 610 - Bioroll.dwg 5/2015



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AERICAN BOULEVARD EAST

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the laws of the State of MINNESOTA

DAVID NASH, PE 04-04-22 Date

Date License No.

QUALITY ASSURANCE/CONTROL

DATE

DATE

ISSUE

5-20-22 100% GMP

7-22-22 CITY PERMIT

7-27-22 LIFT STATION

8-16-22 EASEMENT REVISION

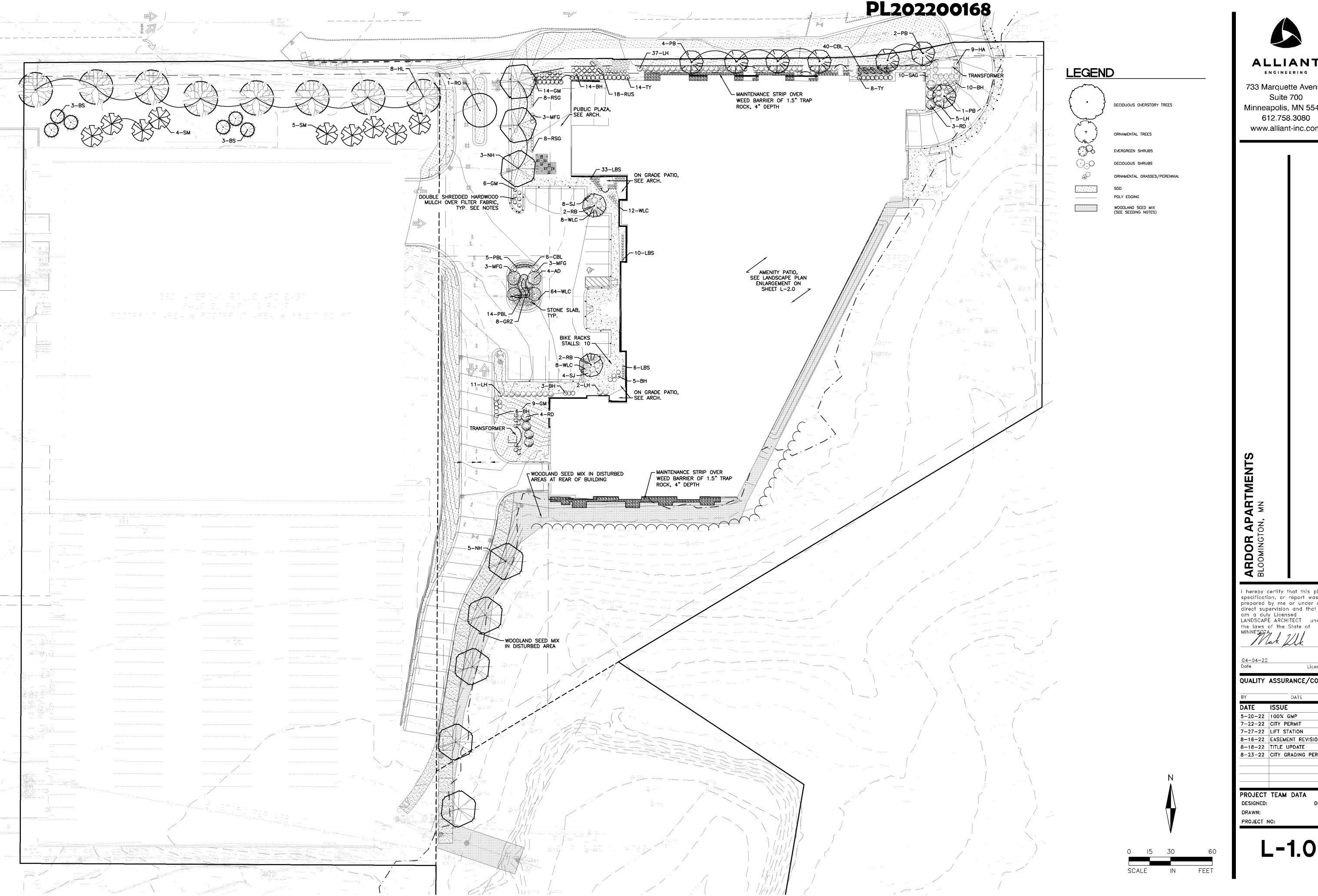
8-18-22 TITLE UPDATE

8-23-22 CITY GRADING PERMIT

PROJECT TEAM DATA
DESIGNED:
DRAWN:

PROJECT NO:

C-7.3





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

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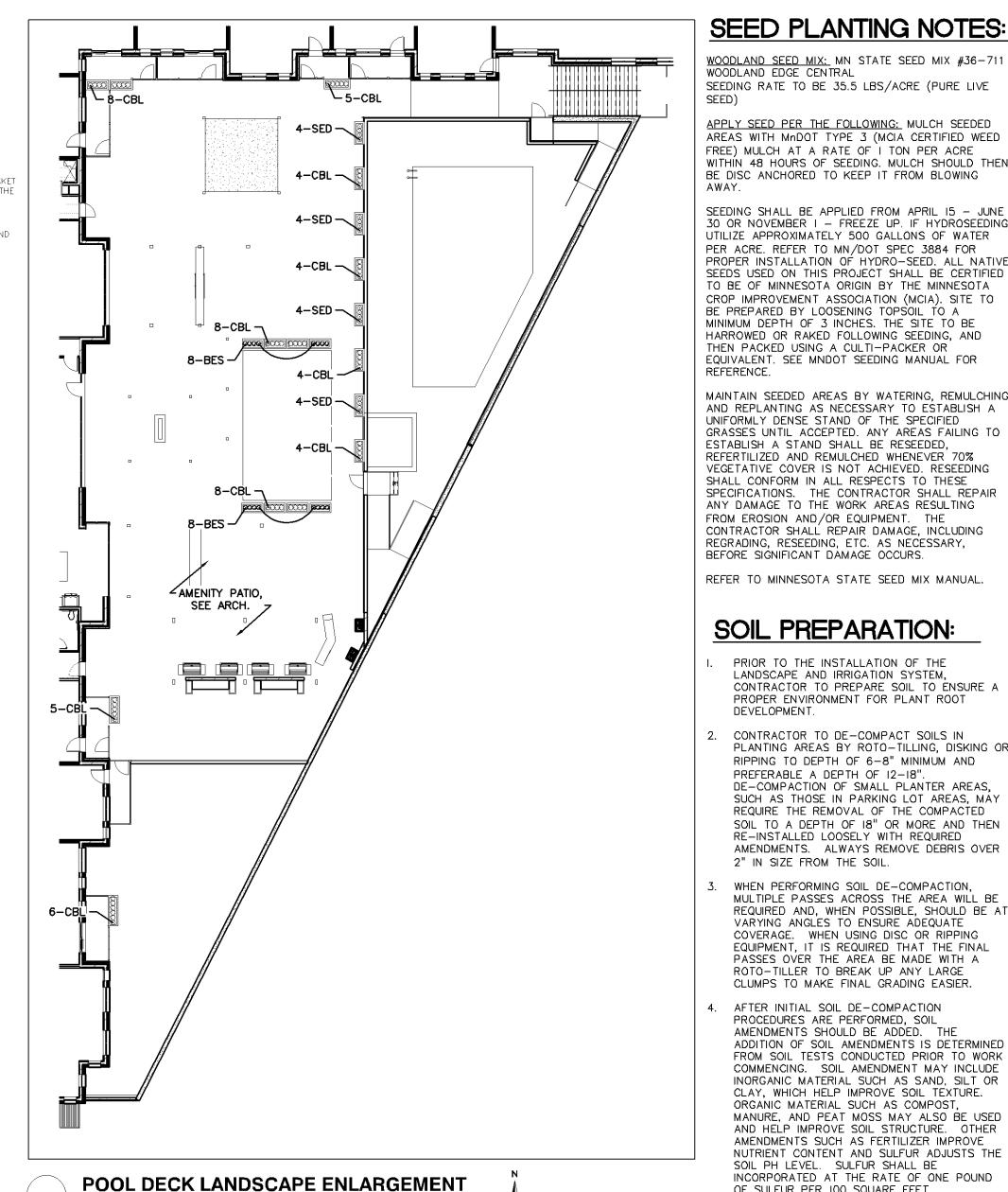
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PROJECT TEAM DATA

190123

DMS/DJN



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

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

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
- 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.
- 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.
- 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.
- ALL AMENDMENTS SHOULD BE MIXED THOROUGHLY WITH EXISTING SOIL AND AN ADDITIONAL SOIL TEST WILL BE TAKEN TO ENSURE PROPER SOIL CONDITIONS PRIOR TO

# POOL DECK SCHEDULE

QTY	KEY	COMMON NAME	SCIENTIFIC NAME	SIZE
PERENI	VIALS & O	RNAMENTAL GRASSES		
16	BES	Little Goldstar Black Eyed Susan	Rudbeckia fulgida 'Little Goldstar'	1 gal cont.
16	SED	Neon Flash Sedum	Sedum spectabile 'Neon'	1 gal cont.
56	CBL	Plum Pudding Coral Bells	Heuchera 'Plum Pudding'	1 gal cont.

#### LANDSCAPE SCHEDULE

SEE NOTES

FILTER FABRIC

MULCH AT SOD DETAIL

∵MIRAFI OR EQUAL

QUANTITY	KEY	COMMON NAME	SCIENTIFIC NAME	SIZE / ROOT TYPE	NOTES
OVERSTORY TE	REES	-1			
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
3	RB	River Birch	Betula nigra	12' ht. B&B	Clump Form
EVERGREEN TR	REES				
6	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					
86	ВН	Dwarf Bush Honeysuckle	Diervilla lonicera	18" ht. cont.	Min. 5 canes at ht. spec.
43	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
60	LH	Lime Light Hydrangea	Hydrangea paniculata 'Limelight'	18" ht. cont.	Min. 5 canes at ht. spec.
7	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.
42	TY	Taunton Yew	Taxus x media 'Taunton'	24" ht. cont.	Full Form
PERENNIALS &	ORNAME	NTAL GRASSES			
86	CBL	Champagne Coral Bells	Heuchera 'Champagne'	1 gal cont.	
8	GRZ	Miscanthus Graziella	Miscanthus sinensis 'Graziella'	3 gal cont.	
42	LBS	Little Bluestem	Schizachyrium scoparium	1 gal cont.	
26	MFG	Miscanthus Flame	Miscanthus sinensis 'Purpurascens'	3 gal cont.	
72	RUS	Little Spire Russian Sage	Perovskia atriplicifolia 'Little Spire'	1 gal cont.	
30	SAG	Sagae Hosta	Hosta 'Sagae'	1 gal cont.	
90	WLC	Walker's Low Catmint	Nepeta x faasenii 'Walker's Low'	1 gal cont.	

#### LANDSCAPE REQUIREMENTS

	•····
DEVELOPABLE AREA:	
TOTAL DEVELOPABLE AREA: APPLE TREE 4TH ADD. — LOT 1 BLK 1 — OUTLOT A	108,963 SF

LANDSCAPE CALCULATIONS: TREES REQUIRED: 44 TREES (1/2,500 SF DEVELOPABLE) TREES PROVIDED: 44 TREES 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.

ALLIANT ENGINEERING

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

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AND

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> 26222 License No.

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DMS/DJN DRAWN: PROJECT NO: 190123

- 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.