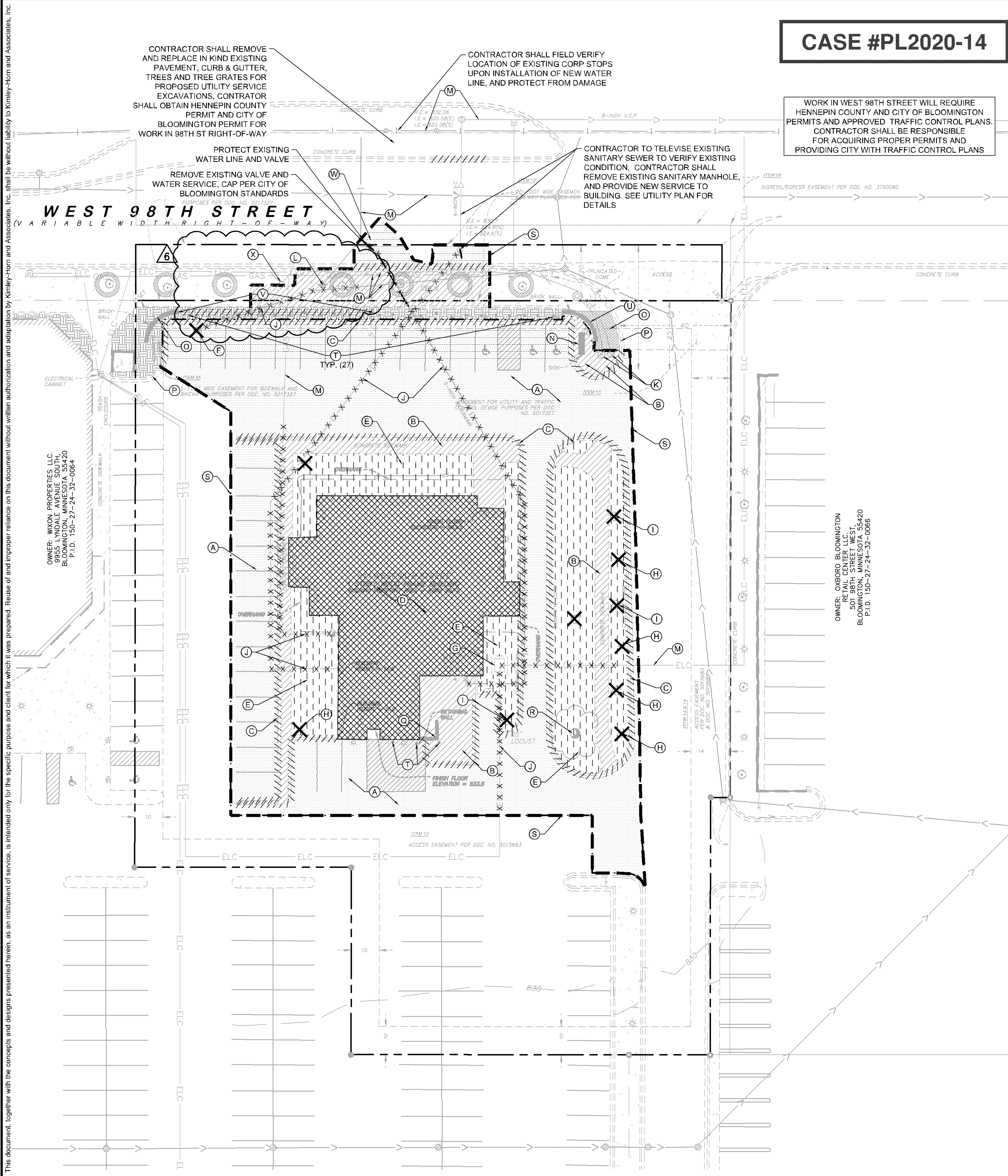






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## CASE #PL2020-14

WORK IN WEST 98TH STREET WILL REQUIRE HENNEPIN COUNTY AND CITY OF BLOOMINGTON PERMITS AND APPROVED TRAFFIC CONTROL PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING PROPER PERMITS AND PROVIDING CITY WITH TRAFFIC CONTROL PLANS

### KEYNOTE LEGEND

- (A) REMOVE EXISTING BITUMINOUS PAVEMENT
- (B) REMOVE EXISTING CONCRETE PAVEMENT/SIDEWALK
- (C) REMOVE CURB AND GUTTER
- (D) REMOVE EXISTING BUILDING, AND ASSOCIATED FOUNDATIONS/FEATURES
- (E) CLEARING AND GRUBBING
- (F) REMOVE STORM STRUCTURE
- (G) REMOVE EXISTING ELECTRICAL EQUIPMENT
- (H) REMOVE EXISTING LIGHT POLE AND ASSOCIATED FOUNDATIONS/FEATURES
- (I) REMOVE EXISTING TREE
- (J) REMOVE EXISTING UTILITIES
- (K) PROTECT EXISTING ELECTRICAL HANDHOLE
- (L) PROTECT EXISTING HYDRANT
- (M) PROTECT EXISTING UTILITIES
- (N) PROTECT EXISTING PYLON SIGN
- (O) PROTECT EXISTING SIDEWALK/PAVEMENT
- (P) PROTECT EXISTING CURB AND GUTTER
- (Q) REMOVE RETAINING WALL
- (R) PROTECT EXISTING TREE
- (S) SAWCUT LINE
- (T) REMOVE EXISTING SIGN/BOLLARDS
- (U) PROTECT EXISTING BRICK WALL
- (V) REMOVE EXISTING FENCING/COLUMNS
- (W) PROPOSED UTILITY SERVICE EXCAVATIONS, MATCH EXISTING PAVEMENT SECTION PER CITY OF BLOOMINGTON STANDARDS
- (X) PROTECT EXISTING LIGHT POLE

IF WELLS ARE ENCOUNTERED, CONTRACTOR SHALL SEAL IN ACCORDANCE WITH ALL LOCAL GOVERNMENTAL REGULATIONS AND CONSTRUCTION CONTINGENCY PLAN, PROVIDE INFORMATION TO THE CITY OF MINNEAPOLIS,

IF UNDERGROUND TANKS OR OIL BURNERS ARE ENCOUNTERED, CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS IN DO IN ACCORDANCE WITH ALL LOCAL GOVERNMENTAL REGULATIONS AND CONSTRUCTION CONTINGENCY PLAN.

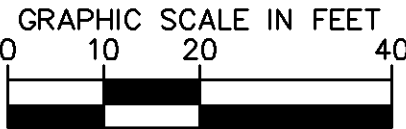
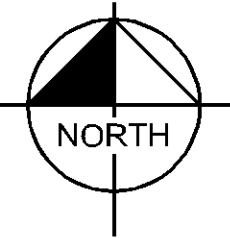
IF CONTRACTOR ENCOUNTERS CONTAMINATED OR HAZARDOUS MATERIALS/SOILS, CONTRACTOR SHALL NOTIFY ENGINEER AND REFER TO ENVIRONMENTAL DOCUMENTATION PREPARED BY OTHERS TO ENSURE REMEDIATION AND DISPOSAL OF MATERIALS IS COMPLETED IN ACCORDANCE PER ALL LOCAL AND GOVERNMENTAL REGULATIONS

### DEMOLITION PLAN NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVE, DRAINAGE STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE PROJECT DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. CONTRACTOR SHALL PROVIDE COPIES OF THE PERMIT AND RECEIPTS OF DISPOSAL OF MATERIALS TO THE OWNER AND OWNERS REPRESENTATIVE.
- THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER AND COORDINATION WITH THE ADJACENT PROPERTIES AND/OR THE CITY.
- THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES WITHIN ALL AREAS OF PROPOSED WORK.
- ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS ANY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PRECEDING WITH THE WORK.
- ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC, AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT-OF-WAY DURING CONSTRUCTION.
- CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. MAINTENANCE OF TRAFFIC CONTROL SHALL BE COORDINATED IN ACCORDANCE WITH BLOOMINGTON, HENNEPIN COUNTY COUNTY AND MNDOT.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL NOTIFY ALL PROPERTIES IF ACCESS WILL BE INTERRUPTED OR ALTERED AT ANY TIME DURING CONSTRUCTION.
- PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
- THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY WATER DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF BLOOMINGTON DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
- REFER TO SURVEY FOR ALL EXISTING INVERT AND RIM ELEVATIONS.
- ALL UTILITIES SHOWN ARE EXISTING UTILITIES.
- IN THE EVENT A WELL IS FOUND, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER IMMEDIATELY. ALL WELLS SHALL BE SEALED BY A LICENSED WELL CONTRACTOR IN ACCORDANCE WITH ALL STATE OF MN REQUIREMENTS.
- IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER AND/OR OWNERS REPRESENTATIVE IMMEDIATELY. ALL CONTAINERS SHALL BE DISPOSED OF AT A PERMITTED LANDFILL PER THE PROJECT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY EXISTING DRAIN TILE IS ENCOUNTERED ON SITE. NO ACTIVE DRAIN TILE SHALL BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.

### LEGEND

- |                |                                |
|----------------|--------------------------------|
| ---            | PROPERTY LINE                  |
| =====          | REMOVE BITUMINOUS SURFACE      |
| =====          | REMOVE CONCRETE SURFACE        |
| =====          | REMOVE BUILDING                |
| =====          | CLEARING & GRUBBING            |
| -----X-----    | FULL DEPTH SAWCUT              |
| -----X-----    | REMOVE TREE                    |
| //////         | REMOVE CONCRETE CURB & GUTTER  |
| X X X X X X X  | REMOVE UTILITY LINES           |
| X X X X X X X  | ABANDON UTILITY LINES          |
| -----          | LIMITS OF CONSTRUCTION         |
| -----O-----ELC | EXISTING OVERHEAD POWER LINE   |
| -----X-----    | EXISTING CHAINLINK FENCE       |
| -----X-----    | EXISTING J-BARRIER             |
| -----X-----    | EXISTING RETAINING WALL        |
| -----X-----    | EXISTING SANITARY SEWER        |
| -----X-----    | EXISTING STORM SEWER           |
| -----X-----    | EXISTING WATERMAIN             |
| -----X-----    | EXISTING GAS MAIN              |
| -----X-----    | EXISTING UNDERGROUND TELEPHONE |
| -----X-----    | EXISTING UNDERGROUND CABLE     |
| -----X-----    | EXISTING CONTOUR               |
| =====          | EXISTING CURB & GUTTER         |
| -----X-----    | EXISTING SIGN                  |
| -----X-----    | EXISTING STORM MANHOLE         |
| -----X-----    | EXISTING STORM CATCHBASIN      |
| -----X-----    | EXISTING GAS METER             |
| -----X-----    | EXISTING ROOF DRAIN            |
| -----X-----    | EXISTING GATE VALVE            |
| -----X-----    | EXISTING HYDRANT               |
| -----X-----    | EXISTING ELECTRICAL METER      |
| -----X-----    | EXISTING POWER POLE            |
| -----X-----    | EXISTING LIGHT POLE            |
| -----X-----    | EXISTING TREE                  |



ENGINEERING DIVISION  
Approved By: Julie Long, PE  
11/05/2020 7:38:30 AM

KHA PROJECT 160774046	DATE 10/2/2020	SCALE AS SHOWN	DESIGNED BY BPG	DRAWN BY BPG	CHECKED BY BRJ	MINN 10/2/2020	LIC. NO. 53084	DATE	BY	11/4/2020	BPG
										10/29/2020	BPG
										10/28/2020	BPG
										10/5/2020	BPG
										6	STORM SERVICE REVISIONS
										5	SANITARY SERVICE REVISIONS
										4	UTILITY REVISIONS
										3	REVISIONS PER CITY COMMENTS
										2	ISSUE FOR GRADING PERMIT
										1	ISSUE FOR OWNER REVIEW
										No.	REVISIONS

**BANK OF AMERICA**  
PREPARED FOR  
**OPPIDAN**

**Kimley»Horn**

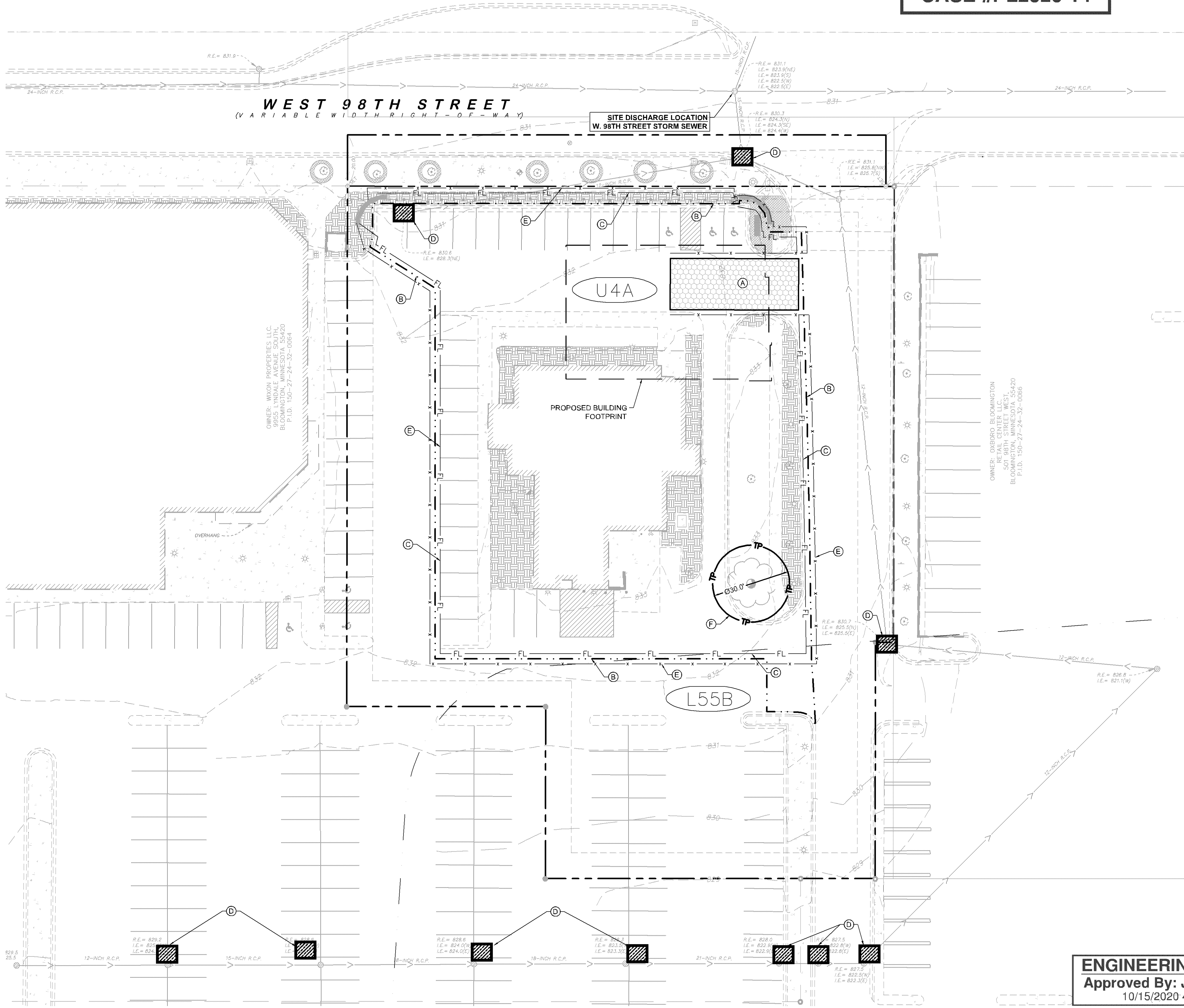
2019 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-446-4187  
WWW.KIMLEY-HORN.COM

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

**DEMO PLAN**

BLOOMINGTON

SHEET NUMBER  
**C200**



CASE #PL2020-14

LEGEND

- PROPERTY LINE
- ROCK ENTRANCE
- INLET PROTECTION
- FL FILTER LOG
- LIMITS OF DISTURBANCE
- SAFETY FENCE
- TREE PROTECTION FENCE
- APPROXIMATE SOIL BOUNDARY, PER USDA WEB SOIL SURVEY
- U4A URBAN LAND-USE/IMPACTS (CUT AND FILL) COMPLEX, 0-8% SLOPES
- L55B URBAN LAND-MALARDI COMPLEX, 0-8% SLOPES

EROSION CONTROL PLAN NOTES

- ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
- THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
- WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
- ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
- REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
- THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
- IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

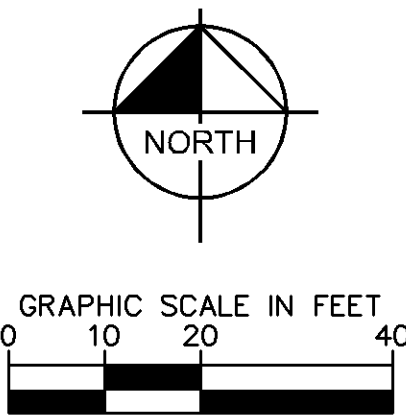
- INSTALL INLET PROTECTION AT EXISTING STORMWATER INLETS.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1), CONCRETE WASHOUT PIT (1) AND INSTALL SILT FENCE.
- PREPARE TEMPORARY PARKING AND STORAGE AREA.
- CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS.
- PERFORM CLEARING AND GRUBBING OF THE SITE. PERFORM MASS GRADING.
- ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
- START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
- TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY NPDES AND/OR CITY OF BLOOMINGTON GRADING PERMIT.

BMP QUANTITIES		
BMP	UNIT	QUANTITY
CONSTRUCTION ENTRANCE	EA.	1
FILTER LOG	LF	640
INLET PROTECTION	EA.	10
SAFETY FENCE	LF	780
TREE PROTECTION	EA.	1

LIMITS OF DISTURBANCE	28,163 SF (0.60 AC)
TOTAL SITE AREA	51,581 SF (1.18 AC)
PRE-DEVELOPMENT PERVIOUS AREA	6,496 SF (0.14 AC)
PRE-DEVELOPMENT IMPERVIOUS AREA	45,085 SF (1.04 AC)
POST-DEVELOPMENT PERVIOUS AREA	6,212 SF (0.14 AC)
POST-DEVELOPMENT IMPERVIOUS AREA	45,369 SF (1.04 AC)

KEYNOTE LEGEND

- (A) CONSTRUCTION ENTRANCE
- (B) LIMITS OF DISTURBANCE
- (C) FILTER LOG
- (D) INLET PROTECTION
- (E) CONSTRUCTION SAFETY FENCE
- (F) TREE PROTECTION ZONE



ENGINEERING DIVISION  
Approved By: Julie Long, PE  
10/15/2020 4:15:54 PM

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

BANK OF AMERICA  
PREPARED FOR  
OPPIDAN

BLOOMINGTON MN

Kimley»Horn

2019 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651-445-4187  
WWW.KIMLEY-HORN.COM

REVISIONS PER CITY COMMENTS

10/5/2020 BPG

9/9/2020 BPG

8/28/2020 BPG

REVISIONS

No.

DATE

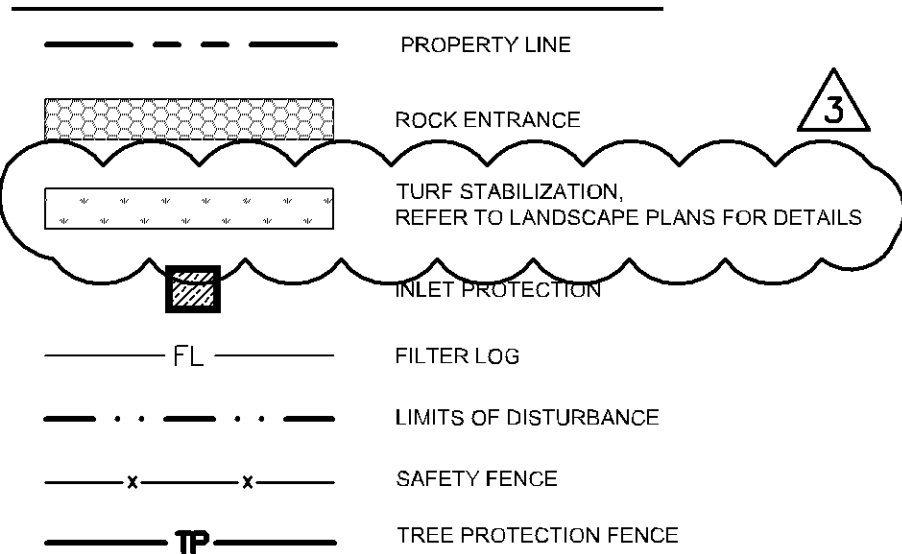
SHEET NUMBER

C300



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## LEGEND



## EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

**SEQUENCE OF CONSTRUCTION:**

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS

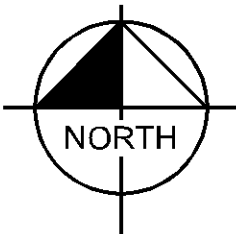
1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDEED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS.
3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. PREPARE SITE FOR PAVING.
6. PAVE SITE AND INSTALL STRIPING.
7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
  1. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES
  2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPs.

BMP QUANTITIES		
BMP	UNIT	QUANTITY
CONSTRUCTION ENTRANCE	EA.	1
FILTER LOG	LF	640
INLET PROTECTION	EA.	11
SAFETY FENCE	LF	780
TREE PROTECTION	EA.	1

LIMITS OF DISTURBANCE	26,163 SF (0.60 AC)
TOTAL SITE AREA	51,581 SF (1.18 AC)
PRE-DEVELOPMENT PERVIOUS AREA	6,496 SF (0.14 AC)
PRE-DEVELOPMENT IMPERVIOUS AREA	45,085 SF (1.04 AC)
POST-DEVELOPMENT PERVIOUS AREA	6,212 SF (0.14 AC)
POST-DEVELOPMENT IMPERVIOUS AREA	45,369 SF (1.04 AC)

### KEYNOTE LEGEND

- (A) CONSTRUCTION ENTRANCE
- (B) LIMITS OF DISTURBANCE
- (C) FILTER LOG
- (D) INLET PROTECTION
- (E) CONSTRUCTION SAFETY FENCE
- (F) TREE PROTECTION ZONE



GRAPHIC SCALE IN FEET

0 10 20 40

## ENGINEERING DIVISION

**Approved By: Julie Long, PE**  
10/15/2020 4:16:06 PM

# EROSION AND SEDIMENT CONTROL PLAN PHASE 2

**BANK OF  
AMERICA  
PREPARED FOR  
OPPIDAN**

BLOOMINGTON

SHEET NUMBER  
**C301**

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.

*Benjamin Johnson*  
BENJAMIN R. JOHNSON

DATE: 10/2/2020 53084  
LIC. NO. 53084

# Kimley»Horn

2019 KIMLEY-HORN AND ASSOCIATES, INC.  
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
PHONE: 651.645.4197

WWW.KIMLEY-HORN.COM

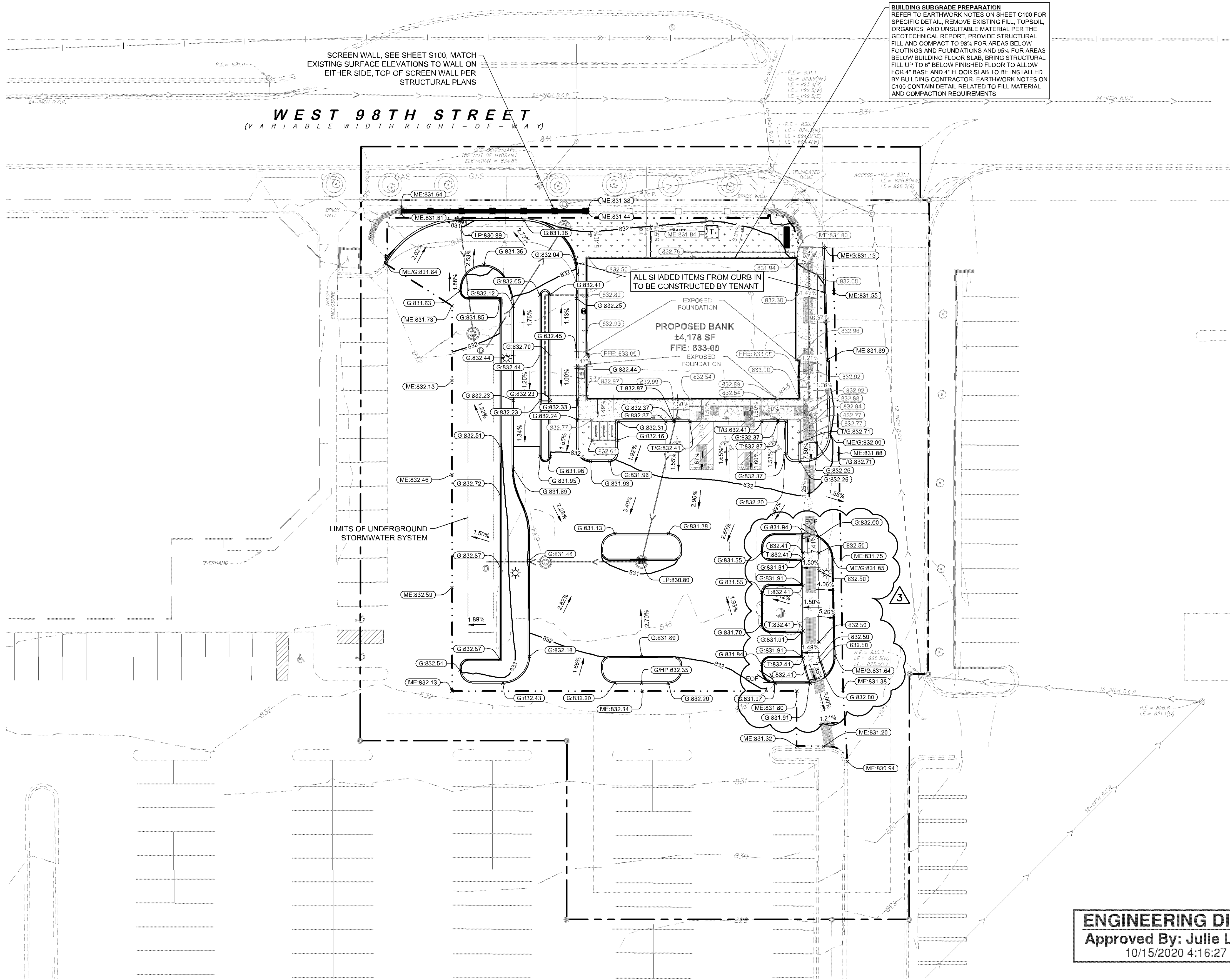
3	REVISIONS PER CITY COMMENTS	10/5/2020	BPG
2	ISSUE FOR GRADING PERMIT	9/9/2020	BPG
1	ISSUE FOR OWNER REVIEW	8/28/2020	BPG
No.	REVISIONS	DATE	BY





CASE #PL2020-14

HENNEPIN COUNTY STATE AID HIGHWAY NO. 1 PLAT 64



**BUILDING SUBGRADE PREPARATION**  
REFER TO EARTHWORK NOTES ON SHEET C100 FOR SPECIFIC DETAIL. REMOVE EXISTING FILL, TOPSOIL, ORGANICS, AND UNSUITABLE MATERIAL PER THE GEOTECHNICAL REPORT. PROVIDE STRUCTURAL FILL AND COMPACT TO 98% FOR AREAS BELOW FOOTINGS AND FOUNDATIONS AND 95% FOR AREAS BELOW BUILDING FLOOR SLAB. BRING STRUCTURAL FILL UP TO 8" BELOW FINISHED FLOOR TO ALLOW FOR 4" BASE AND 4" FLOOR SLAB TO BE INSTALLED BY BUILDING CONTRACTOR. EARTHWORK NOTES ON C100 CONTAIN DETAIL RELATED TO FILL MATERIAL AND COMPACTION REQUIREMENTS

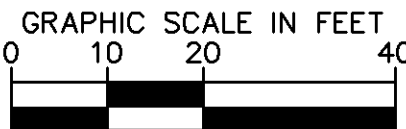
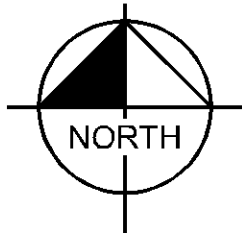
LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOT
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED FLUSH PAVEMENT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED DRAINAGE DIRECTION
- PROPOSED ADA SLOPE
- ACCESSIBLE ROUTE, SEE NOTE 14

GRADING PLAN NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BLOOMINGTON, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
- CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
- CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
- SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
- GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
- ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
- REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
- INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
- UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 6" OF TOPSOIL.
- ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
- GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
- MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
- MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
- CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.

ENGINEERING DIVISION  
Approved By: Julie Long, PE  
10/15/2020 4:16:27 PM



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GRADING PLAN

KHA PROJECT	16074046
DATE	10/2/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	BRJ

LICENSURE 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.  
*Benjamin R. Johnson*  
BENJAMIN R. JOHNSON  
MN LIC. NO. 53084

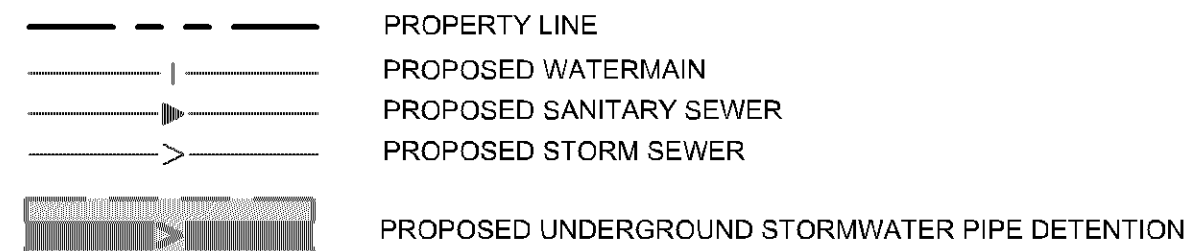
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REVISIONS PER CITY COMMENTS	DATE	BY
1	10/5/2020	BPG
2	9/9/2020	BPG
3	8/28/2020	BPG

# CASE #PL2020-14

## LEGEND

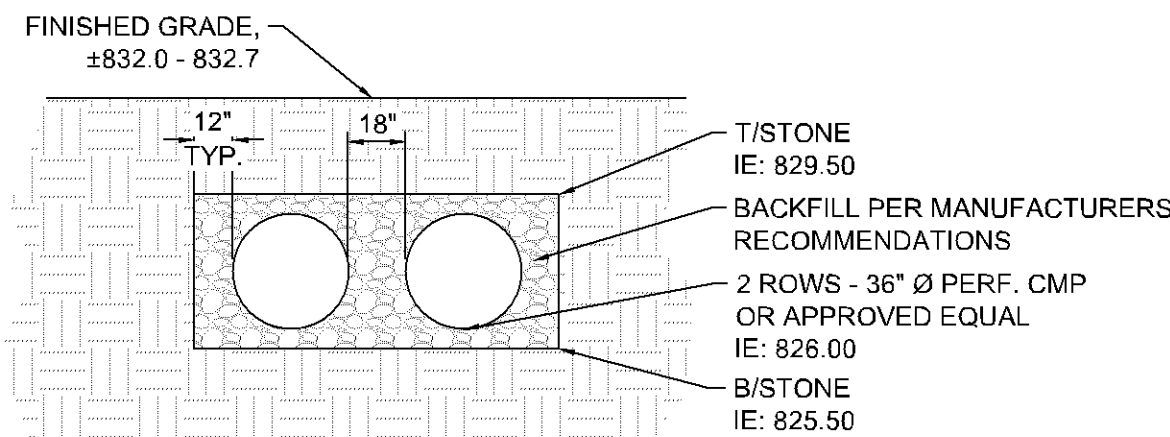


## UNDERGROUND STORMWATER MANAGEMENT NOTES

- CONTRACTOR TO PROVIDE (2) DOUBLE RING INFILTROMETER TESTS WITHIN THE UNDERGROUND SYSTEM EXCAVATION PRIOR TO INSTALLATION OF THE UNDERGROUND SYSTEM. **THE CONTRACTOR SHALL NOTIFY THE CITY 48-HOURS BEFORE TESTING OCCURS AND PROVIDE THE RESULTS TO THE ENGINEER AND CITY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE UNDERGROUND SYSTEM.**
- IF NATIVE SUBGRADE SOILS BELOW UNDERGROUND SYSTEM ARE DETERMINED TO NOT BE CONDUCTIVE TO THE DESIGN INFILTRATION REQUIREMENTS (LESS THAN 0.8 INCHES/PER), THE CONTRACTOR SHALL REMOVE AND REPLACE THE POORLY INFILTRATING SOILS TO A DEPTH WHERE THE EXISTING NATIVE SUBGRADE SOILS MEET OR EXCEED THE DESIGN INFILTRATION RATE AS REVIEWED BY THE ENGINEER. SOILS TO BE REPLACED WITH SANDY MEDIA MEETING MNDOT GRADATION 3149.J.2 FOR FINE FILTER AGGREGATE.
- UPON COMPLETION OF THE STORMWATER BMP AND FINAL STABILIZATION OF THE TRIBUTARY DRAINAGE AREA, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION THE BMP AFTER A SIGNIFICANT RAIN EVENT THAT SHOWS THE BMPS DRAWS DOWN WITHIN 48 HOURS.
- NO CONSTRUCTION EQUIPMENT SHALL TRAVEL WITHIN THE UNDERGROUND INFILTRATION SYSTEM AREA. USE EXCAVATOR WITH TOOTHED BUCKET FOR INFILTRATION BASIN EXCAVATION TO AVOID COMPACTING OR SMEARING OF SOILS.
- FINAL EXCAVATION OF UNDERGROUND INFILTRATION SYSTEM AREA AND INSTALLATION OF OF ENGINEERED SOIL MUST OCCUR IN DRY SOIL CONDITIONS TO PREVENT SMEARING AND COMPACTION. DO NOT WORK IN INFILTRATION SYSTEM AREA IF SOIL CONDITIONS ARE WET.
- IMMEDIATELY FOLLOWING SYSTEM CONSTRUCTION, THE EXCAVATION FOR THE TRENCH SHALL BE IMMEDIATELY BACKFILLED WITH APPROVED BACKFILL MATERIAL PER MANUFACTURER'S RECOMMENDATION, OR THE EXCAVATION SHALL BE PROTECTED WITH SILT FENCE AND OR BIO-ROLLS SUCH THAT ON-SITE SOILS DO NOT ENTER THE TRENCH EXCAVATION AND CLOG UP THE BOTTOM/SIDES OF THE TRENCH LIMITING THE INFILTRATION CAPACITY OF THE UNDERGROUND SYSTEM.
- IF ANY SOILS ENTER THE TRENCH PRIOR TO BACKFILLING, THE CONTRACTOR SHALL REMOVE SOILS AND CONFIRM THE INFILTRATION CAPACITY OF THE NATIVE SUBGRADE SOILS IS MET WITH INFILTROMETER TESTS.
- CONTRACTOR SHALL COORDINATE AND COMPLETE CERTIFIED AS-BUILT PLANS DEMONSTRATING ALL CONSTRUCTED STORMWATER CONVEYANCE STRUCTURES, AND STORMWATER MANAGEMENT FACILITIES (INCLUDING AS-BUILT VOLUMES) CONFORM TO DESIGN AND/OR PLANS AS APPROVED BY THE CITY.

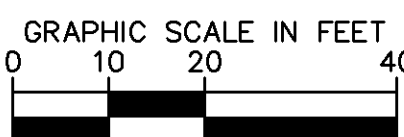
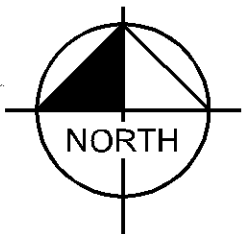
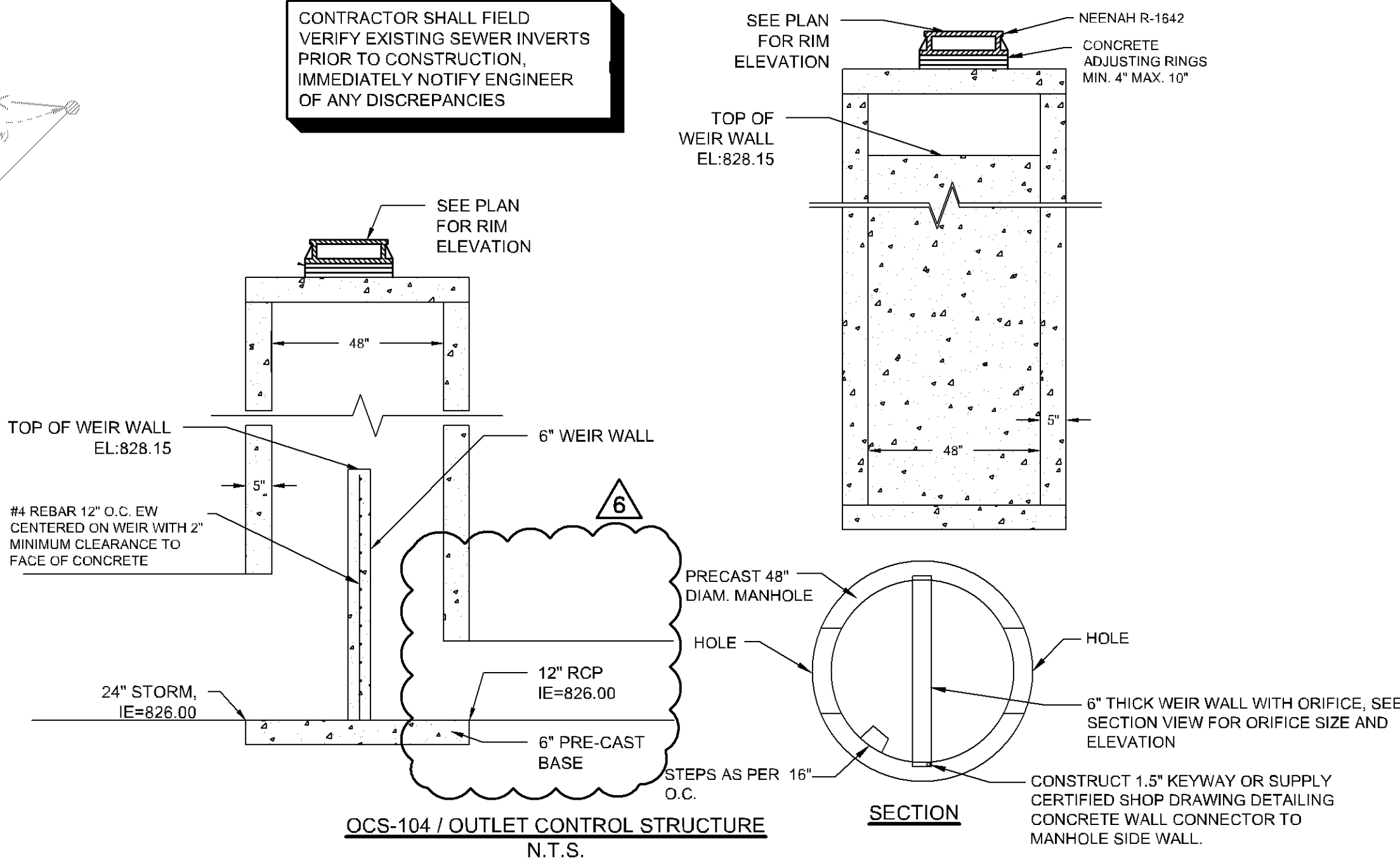
## STORM SEWER PLAN NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BLOOMINGTON, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
- CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
- ON-SITE STORM SEWER SHALL BE AS FOLLOWS:  
PVC SDR 26 PER ASTM D-3034 OR  
HDPE PER ASTM F-2306  
RCP PER ASTM C-76  
  
ON-SITE STORM SEWER FITTINGS SHALL BE AS FOLLOWS:  
PVC SDR 26 PER ASTM D-3034, JOINTS PER ASTM D-3212 OR  
HDPE PER ASTM 3212  
RCP PER ASTM C-361 AND C-443
- CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
- SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
- REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
- ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
- ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
- UPON PROJECT'S COMPLETION THE GENERAL CONTRACTOR, PROPERTY OWNER OR RESPONSIBLE PARTY SHALL PROVIDE TO THE DEPARTMENT OF PUBLIC WORKS A FINAL STORMWATER MANAGEMENT REPORT INCLUDING RECORD DRAWINGS. THIS REPORT WILL SERVE AS A MEANS OF VERIFICATION THAT THE INTENT OF THE APPROVED STORMWATER MANAGEMENT DESIGN HAS BEEN MET. THIS FINAL REPORT SHALL SUBSTANTIATE THAT ALL ASPECTS OF THE ORIGINAL DESIGN HAVE BEEN ADEQUATELY PROVIDED FOR BY THE CONSTRUCTION OF THE PROJECT.
- SEWER DISCONNECTIONS ARE REQUIRED TO BE CUT AND BULKHEADED AT THE MAIN.
- ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, CHAPTER 474, SECTION 1109.
- HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.



A-A INFILTRATION SYSTEM PIPE SECTION  
SCALE 1"=5'

CONTRACTOR SHALL FIELD VERIFY EXISTING SEWER INVERTS PRIOR TO CONSTRUCTION, IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES



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STORM SEWER  
PLAN

LIBRARY 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.

*Benjamin R. Johnson*  
BENJAMIN R. JOHNSON  
MN LIC. NO. 53084

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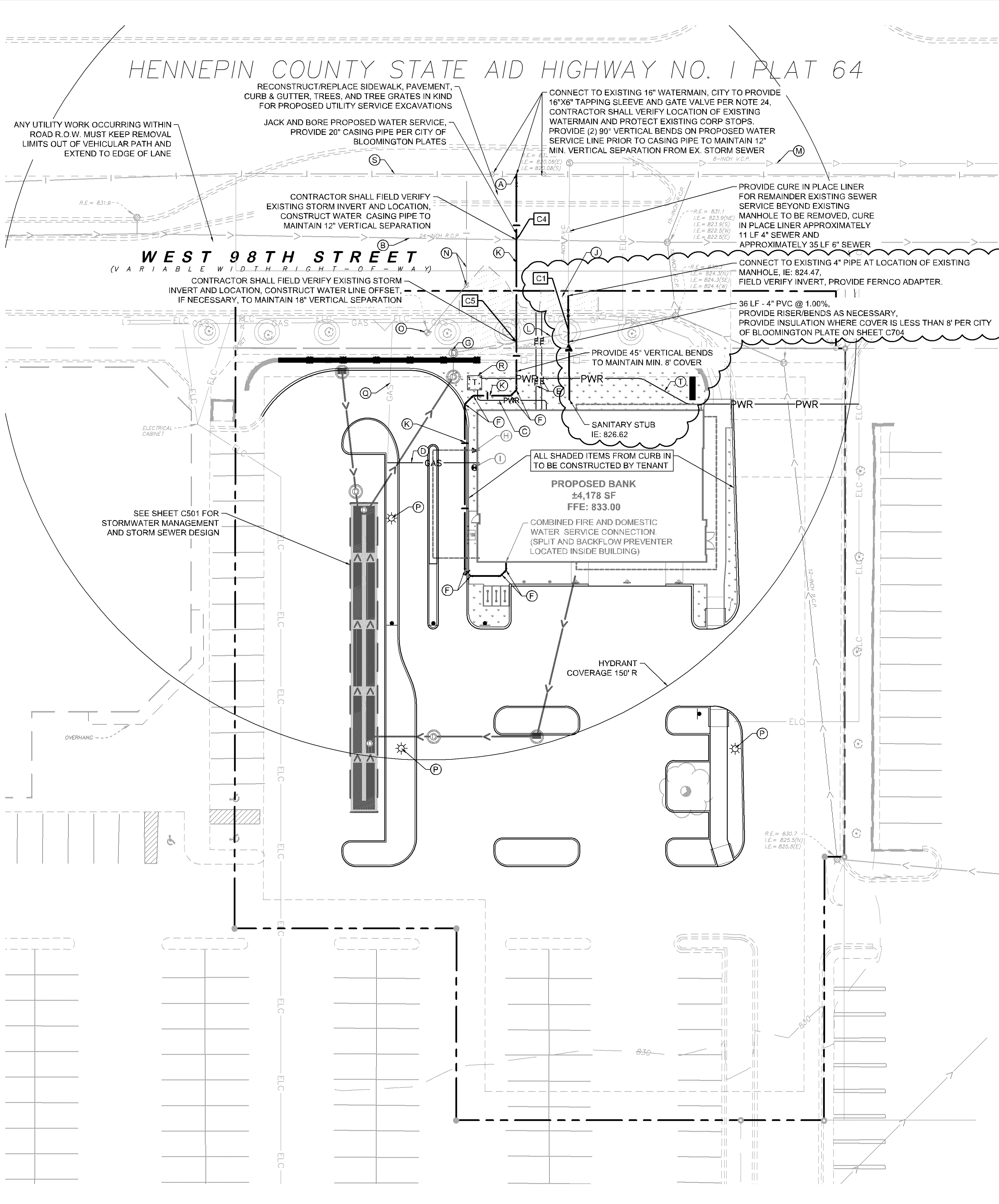
DATE	BY
11/4/2020	BPG
10/29/2020	BPG
10/28/2020	BPG
10/5/2020	BPG
9/9/2020	BPG
8/28/2020	BPG
REVISIONS	No.
6	STORM SERVICE REVISIONS
5	SANITARY SERVICE REVISIONS
4	UTILITY REVISIONS
3	REVISIONS PER CITY COMMENTS
2	ISSUE FOR GRADING PERMIT
1	ISSUE FOR OWNER REVIEW

SHEET NUMBER  
C501

BLOOMINGTON MN



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### KEYNOTE LEGEND

- (A) CONNECT TO EXISTING WATERMAIN W/ GATE VALVE
- (B) EXISTING 24" RCP STORM SEWER
- (C) PROVIDE (1) 4" ELECTRICAL CONDUIT WITHIN 5' OF BUILDING PAD TO POWER SOURCE TRANSFORMER, COORDINATE W/ UTILITY
- (D) PROVIDE (1) 1" 5' LOW PRESSURE OR (1) 1" MEDIUM PRESSURE PROPOSED GAS SERVICE WITHIN 5' OF BUILDING PAD, COORDINATE W/ UTILITY
- (E) PROVIDE (2) 4" COMMUNICATION CONDUIT WITHIN 5' OF BUILDING FOOTPRINT, COORDINATE W/ UTILITY
- (F) BEND
- (G) CONSTRUCT MANHOLE OVER EXISTING STORM SEWER
- (H) FDC
- (I) GAS METER
- (J) PROPOSED UTILITY SERVICE EXCAVATIONS, MATCH EXISTING PAVEMENT SECTION PER CITY OF BLOOMINGTON STANDARDS
- (K) PROPOSED 6" DIP COMBINED WATER SERVICE
- (L) PROTECT EXISTING 12" RCP STORM SEWER
- (M) PROTECT EXISTING 8" VCP SANITARY SEWER
- (N) PROTECT EXISTING 8" WATERMAIN AND GATE VALVE
- (O) EXISTING FIRE HYDRANT
- (P) PROPOSED LIGHT POLE - SEE LIGHTING PLANS
- (Q) PROTECT EXISTING UTILITY, MAINTAIN COVER
- (R) PROPOSED TRANSFORMER
- (S) PROTECT EXISTING 16" WATERMAIN
- (T) PRIMARY UNDERGROUND POWER SERVICE, COORDINATE W/ UTILITY

### UTILITY CROSSING LEGEND

- C1 12" STORM 4" SANITARY T/P = 825.05 B/P = 826.38
- C4 24" STORM 20" WATER CASING T/P = 821.52
- C5 12" STORM 20" WATER CASING T/P = 821.52

### JACK AND BORE NOTES

- CONTRACTOR SHALL PROVIDE SUBMITTALS FOR THE FOLLOWING:
  - DETAILED DRAWINGS SHOWING PLAN/LOCATION OF ALL JACK AND BORE PITS
  - PROCEDURE FOR INSTALLING PIPE SUPPORTS BETWEEN CARRIER PIPE AND CASING PIPE
  - CASING PIPE MATERIAL
  - PIPE SUPPORT MATERIAL
  - CARRIER PIPE MATERIAL
- JACK AND BORE SHALL BE DONE IN ACCORDANCE WITH CITY OF BLOOMINGTON STANDARD PLATE 315 STD CASING PIPE

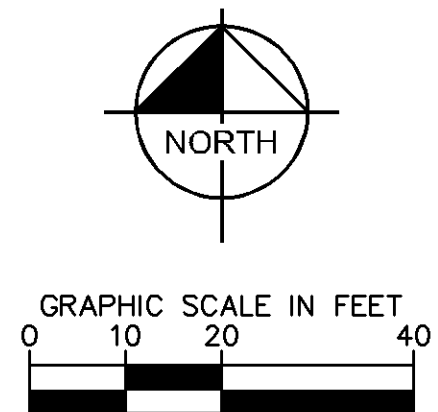
### LEGEND

- | EXISTING | PROPOSED |  |
|----------|----------|--|
|          |          | GATE VALVE                                     |
|          |          | HYDRANT  |
|          |          | REDUCER  |
|          |          | TEE  |
|          |          | SANITARY SEWER MANHOLE                         |
|          |          | SANITARY CLEANOUT                              |
|          |          | WATERMAIN                                      |
|          |          | SANITARY SEWER                                 |
|          |          | STORM SEWER                                    |
|          |          | UNDERGROUND ELECTRIC                           |
|          |          | TELEPHONE                                      |
|          |          | GAS MAIN                                       |
|          |          | PROPOSED UNDERGROUND STORMWATER PIPE DETENTION |

### UTILITY PLAN NOTES

- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:  
PVC SDR26 PER ASTM D-30394 OR SCH 40 PER ASTM D-1785 INSTALLED PER ASTM D-2321
- WATER LINES SHALL BE AS FOLLOWS:  
CLASS 52 DIP PER ANSI/AWWA A-24.51/C151 WITH JOINTING PER ANSI/AWWA A-21.11/C111, MINIMUM 8 MIL POLYWRAP REQUIRED ON ALL DIP.  
WATER LINES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST CURRENT EDITION OF CEAM SPECIFICATIONS.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
- ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE).
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 8" AND MAXIMUM OF 10' COVER ON ALL WATERLINES.
- INSTALL HIGH DENSITY POLYSTYRENE INSULATION TO PREVENT FREEZING ON SANITARY SEWER MAINLINES, CLEANOUTS, MANHOLES AND SERVICES WITHOUT ADEQUATE COVER.
- A MINIMUM 18-FOOT HORIZONTAL SEPARATION AND 18-INCH VERTICAL SEPARATION IS REQUIRED BETWEEN WATERMAIN AND SEWERS.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES, OR ANY OBSTRUCTION (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- TOPS OF MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS, IN GREEN AREAS, WITH WATERTIGHT LIDS.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF BLOOMINGTON AND/OR STATE OF MN WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
- BACKFLOW DEVICES (DDCV AND PR2 ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING. REF. ARCH / MEP PLANS.
- ALL ONSITE WATERMANS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
- ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING.
- TAPS OF LIVE WATERMANS AND SLEEVE/ VALVES ARE DONE BY CITY FORCES AND PAID FOR AND COORDINATED WITH THE CONTRACTOR.
- UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER. ALSO THE WATER METER MUST BE LOCATED WITHIN 10' OF WHERE THE SERVICE CROSSES THE OUTSIDE WALL OF THE BUILDING.
- 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.
- UTILITY AS-BUILTS MUST BE PROVIDED PRIOR TO CERTIFICATE OF OCCUPANCY.
- CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVAL OR INSTALLATION. CONTACT UTILITIES (952-563-4588) FOR PERMIT INFORMATION.
- UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.

CASE #PL2020-14



**ENGINEERING DIVISION**  
Approved By: Julie Long, PE  
11/02/2020 8:18:09 AM

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