

K:\TWC_LDEV\CUNINGHAM GROUP\BLOOMINGTON_SICK\3 Design\CAD\PlanSheets\CO-COVER SHEET.dwg, January 14, 2020 - 7:20pm
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SITE DEVELOPMENT PLANS FOR SICK TECHNOLOGY CAMPUS

SECTION 01, TOWNSHIP 27, RANGE 24
BLOOMINGTON, HENNEPIN COUNTY, MN

PROJECT TEAM:

ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.

Kimley»Horn

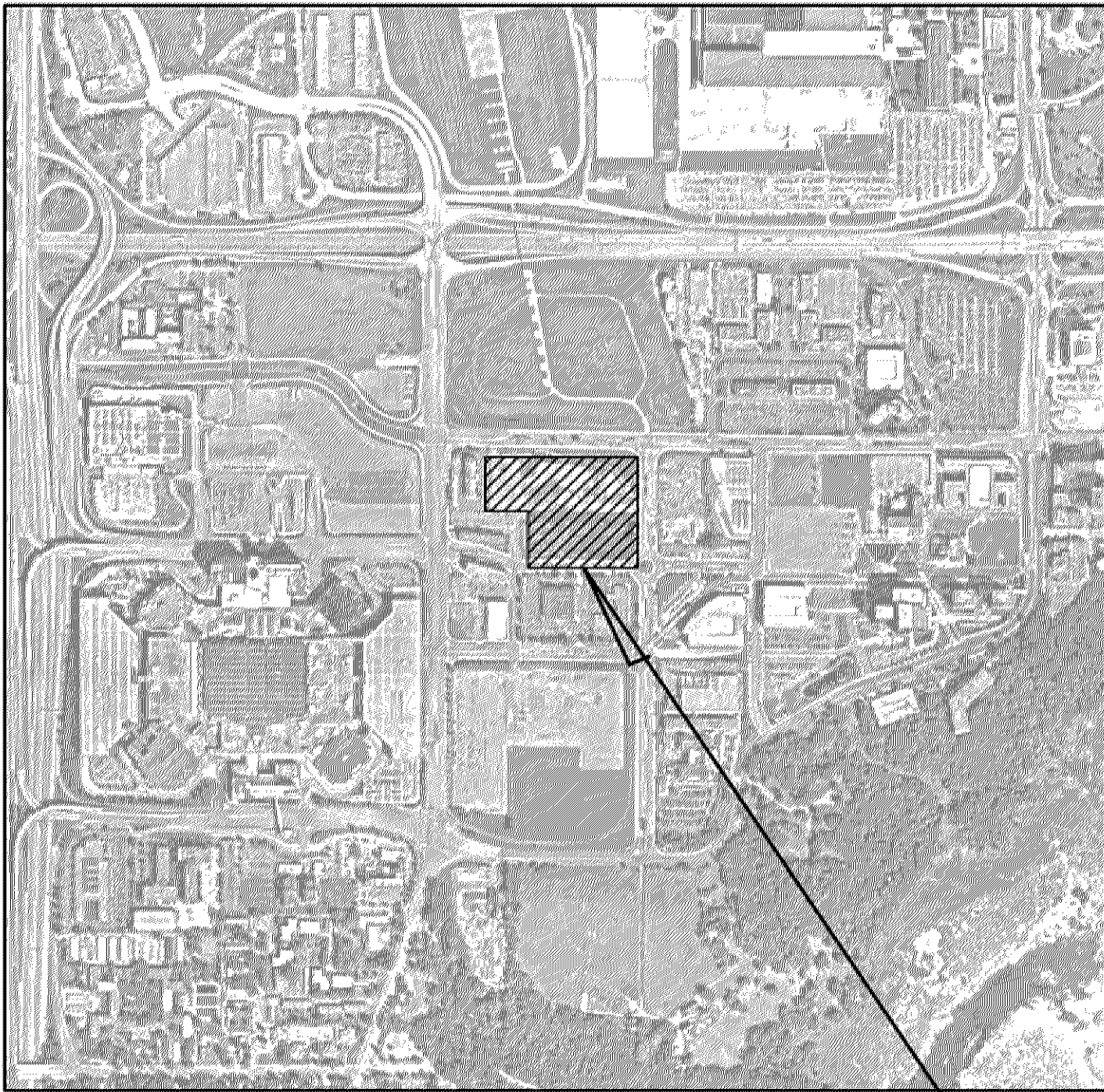
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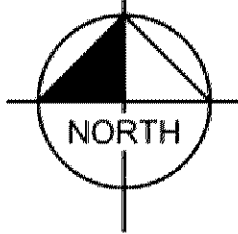
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CONTACT: JENA STANTON, ASLA



VICINITY
N.T.S.



SITE

NOTES:

1. CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A Previous paper size (42.00 x 30.00 inches) SHEET.
3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

DRAWING INDEX

SHEET No.	SHEET TITLE
C000	COVER SHEET
1	BOUNDARY, TOPOGRAPHIC, LOCATION, AND UTILITY SURVEY
2	BOUNDARY, TOPOGRAPHIC, LOCATION, AND UTILITY SURVEY
3	BOUNDARY, TOPOGRAPHIC, LOCATION, AND UTILITY SURVEY
C100	GENERAL NOTES
C200	DEMOLITION PLAN
C300	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1
C301	EROSION AND SEDIMENT CONTROL PLAN - PHASE 2
C302	EROSION AND SEDIMENT CONTROL DETAILS
C400	SITE PLAN
C401	FIRE DEPARTMENT ACCESS PLAN
C402	SITE DETAILS
C500	GRADING AND DRAINAGE PLAN
C501	GRADING AND DRAINAGE DETAILS
C502	GRADING AND DRAINAGE DETAILS
C600	UTILITY PLAN
C601	UTILITY DETAILS



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.

BRANDON R. ELEGERT, P.E.
DATE: XXXXXXXX MIN LIC NO. XXXXX

PRELIMINARY NOT FOR
CONSTRUCTION

Revisions
No. Date Description

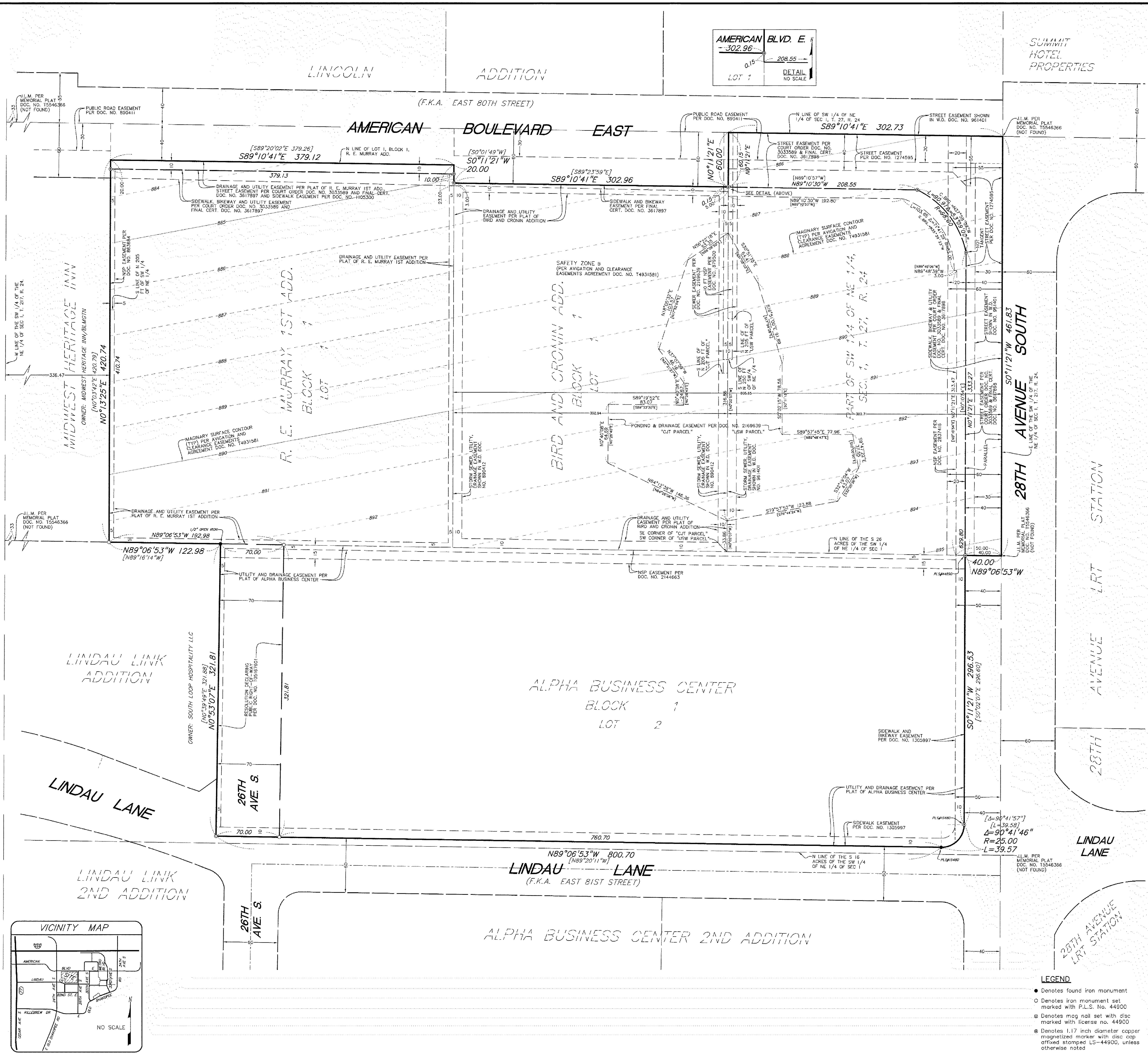
Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / AIC / LCBE
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

Sheet Title
COVER SHEET

Sheet Number Current Revision
C000

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DESCRIPTION OF PROPERTY SURVEYED
(Per Certificate of Title No. 1372660 - Hennepin County, Minnesota)

Lot 2, Block 1, Alpha Business Center

Subject to utility and drainage easements as shown on the plat;

And

(Per Certificate of Title No. 1347057 - Hennepin County, Minnesota)

Lot 1, Block 1, R. E. Murray 1st Addition

The North and South lines of the above described tract have been judicially determined and have been marked by Judicial Landmarks pursuant to Torrens Case, No. 5819;

Subject to drainage and utility easements as shown on the plat;

And

(Per Certificate of Title No. 1347376 - Hennepin County, Minnesota)

Lot 1, Block 1, Bird And Cronin Addition;

Subject to an easement for the installation and maintenance of storm sewer, utility and drainage facilities over, upon, under and across the East 10 feet and the West 10 feet of the plat of Bird And Cronin Addition as shown in deed Doc. No. 690412, Files of Registrar of Titles;

Subject to drainage and utility easements as shown on the plat;

The boundaries of the above described plat have been judicially determined pursuant to order entered herein;

And

(Per Certificate of Title No. 1347055 - Hennepin County, Minnesota)

The East 302.71 feet of the following described tract: All of the Southwest 1/4 of the Northeast 1/4 of Section 1, Township 27, Range 24 West of the 4th P. M. except the South 26 acres thereof.

Subject to an easement over, upon and across the East 30 feet thereof for Street purposes as shown in deed Doc. No. 961401;

Subject to an easement for the installation and maintenance of storm sewer, utility and drainage purposes over, upon, under and across the West 10 feet thereof as shown in deed Doc. No. 961401;

PLAT RECORDING INFORMATION

The plat of ALPHA BUSINESS CENTER was filed of record on November 2, 1978, as R. T. Document No. 1301864 and on November 3, 1978 as C. R. Document No. 4426255.

The plat of R. E. MURRAY 1ST ADDITION was filed of record on December 27, 1973, as R. T. Document No. 1095211.

The plat of BIRD AND CRONIN ADDITION was filed of record on December 31, 1990, as R. T. Document No. 2146163.

[] Bearings and/or dimensions listed within brackets are per plat or record documents.

This survey was prepared without the benefit of current title work. Easements, appurtenances, and encumbrances may exist in addition to those shown hereon. This survey is subject to revision upon receipt of a current title insurance commitment or attorney's title opinion.

- GENERAL NOTES**
- 1.) Survey coordinate basis: Hennepin County Coordinate System NAD 83 (1986 Adj.)
 - 2.) No Buildings Observed on the surveyed property in the process of conducting the fieldwork.
 - 3.) Adjoining ownership information shown hereon was obtained from the Hennepin County Property Tax Information web site.
 - 4.) At the time fieldwork was performed for this survey, there was a significant amount of snow on the ground. Physical features were located to the best of our ability, but there may be additional features that were not visible and, therefore, not shown hereon.
 - 5.) Field work for this survey was completed in February, 2019 and survey was issued as preliminary 2/19/2019. Additional utility location work was performed in July, 2019. (Sheets 2 & 3). Physical location and elevations of an Xcel duct segment was added 1/10/2020 and survey issued.

- UTILITY NOTES**
- 1.) Utility information from plans and markings was combined with observed evidence of utilities to develop a view of the underground utilities shown hereon. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. In addition, Gopher State One Call locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, excavation and/or a private utility locate request may be necessary.
 - 2.) Other underground utilities of which we are unaware may exist. Verify all utilities critical to construction or design.
 - 3.) Some underground utility locations are shown as marked onsite by those utility companies whose locators responded to our Gopher State One Call, ticket number 190370101.
 - 4.) Contact GOPHER STATE ONE CALL at 651-454-0002 (800-252-1166) for precise onsite location of utilities prior to any excavation.

FLOOD ZONE NOTE

- 1.) The subject property appears to lie within Zone X (Areas determined to be outside the 0.2% annual chance floodplain) per the National Flood Insurance Program, Flood Insurance Rate Map Community Panel No. 275230 0476 F, dated November 4, 2016. This information was obtained from the FEMA Map Service Center web site.

AREAS

Gross Area: 686,015 Sq. Ft. or 15.749 Acres

Net Area (Excludes Street easements and "Declared Public Right-of-Way"):
624,180 Square Feet or 14.329 Acres

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Dated this 10th day of January, 2020

SUNDE LAND SURVEYING, LLC.

By: *Ailee J. Gilson*
Ailee J. Gilson, P.L.S. Minn. Lic. No. 44900

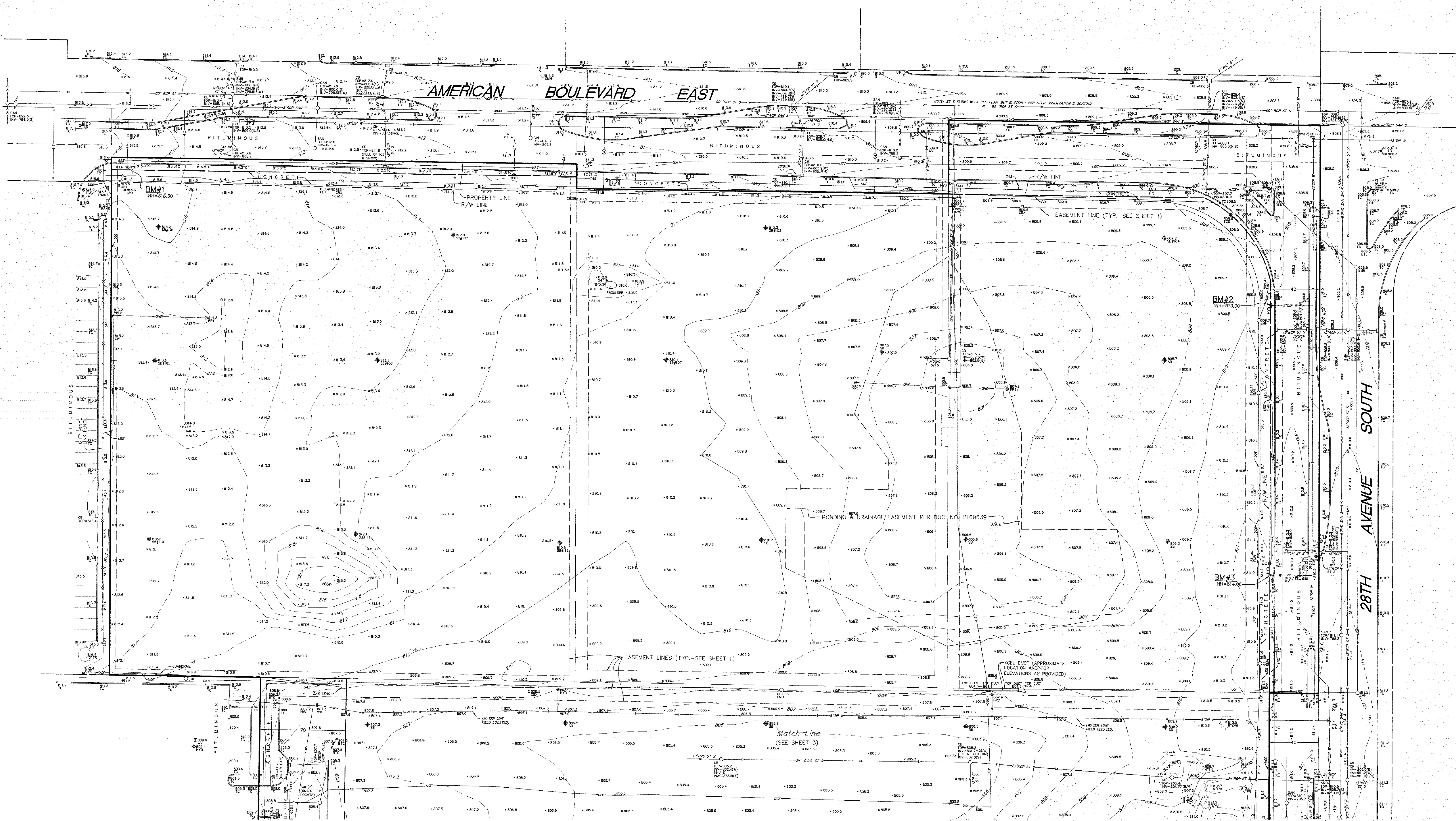
Revision: _____ By: _____ Date: _____

Drawing Title:
**BOUNDARY, TOPOGRAPHIC, LOCATION
AND UTILITY SURVEY FOR:**
SICK, Inc.

**SUNDE
LAND SURVEYING**

Main Office: 9001 East Bloomington Freeway (294) • Suite 118
Bloomington, Minnesota 55420-3435
952-881-2450 (Fax: 952-888-9626)

Project: 2019-014 Rk/Plg: 763/77 Date: 1/10/2020
Township: 27 Range: 24 Section: 01
File: 2019014001.dwg Sheet: 1 of 3

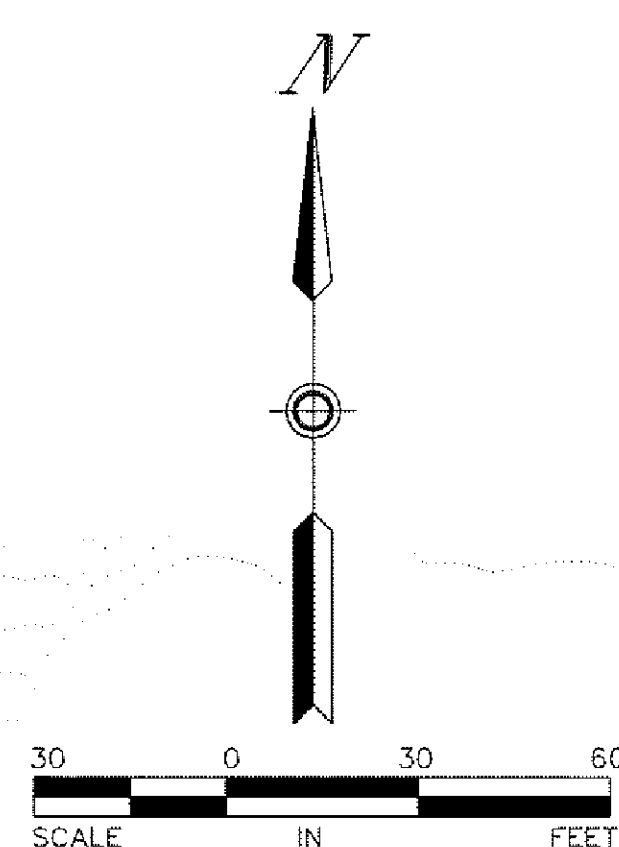


BENCHMARKS (BM) (NGVD 29)

- Top of top nut of first fire hydrant east of 24th Ave. S. on south side of American Blvd.
Elevation = 818.30 feet
- Top of top nut of first fire hydrant south of American Blvd. on west side of 28th Ave. S.
Elevation = 813.00 feet
- Top of top nut of second fire hydrant south of American Blvd. on west side of 28th Ave. S.
Elevation = 814.06 feet

LEGEND

BM	Denotes benchmark	PP	Denotes power pole
BTC	Denotes top of bituminous curb	PPLP	Denotes power and light pole
BT	Denotes beaver tail curb	PPT	Denotes power pole with transformer
CB	Denotes catch basin	PPU	Denotes power pole with underground utility
CBOX	Denotes control box	PVC	Denotes polyvinyl chloride pipe
CBX	Denotes communication box	RCP	Denotes reinforced concrete pipe
CAH	Denotes communication manhole	SAN	Denotes sanitary manhole
DIP	Denotes ductile iron pipe	SAN S	Denotes sanitary sewer
EE	Denotes electric box	SB	Denotes soil boring
EMH	Denotes electric manhole	SMH	Denotes storm manhole
EVG	Denotes electric tree	ST S	Denotes storm sewer
G	Denotes gutter	STC	Denotes top of surmountable curb
GW	Denotes guy wire	TC	Denotes top of concrete curb
HCR	Denotes handicap ramp	TCS	Denotes traffic control sign
HYD	Denotes fire hydrant	TN	Denotes top of top nut of fire hydrant
INV	Denotes structure invert	TR	Denotes deciduous tree
JLM	Denotes Judicial Landmark	TRANS	Denotes transformer box
LP	Denotes light pole	UGC	Denotes underground communication line
MH	Denotes manhole	UGE	Denotes underground electric line
OHE	Denotes overhead electric line	UGG	Denotes underground gas
(P)	Denotes per plan/not field verified	W	Denotes water line
PKS	Denotes parking sign	NV	Denotes water valve



Dated this 10th day of January, 2020

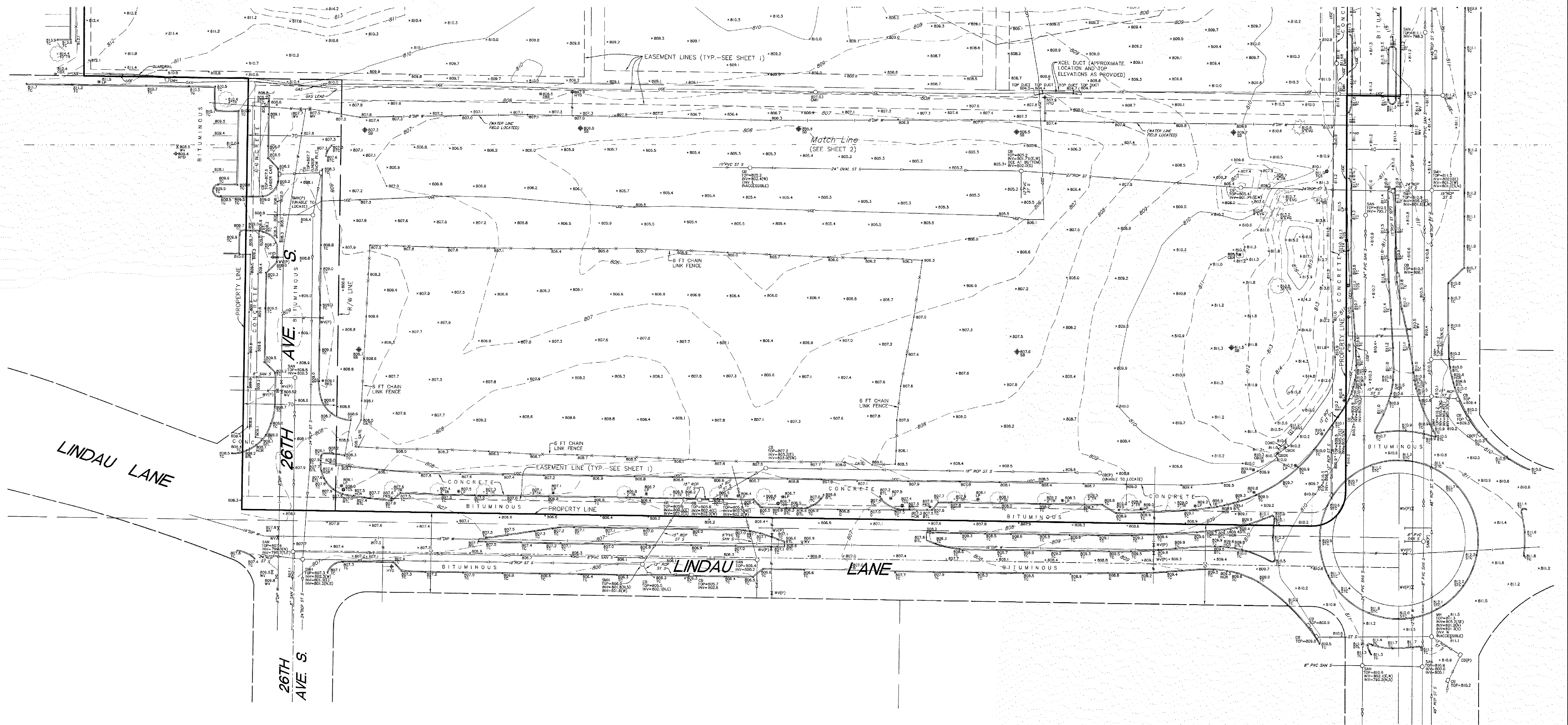
Certified by: *Arlee J. Carlson*
Arlee J. Carlson, P.L.S. Minn. Lic. No. 44900

SEE SHEET 1 FOR BOUNDARY
AND EASEMENT DETAIL

Revision		By	Date
Drawing Title: BOUNDARY, TOPOGRAPHIC, LOCATION AND UTILITY SURVEY FOR: SICK, Inc.			
Project: 2019-014		Blk/Pg: 763/72	Date: 1/10/2020
Township: 24		Section: 01	Sheet: 2 of 3
File: 2019014001.dwg			

SUNDE
LAND SURVEYING
www.sunde.com

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800-881-7400 (Toll Free) 612-888-9000

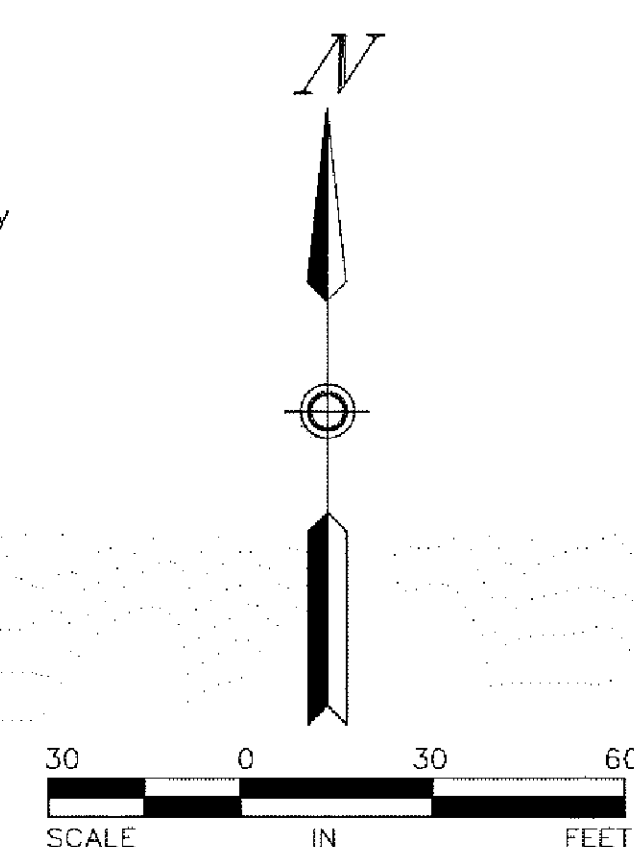


BENCHMARKS (BM)
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Blvd. on west side of 28th Ave. S.
Elevation = 813.00 feet
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Elevation = 814.06 feet

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PKS	Denotes parking sign	W	Denotes water line
		WV	Denotes water valve



Dated this 10th day of January, 2020

Certified by: *Arlee J. Carlson*
Arlee J. Carlson, P.L.S. Minn. Lic. No. 44900

SEE SHEET 1 FOR BOUNDARY
AND EASEMENT DETAIL

Revision	By	Date
	SLP	
Drawing Title: BOUNDARY, TOPOGRAPHIC, LOCATION AND UTILITY SURVEY FOR: SICK, Inc.		
SUNDE LAND SURVEYING www.sunde.com		
Main Office: 9201 East Bloomington Freeway (169) • Suite 118 Bloomington, Minnesota 55425-3435 952-881-7400 (Fax: 952-881-9005)		
Project: 2019-014	Blk/Pg: 763/72	Date: 1/10/2020
Township: 27	Range: 24	Section: 01
File: 2019014001.dwg		Sheet: 3 of 3

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE MN DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. THE EXISTING SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL "D" UNLESS OTHERWISE NOTED. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CIACSE 3802, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF SUBSURFACE QUALITY DATA BY THE FHA. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SVING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
10. ANY WELLS DISCOVERED ON A SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
11. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
13. SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS, OR OTHER SOURCE OF POTENTIAL CONTAMINATION, THEY SHALL IMMEDIATELY CONTACT THE ENGINEER AND OWNER.

EROSION CONTROL MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED BY ALL JURISDICTIONS UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A CERTIFIED PERSON AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

1. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDD AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO THE STANDARD SPECIFICATIONS.
2. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
3. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
4. THE TEMPORARY PARKING AND STORAGE AREA BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
5. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

TYPICAL OWNER/ENGINEER OBSERVATIONS

CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES:

- PRE-CONSTRUCTION MEETING, SUBGRADE PREPARATION, BASE INSTALLATION
- ASPHALT INSTALLATION, UNDERGROUND PIPING AND UTILITIES INSTALLATION
- INSTALLATION OF STRUCTURES, CHECK VALVES, HYDRANTS, METERS, ETC.
- SIDEWALK INSTALLATION, CONNECTIONS TO WATER AND SEWER MAINS, TESTS OF UTILITIES

EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF MN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS, OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ON A PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO PUBLIC AREAS SHALL BE PAID BY THE CONTRACTOR.
5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL, CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN SHALL BE INITIATED AS SOON AS IS PRACTICABLE.
13. ALL STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY, OTHERWISE, COVERING OR ENCRICLING THESE AREAS WITH SOME PROTECTIVE MEASURE WILL BE NECESSARY.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION, OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBRICANT OIL, PESTICIDES, AND ANY SOLID WASTE MATERIALS.
15. EROSION CONTROL DEVICES SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT.
16. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF BLOOMINGTON ENGINEERING DIVISION.
17. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL HAVE TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE. ANY DEVISONS TO THE EROSION CONTROL PLAN MADE BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER.

PAVING AND STRIPING NOTES

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTIONS' RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR MNDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND CITY STANDARDS.
3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
4. ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIOUS POINTS SHALL BE 2 FEET.
6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
7. THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE.
8. CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE BY OWNER FOLLOWED BY A COAT OF GLASS BEADS AS APPLICABLE PER THE PROJECT DOCUMENTS.
9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.
10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER A.D.A.) 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.
11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

GRADING AND DRAINAGE NOTES

1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMP'S AS NECESSARY AND REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS SO THAT SURFACE RUNOFF WILL DRAIN BY GRAVITY TO NEW OR EXISTING DRAINAGE OUTLETS. CONTRACTOR SHALL ENSURE NO POHODS OCCURS IN PAVED AREAS AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION. EXISTING CASTINGS AND STRUCTURES TO REMAIN SHALL BE ADJUSTED TO MATCH THE PROPOSED FINISHED GRADES.
5. BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6 INCHES SHALL BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHALL BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
6. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 4" OF TOPSOIL AT COMPLETION OF WORK. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
7. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
8. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
9. THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO MNDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBIDITY.
15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURERS RECOMMENDATIONS AND MNDOT SPECIFICATION.
17. ALL CONCRETE/ASPHALT SHALL BE INSTALLED PER GEOTECH REPORT, CITY OF BLOOMINGTON AND MNDOT SPECIFICATIONS.
18. SPOT ELEVATIONS ARE TO FLOWLINE OF CURB UNLESS OTHERWISE NOTED.
19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT COMPENSATION.
22. BLEND NEW EARTH/WORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
23. ALL PROPOSED GRADES ONSITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS. ANY SLOPES STEEPER THAN 4:1 REQUIRE EROSION AND SEDIMENT CONTROL BLANKET.
24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
26. CONTRACTOR SHALL ENSURE MINIMUM GRADES ARE MET WITHIN PAVED AREAS, 1.2% FOR ASPHALT PAVING AND 0.6% FOR CONCRETE PAVING.

3RD PARTY TEST REPORTS REQ'D

TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

- DENSITY TEST REPORTS
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

WATER STORM SEWER & SANITARY SEWER NOTES

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURERS SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIRED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS PLAINS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
10. CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10' AND A VERTICAL CLEARANCE OF 18" BETWEEN WATER AND SANITARY SEWER MANHOLES AND LINES.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS.
13. UNLESS OTHERWISE STATED IN CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS, ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS, MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". EXISTING CASTINGS AND STRUCTURES WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO MEET THESE CONDITIONS AND THE PROPOSED FINISHED GRADE.
14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR RECORD.
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT OUT.
17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES OR AT STORM STRUCTURES. ROOF DRAINS AND TRUCK WELL DRAIN SHALL RUN AT A MINIMUM 1% SLOPE, UNLESS NOTED OTHERWISE, AND TIE IN AT THE CENTERLINE OF THE STORM MAIN.
18. ALL ROOF AND SANITARY SEWER DRAINS SHALL BE INSULATED IF 7' OF COVER CANNOT BE PROVIDED.
19. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
20. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES, AND OTHER ABOVE AND BELOW-GRADE IMPROVEMENTS ARE APPROXIMATE AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF EACH PRIOR TO THE START OF CONSTRUCTION.
21. A MINIMUM OF 5' SEPARATION IS REQUIRED BETWEEN UTILITIES AND TREES UNLESS A ROOT BARRIER IS UTILIZED.
22. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW. CONTRACTOR TO COORDINATE FINAL DESIGN AND INSTALLATION WITH UTILITY COMPANIES.
23. COORDINATE UTILITY INSTALLATION WITH IRRIGATION DESIGN AND INSTALLATION.
24. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED. PERIMETER WALL DIMENSIONS ARE TO INSIDE WALL FACE. REFERENCE ARCHITECTURAL PLANS FOR EXACT WALL WIDTH AND SPECIFICATIONS.
25. REFERENCE ARCHITECTURAL PLANS (BY OTHERS) FOR EXACT BUILDING DIMENSIONS, AND MATERIALS SPECIFICATIONS.
26. REFERENCE M.E.P. PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS AND SPECIFICATIONS.
27. CONTRACTOR SHALL REFERENCE STRUCTURAL PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS AND PAD PREPARATION SPECIFICATIONS.
28. CONTRACTOR SHALL REFERENCE M.E.P PLANS (BY OTHERS) FOR LIGHT POLE WIRING.

REFER TO PRELIMINARY GEOTECHNICAL BORINGS
PROJECT No. B1901159
BRAUN INTEREC
2600 LINDAU LANE
DATED 03/05/2019



THEREBY 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.

BRANDON R. ELEGANT, P.E.
DATE: XXX/XXX/XX MIN. LIC. NO. XXXXX

PRELIMINARY NOT FOR CONSTRUCTION

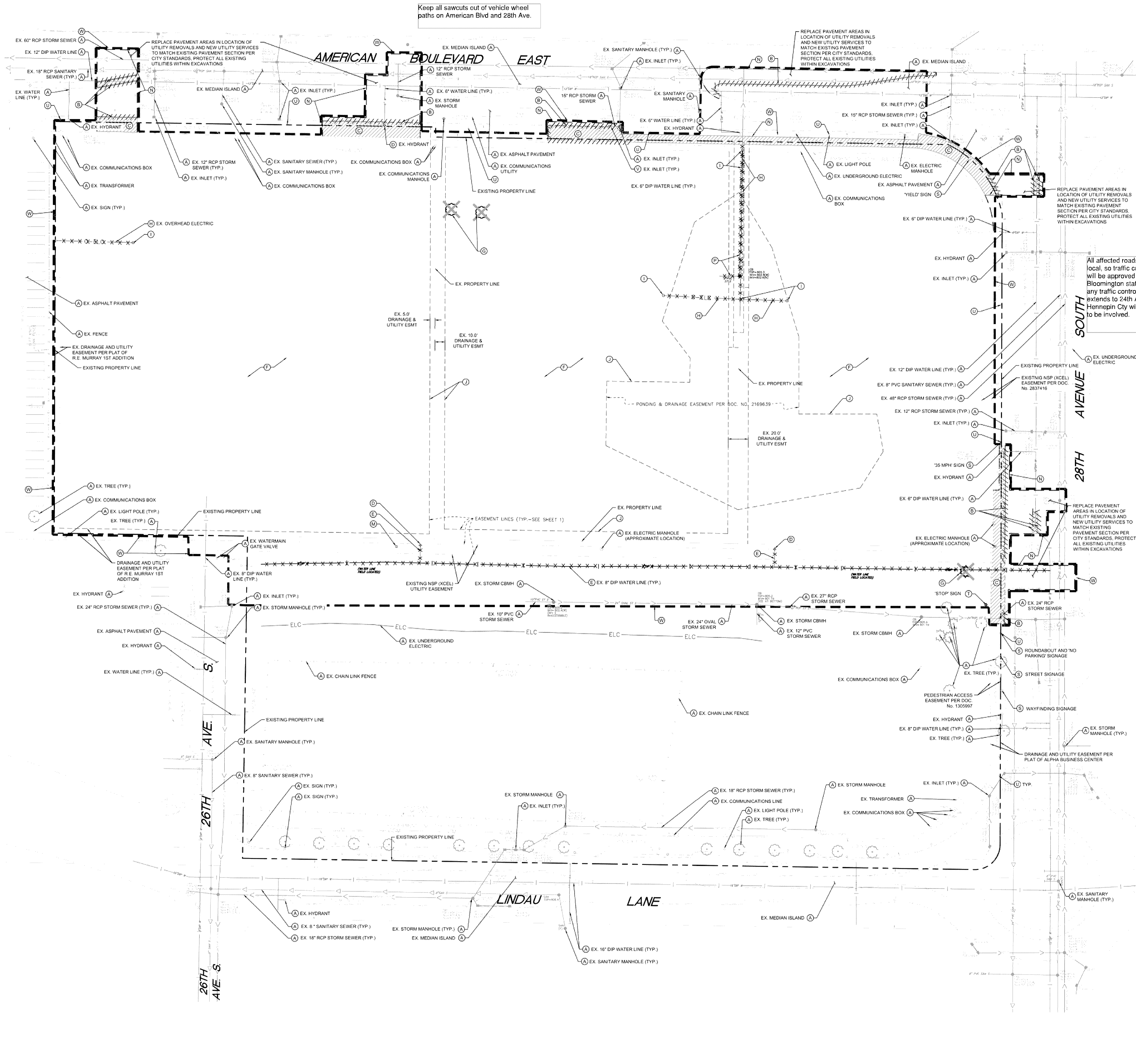
Revisions		
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SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

Sheet Title
GENERAL NOTES

Sheet Number
C100
Current Revision



DEMOLITION PLAN NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES (ALL STRUCTURES, FADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, 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 -COUNTY COUNTY AND MINN.
- 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 THE 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 DRAINAGE IS ENCOUNTERED ON SITE. NO ACTIVE DRAINAGE SHALL BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.
- CONTRACTOR TO REFER TO PHASE II EBA TO RAPICOP PREPARED BY LANDMARK ENVIRONMENTAL, LLC FOR REMOVAL OF CONTAMINATED MATERIAL.

LEGEND

	PROPERTY LINE
	REMOVE BITUMINOUS SURFACE
	REMOVE CONCRETE SURFACE
	FULL DEPTH SAWCUT
	REMOVE TREE
	REMOVE CONCRETE CURB & GUTTER
	REMOVE UTILITY LINES
	REMOVE CHAIN LINK FENCE
	LIMITS OF CONSTRUCTION
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING CHAIN LINK FENCE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	EXISTING COMMUNICATIONS CABLE
	EXISTING CONTOUR
	EXISTING CURB
	EXISTING TRAFFIC SIGN
	EXISTING NO PARKING SIGN
	EXISTING STORM MANHOLE / STORM CATCHBASIN / SANITARY MANHOLE
	EXISTING STORM CATCHBASIN (ON CURB)
	EXISTING GATE VALVE
	EXISTING HYDRANT
	EXISTING ELECTRICAL TRANSFORMER
	EXISTING COMMUNICATIONS BOX
	EXISTING LIGHT POLE
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE

KEYNOTE LEGEND

(A)	PROTECT IN PLACE
(B)	REMOVE EX. CONCRETE CURB TO NEAREST JOINT, LIMITS PER PLAN
(C)	REMOVE EX. CONCRETE SIDEWALK TO NEAREST JOINT, LIMITS PER PLAN
(D)	REMOVE, SALVAGE AND RELOCATE EX. HYDRANT PER CITY OF BLOOMINGTON STANDARDS AND SPECIFICATIONS
(E)	REMOVE EX. WATER LINE, SIZE, MATERIAL, AND LIMITS PER PLAN
(F)	CLEARING AND GRUBBING AS NECESSARY FOR IMPROVEMENTS
(G)	REMOVE EX. TREE
(H)	REMOVE EX. OVERHEAD POWER LINE PER XCEL ENERGY AND CITY OF BLOOMINGTON STANDARDS AND SPECIFICATIONS
(I)	REMOVE EX. POWER POLE
(J)	EX. EASEMENT TO BE VACATED
(K)	REMOVE EX. UNDERGROUND UTILITY LINE
(L)	NOT USED
(M)	REMOVE EX. COMMUNICATIONS BOX
(N)	FULL DEPTH SAW CUT
(O)	REMOVE EX. GATE VALVE
(P)	REMOVE EX. STORM SEWER
(Q)	REMOVE EX. STORM SEWER CATCH BASIN
(R)	RECONSTRUCT EX. CATCH BASIN/MANHOLE
(S)	PROTECT IN PLACE EX. SIGNAGE
(T)	REMOVE AND SALVAGE EX. SIGNAGE
(U)	PROTECT IN PLACE EX. STREET LIGHTING
(V)	ADJUST CASTING
(W)	LIMITS OF DISTURBANCE; OFFSET FROM PROPERTY LINE AND SAW CUTS FOR CLARITY



CUNNINGHAM
G R O U P

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BRANDON R. ELEGANT, P.E.
DATE: XXXXXXXX MIN. LIC. NO. XXXXXX

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CONSTRUCTION

Revisions
No. Date Description

Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 16068709 PIC / AIC: LC08E

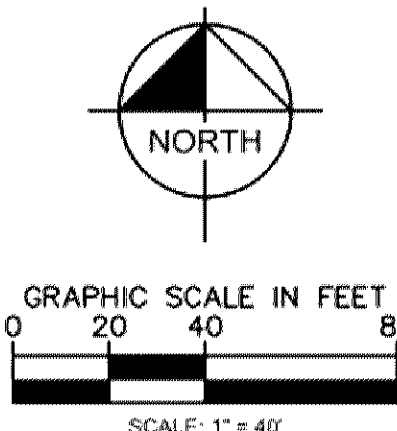
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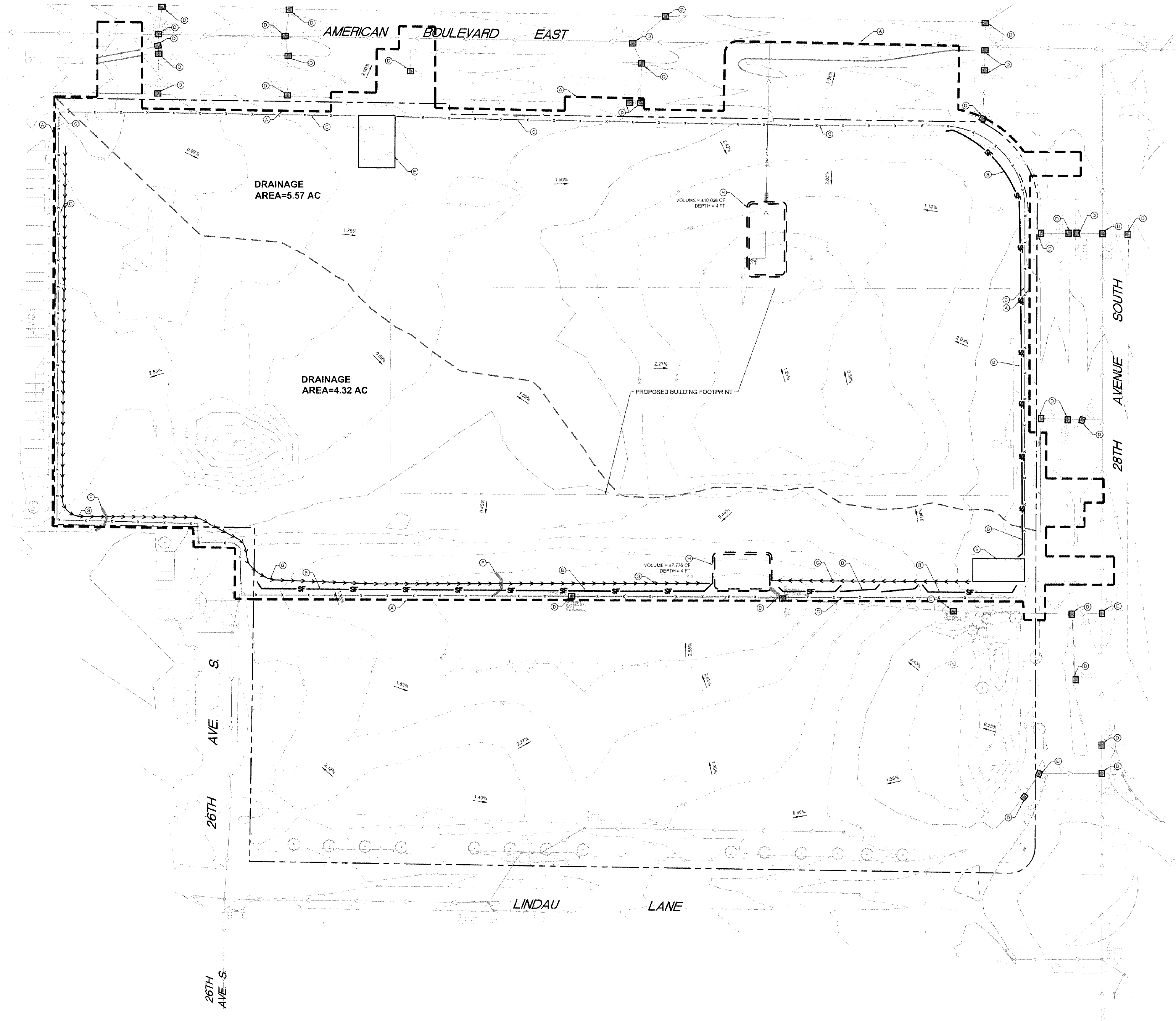
Sheet Title
DEMOLITION PLAN

Sheet Number
C200

Current Revision

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SIGNED: _____ DATE: 01/15/2020
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MODOT DESIGN OF SWPPP CERTIFIED
EXPIRES MAY 31, 2022

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LEGEND

- ROCK ENTRANCE
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE
- APPROXIMATE GRADE BREAK
- SAFETY FENCE
- DIVERSION DITCH
- TEMPORARY CHECK DAM
- SEDIMENT TRAP BASIN
- RIP-RAP

- EROSION CONTROL PLAN NOTES**
- ALL PERMETER 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, SOIL, 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 DAILY, AS REQUIRED, AND PRIOR TO ANY STORM.
 - IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.
 - INLET PROTECTION IN PUBLIC STREETS SHALL BE REMOVED PRIOR TO WINTER FREEZE-UP. UPSTREAM BMPs MUST BE IN PLACE PRIOR TO INLET PROTECTION REMOVAL.
 - INLET PROTECTION DEVICES MUST HAVE EMERGENCY OVERFLOW CAPACITY WHEN USED IN PUBLIC STREETS.
 - STREETS SHALL BE SWEEP DAILY, AS REQUIRED, AND PRIOR TO ANY STORM.
 - SHOP DRAWINGS AND ALL MATERIALS SHALL BE APPROVED BY THE SITE DESIGN ENGINEER PRIOR TO ANY REQUEST FOR APPROVAL FROM THE CITY ENGINEER.
 - UNDERGROUND STORMWATER SYSTEM SHALL BE AS-BUILT BY A LICENSED PROFESSIONAL ENGINEER.
 - INLET PROTECTION IN PUBLIC STREETS SHALL BE REMOVED PRIOR TO WINTER FREEZE-UP. UPSTREAM BMPs MUST BE IN PLACE PRIOR TO INLET PROTECTION REMOVAL.
 - INLET PROTECTION DEVICES MUST HAVE EMERGENCY OVERFLOW CAPACITY WHEN USED IN PUBLIC STREETS.

- 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 CULVERTS.
 - 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 ISSUING PERMIT.

SWPPP UPDATES AND AMENDMENTS

THE GC MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION, OR REMOVAL; CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.); CLEARING, GRUBBING OR GRADING; OR TEMPORARY OR PERMANENT STABILIZATION.

SITE DISCHARGE

RUNOFF WILL DISCHARGE INTO THE CITY SEWER THEN TO LONG MEADOW LAKE AND ULTIMATELY THE MINNESOTA RIVER APPROXIMATELY 2 MILES FROM THE SITE. THE MINNESOTA RIVER IS CONSIDERED IMPAIRED AT THIS LOCATION.

SOIL TYPES

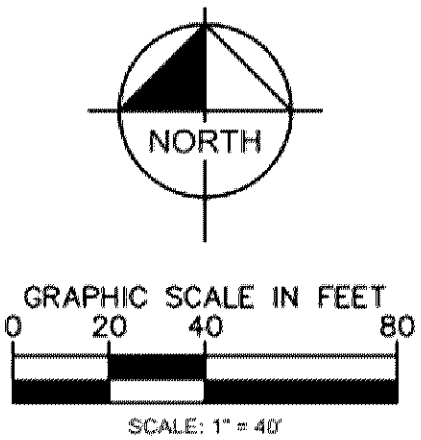
THE SITE BORING LOGS CONSIST GENERALLY OF 5 TO 11 FEET OF SILTY SAND AND SANDY LEAN CLAY FILL FOLLOWED BY POORLY GRADED SAND, MOST LIKELY GLACIAL OUTWASH.

AREA SUMMARY	
TOTAL PROPERTY AREA	14.33 AC
TOTAL DISTURBED AREA	10.52 AC
EXISTING IMPERVIOUS AREA	0.86 AC
EXISTING PERVIOUS AREA	9.66 AC
PROPOSED IMPERVIOUS AREA	6.75 AC
PROPOSED PERVIOUS AREA	3.77 AC

ESTIMATED PHASE 1 BMP QUANTITIES		
SILT FENCE	1129	LF
SAFETY FENCE	2650	LF
CONSTRUCTION ENTRANCE	2	EA
INLET PROTECTION	37	EA
DIVERSION DITCH	1190	LF
CHECK DAMS	2	EA
SEDIMENT TRAP	2	EA

KEYNOTE LEGEND

- (A) LIMITS OF DISTURBANCE
- (B) SILT FENCE - OFFSET FROM LIMITS OF DISTURBANCE FOR CLARITY
- (C) SAFETY FENCE - OFFSET FROM LIMITS OF DISTURBANCE FOR CLARITY
- (D) INLET PROTECTION
- (E) ROCK CONSTRUCTION ENTRANCE/EXIT
- (F) TEMPORARY CHECK DAM
- (G) TEMPORARY DIVERSION DITCH
- (H) SEDIMENT TRAP WITH RIP-RAP TO INLET STRUCTURE



Provide Construction SWPPP plan meeting the requirements of the MPA's Construction Stormwater Management permit.

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DATE: XXX/XXX/XXX MIN. LIC. NO. XXXXXX

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Revisions		
No.	Date	Description

Project Information

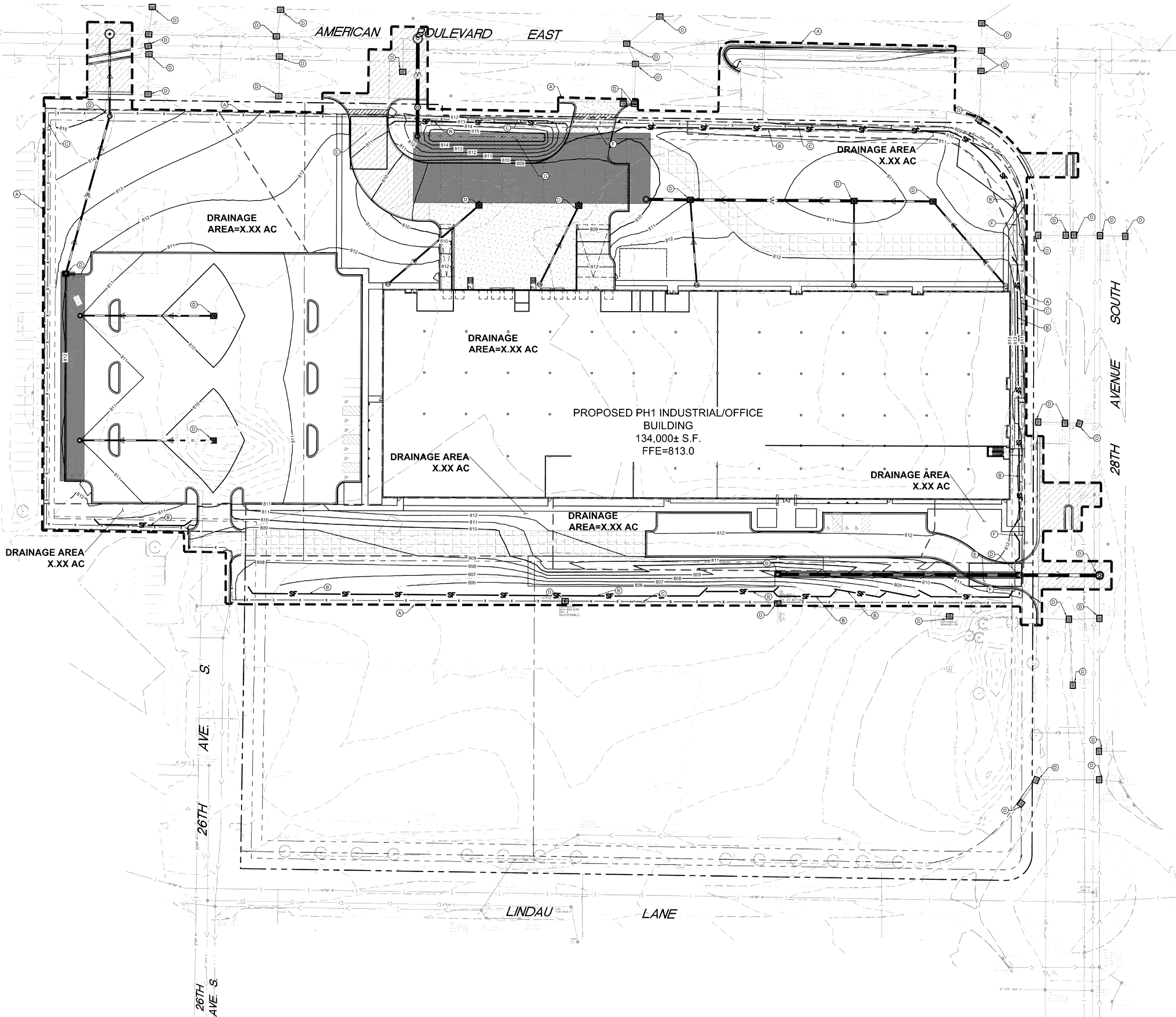
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / A/C: LCBE
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Sheet Title
EROSION AND SEDIMENT CONTROL PLAN - PHASE 1

Sheet Number **C300** **Current Revision**

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ESTIMATED PHASE 2 BMP QUANTITIES		
SILT FENCE	1746	LF
SAFETY FENCE	2650	LF
CONSTRUCTION ENTRANCE	2	EA
INLET PROTECTION PH2	52	EA
BIOTROLL	136	LF
EROSION CONTROL BLANKET	16574	SF

LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED CLASS V AGGREGATE BASE FIRE ACCESS ROUTE
- EROSION CONTROL BLANKET
- ROCK ENTRANCE
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE
- APPROXIMATE GRADE BREAK
- SAFETY FENCE
- BIO ROLL

EROSION CONTROL PLAN NOTES

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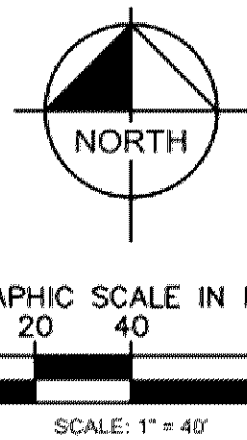
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KEYNOTE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE - OFFSET FROM LIMITS OF DISTURBANCE FOR CLARITY
- SAFETY FENCE - OFFSET FROM LIMITS OF DISTURBANCE FOR CLARITY
- INLET PROTECTION
- ROCK CONSTRUCTION ENTRANCE / EXIT
- BIOTROLL
- EROSION CONTROL BLANKET



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DATE: XXXXXXXX MIN LIC NO: XXXXXX

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Revisions

No.	Date	Description
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Project Information

Phase: Development Application Date: 01/15/2020

KHA Project No: 160687009 PIC / AIC: LCBE

SICK TECHNOLOGY CAMPUS

PREPARED FOR

SICK

Sheet Title

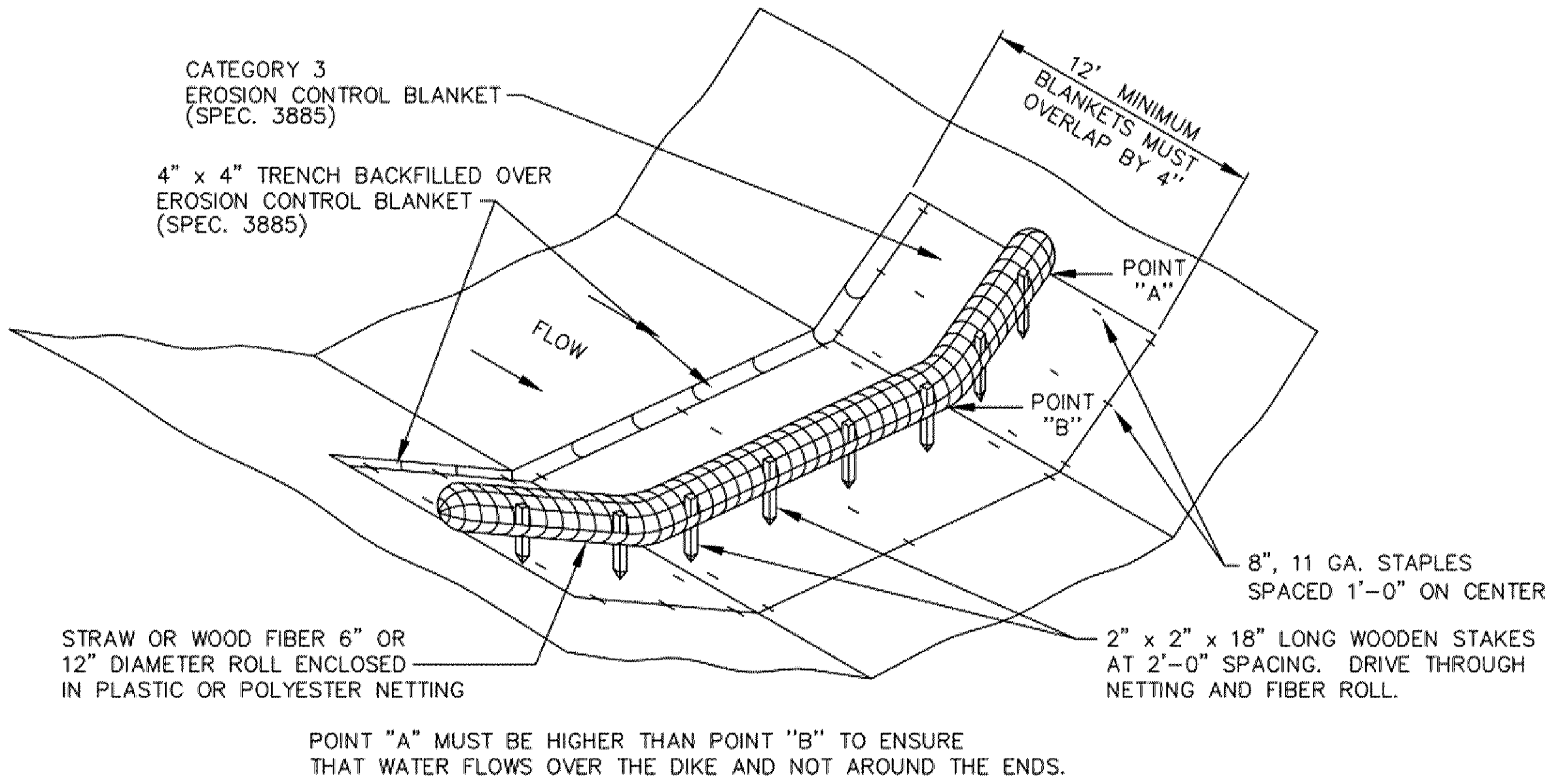
EROSION AND SEDIMENT
CONTROL PLAN - PHASE 2

Sheet Number

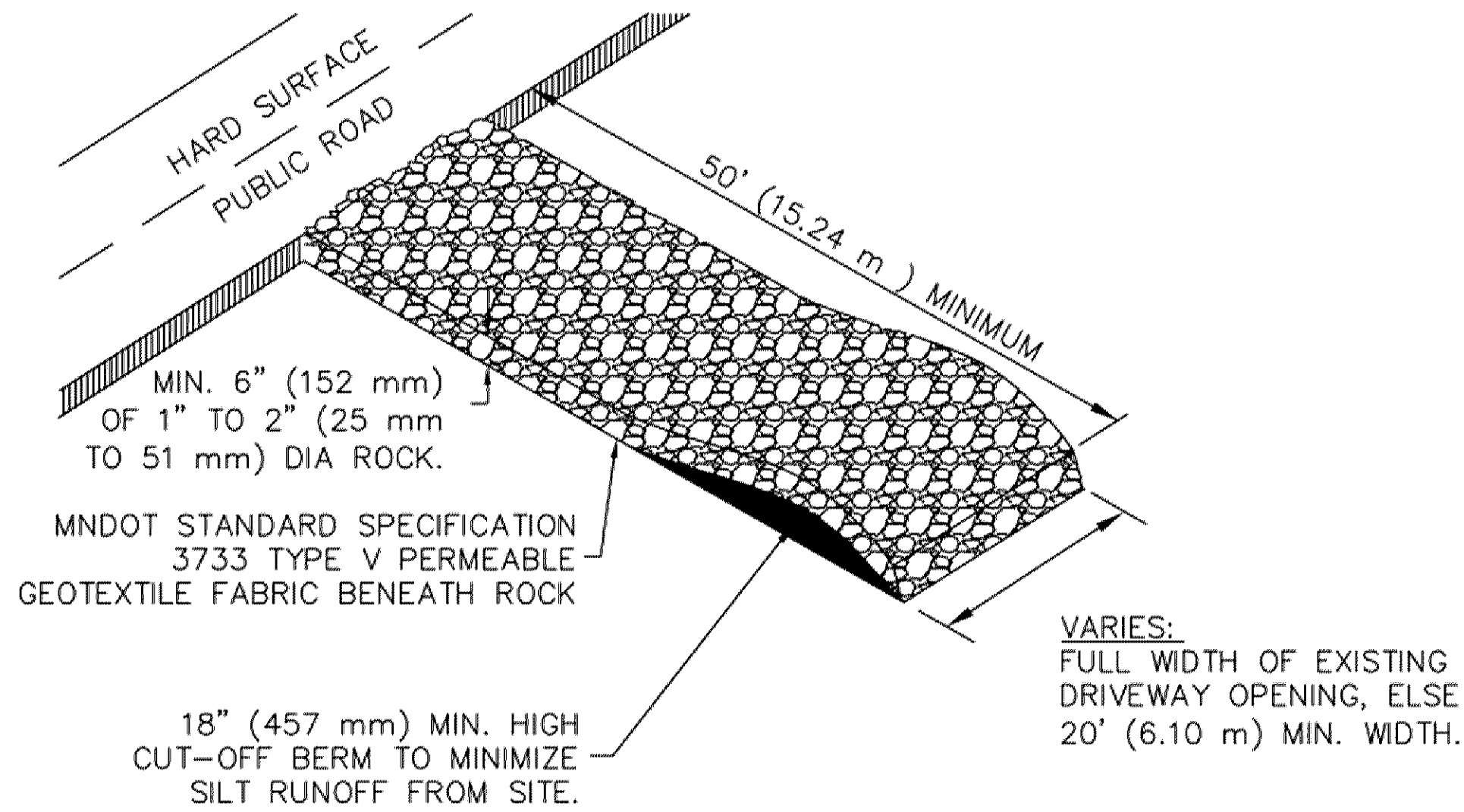
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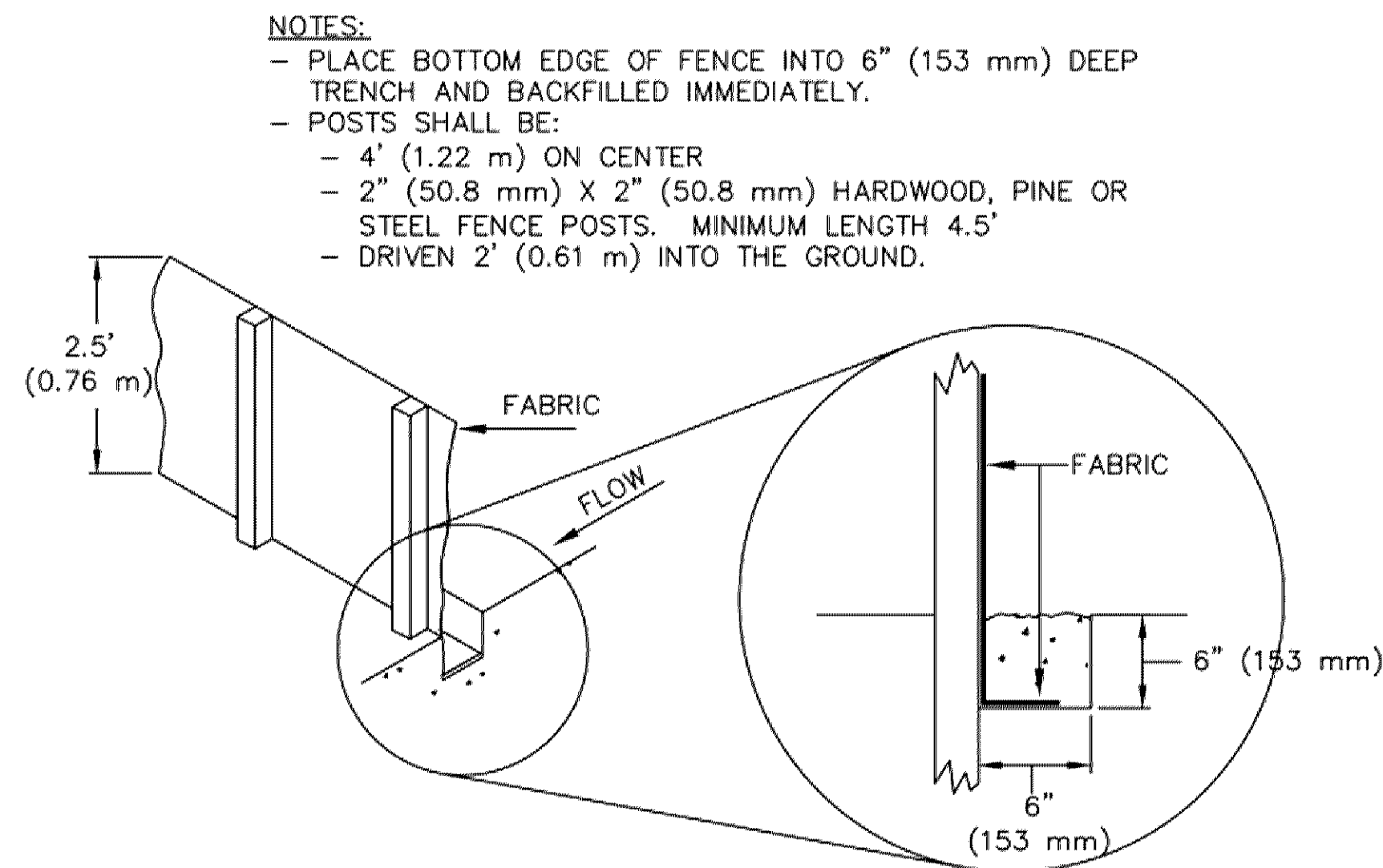
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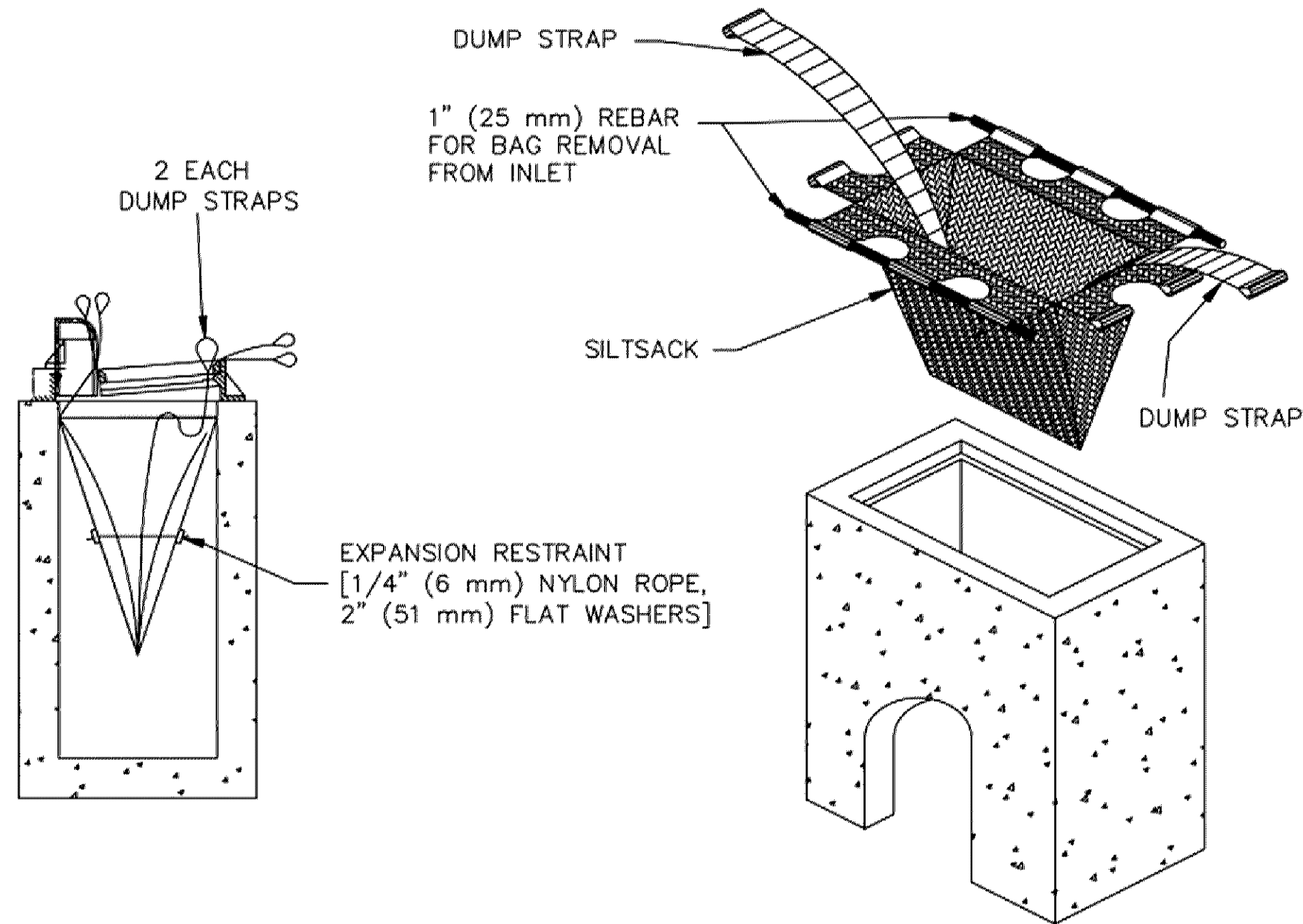
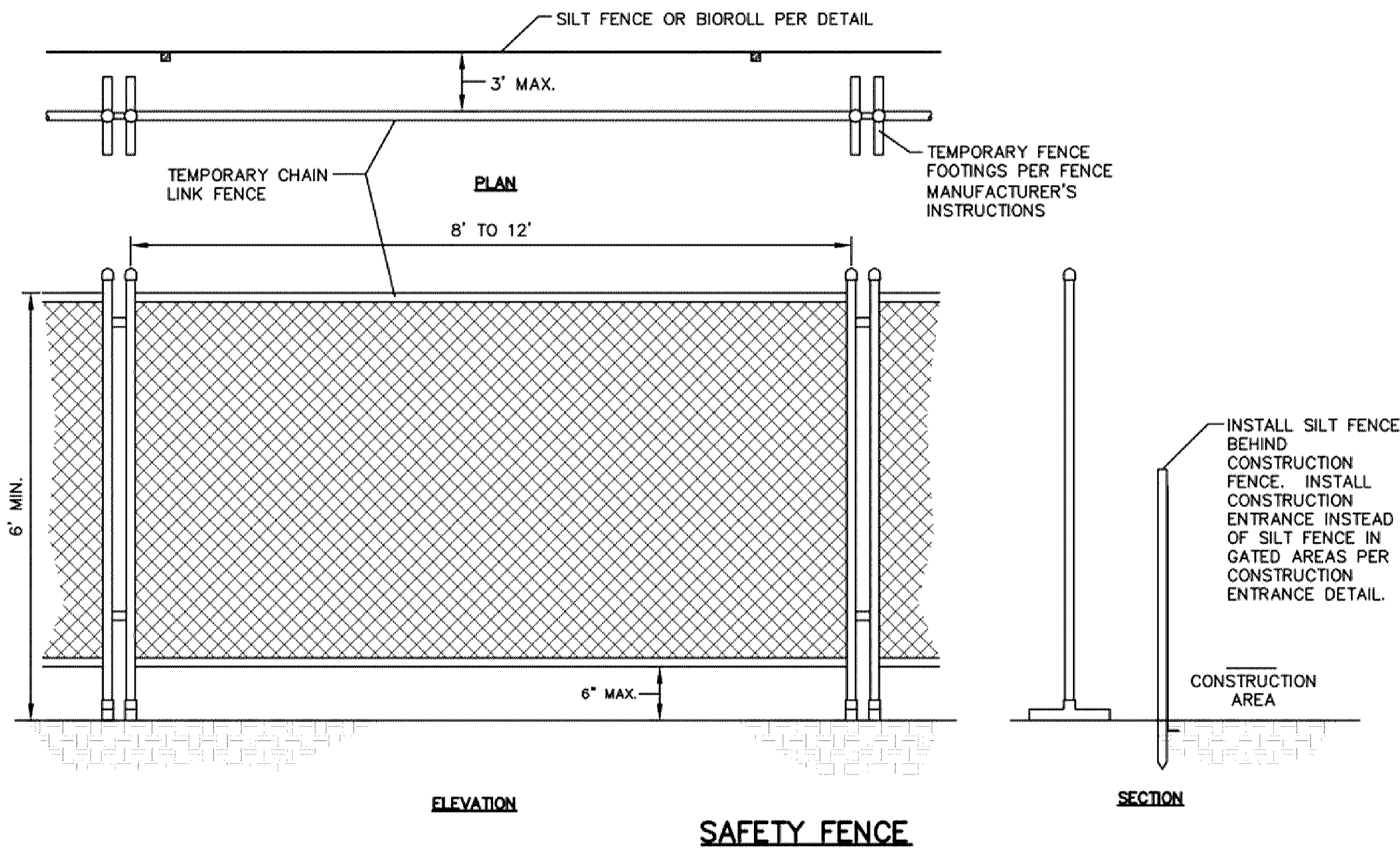
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BIOROLL.dwg 4/2009



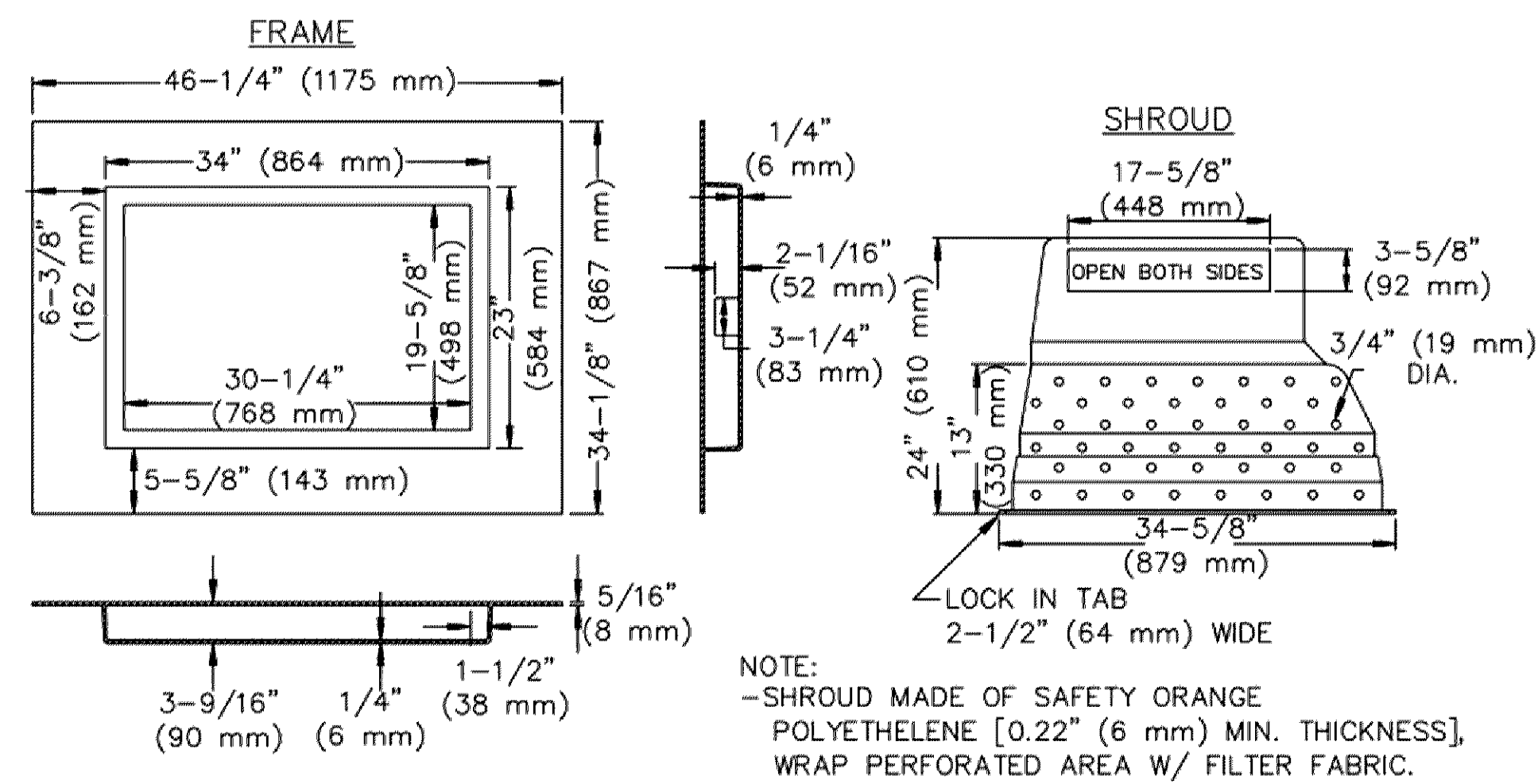
ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS
ROCK-ENTR.dwg 4/2009



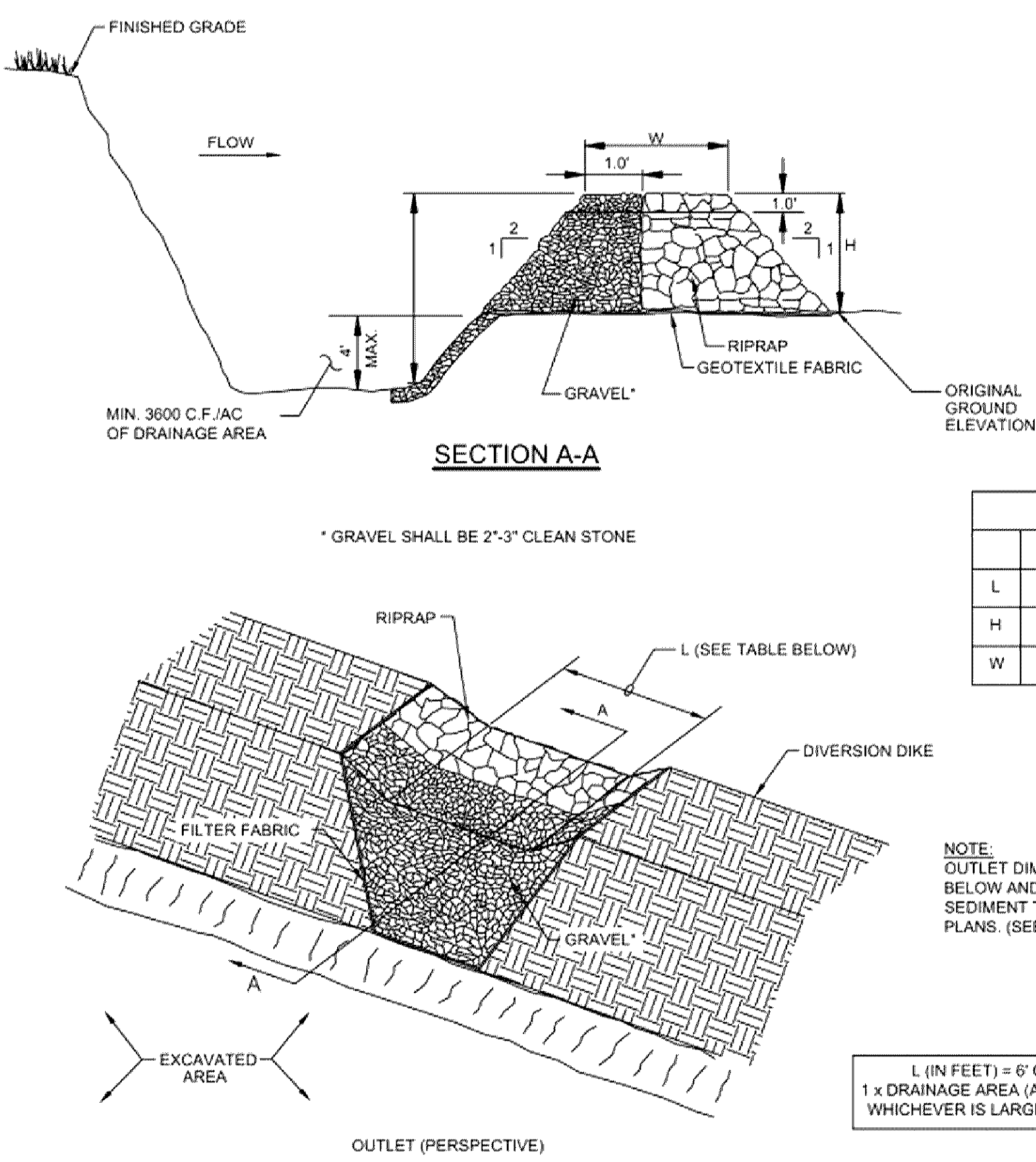
EROSION CONTROL FENCE
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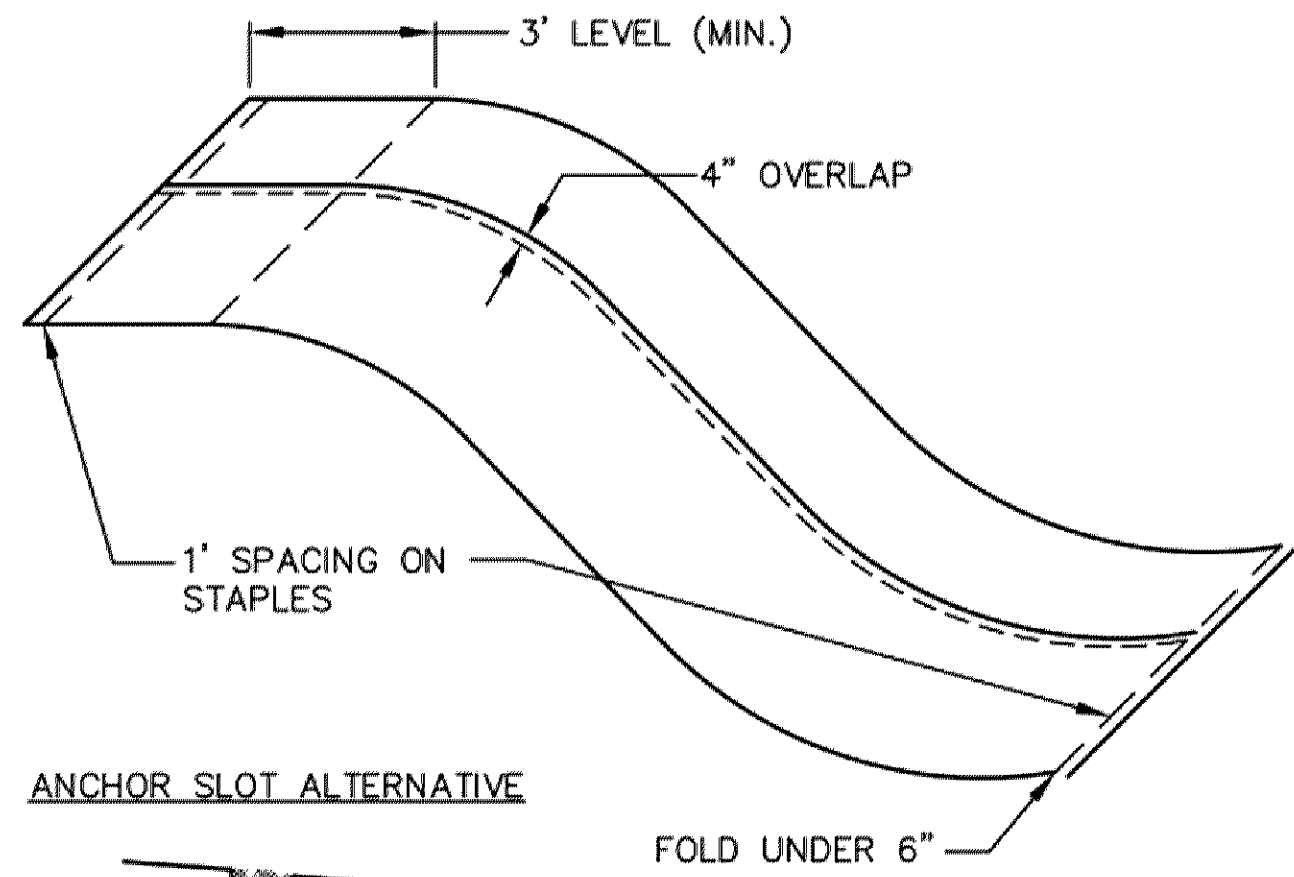
INLET PROTECTION, SEDIMENT FILTER SACK
SILT_SACK_2x3 4/2009



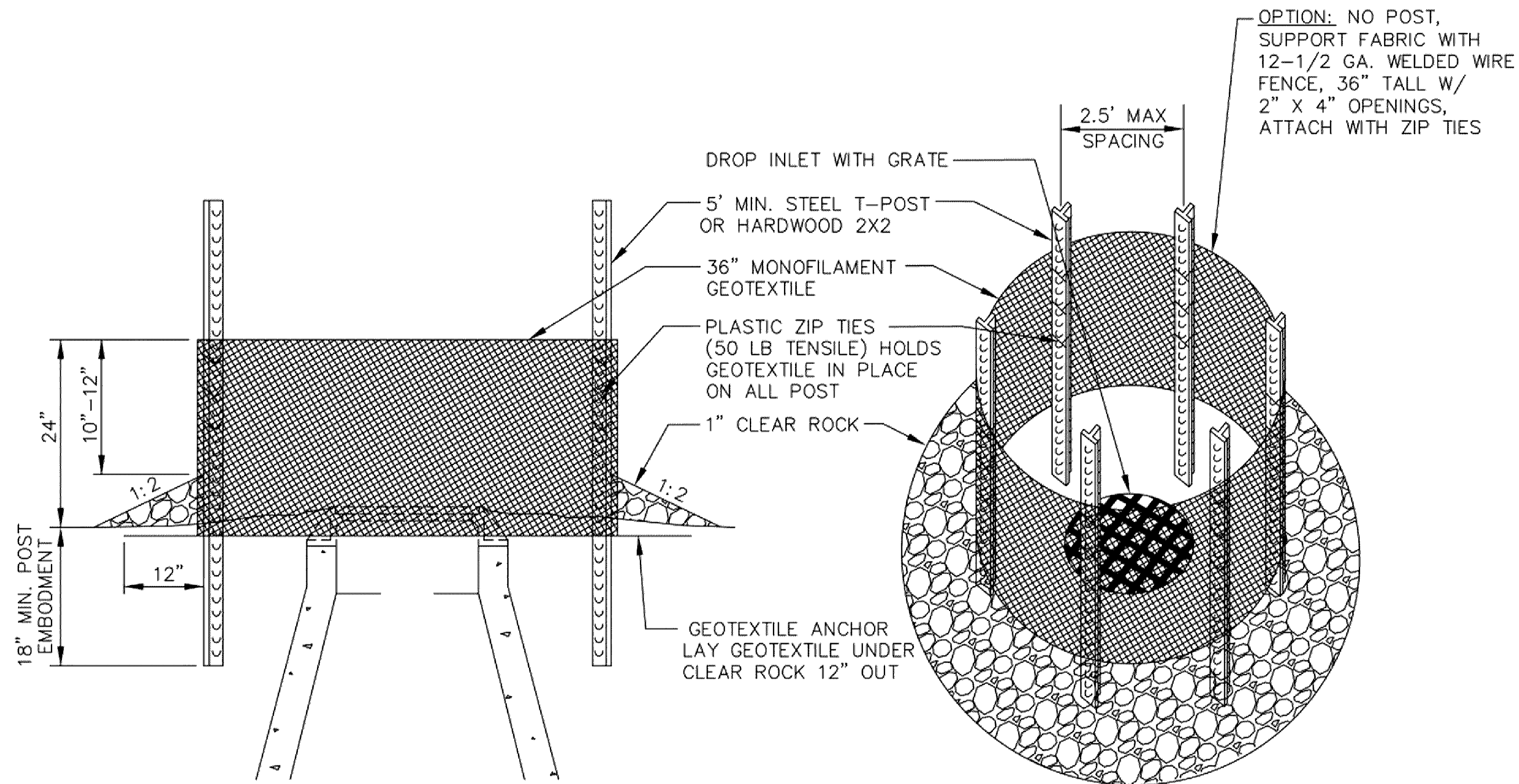
INLET PROTECTION, PERFORATED EROSION BARRIER
SHROUD W/ 2' x 3' (0.61 x 0.91 m) FRAME
INLET_SHROUD_2x3.dwg 4/2009



TEMPORARY SEDIMENT TRAP



EROSION CONTROL BLANKET



USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS

INLET PROTECTION
SILT FENCE RING AND ROCK FILTER BERM
INLET_PROTECTION_RING.dwg 4/2009

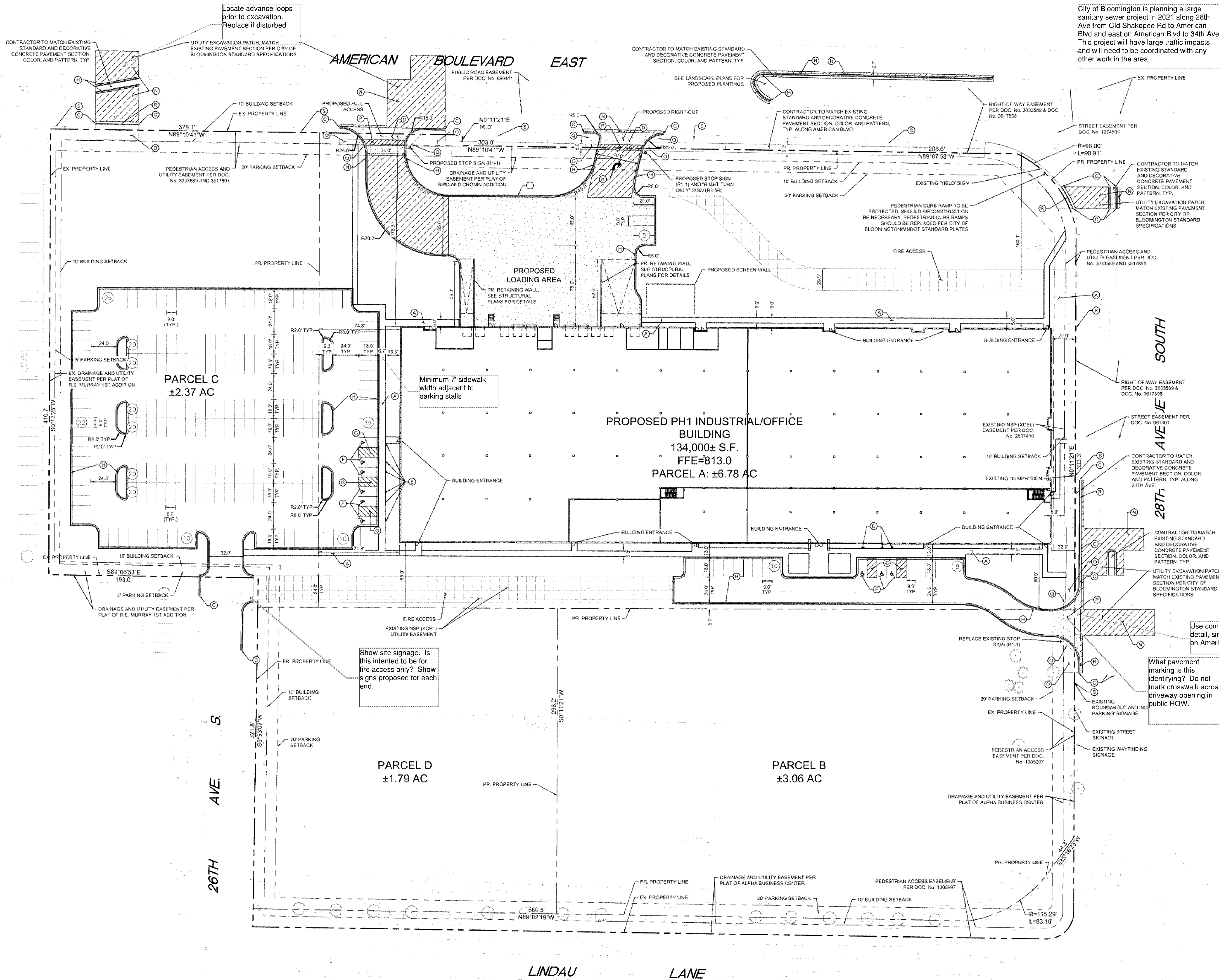
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Revisions
No. Date Description

Project Information
Phase: Development Application Date: 01/15/2020
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SICK

Sheet Title
EROSION AND SEDIMENT CONTROL DETAILS

Sheet Number
C302
Current Revision

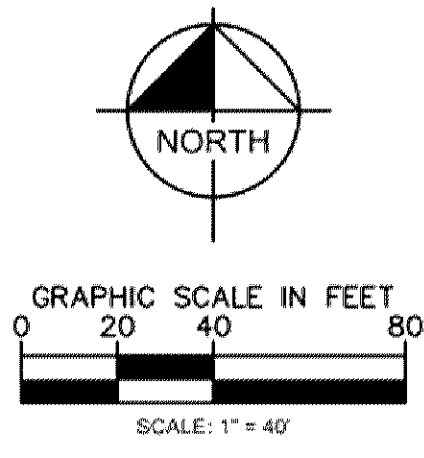


LEGEND	
	PROPERTY LINE
	PROPOSED FENCE
	SETBACK LINE
	PROPOSED CURB AND GUTTER
	REPLACE AND MATCH EXISTING ASPHALT PAVEMENT
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT
	PROPOSED CONCRETE SIDEWALK
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED CLASS V AGGREGATE BASE FIRE ACCESS ROUTE
	PROPOSED GRAVEL BASE

PROPERTY SUMMARY	
SICK TECHNOLOGY CAMPUS	
TOTAL PARCEL A PROPERTY AREA	6.78 AC
TOTAL PARCEL B PROPERTY AREA	3.06 AC
TOTAL PARCEL C PROPERTY AREA	2.37 AC
TOTAL PARCEL D PROPERTY AREA	1.79 AC
PROPOSED IMPERVIOUS AREA	6.75 AC
PROPOSED PERVIOUS AREA	3.77 AC
TOTAL DISTURBED AREA	10.52 AC
ZONING SUMMARY	
EXISTING ZONING	LINDAU MIXED USE (LX)
PROPOSED ZONING	LINDAU MIXED USE (LX)
PARKING SETBACKS	SIDE/REAR = 5' ROAD = 20'
BUILDING SETBACKS	FRONT = 10' SIDE = 10' REAR = 10'
BUILDING DATA SUMMARY	
AREAS	
PROPOSED PROPERTY	14.33 AC
BUILDING AREA	134,000 SF (21% OF TOTAL PROPERTY AREA)
PHASE I PARKING	
REQUIRED PARKING	221 STALLS
REQUIRED PARKING W/ 10% TRANSIT REDUCTION	199 STALLS
PROPOSED PARKING	227 STALLS
ADA STALLS REQ'D / PROVIDED	7 STALLS / 9 STALLS

- SITE PLAN NOTES**
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
 - CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 - ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. REFER TO LANDSCAPE PLAN FOR EXACT SODDING AND SEEDING LIMITS AND SPECIFICATIONS.
 - ALL INNER CURBED RADII ARE TO BE 4.7' AND OUTER CURBED RADII ARE TO BE 10' UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5'. ALL CURB AND GUTTER IS TYPE B612 UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 - EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
 - SITE BOUNDARY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY SUNDE LAND SURVEYING.
 - REFER TO ELECTRICAL PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
 - CONTRACTOR IS REQUIRED TO ENSURE ALL SIDEWALKS MEET ADA STANDARDS.
 - RESTORE CITY STREET BY COMPLYING WITH THE BLOOMINGTON CITY STREET IMPROVEMENT POLICY.
 - ALL PARKING STALL STRIPING MUST BE PAINTED WHITE.
 - STREET LIGHTING AND INTERCONNECT CONDUIT MUST BE EXPOSED FOR CITY INSPECTION PRIOR TO POURING CONCRETE OR BACKFILLING EXCAVATION IN CITY RIGHT-OF-WAY.
 - ALL PARKING STALL STRIPING MUST BE PAINTED WHITE. PARKING ISLANDS MUST BE 3-FEET SHORTER THAN THE PARKING STALL AND 8-FEET WIDE.

KEYNOTE LEGEND	
(A)	CONCRETE SIDEWALK
(B)	PROPOSED PIPE BOLLARD
(C)	MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER
(D)	COMMERCIAL DRIVEWAY APPROX PER CITY OF BLOOMINGTON
(E)	DETAIL
(F)	ACCESSIBLE PARKING SIGN PER STATE OF MINNESOTA ADA GUIDELINES
(G)	ACCESSIBLE PARKING STALL AND ACCESS AISLE PER STATE OF MINNESOTA ADA GUIDELINES
(H)	AREA STRIPED WITH 4" SYSL @ 45° 2' O.C.
(I)	B612 CURB & GUTTER (TYP.)
(J)	TIPOUT CURB
(K)	NOT USED
(L)	PAVEMENT LEGEND - SEE DETAIL
(M)	LANDSCAPE AREA - SEE LANDSCAPE PLANS
(N)	MOUNTABLE CURB AND GUTTER
(O)	BITUMINOUS PAVEMENT REPLACEMENT
(P)	CONCRETE SIDEWALK REPLACEMENT. PAVEMENT SECTION TO MATCH EXISTING
(Q)	PAVEMENT MARKINGS IN ACCORDANCE WITH MUTUICD
(R)	CLEAR VIEW TRIANGLE 15' FROM PROPERTY LINE AND DRIVEWAY APPROACHES
(S)	B24 CURB & GUTTER
(T)	EXISTING STREET LIGHTING
(U)	OUTFALL CURB AND GUTTER



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BRANDON R. ELEGANT, P.E.
DATE: XXXXXXXX IN: NO. XXXXX

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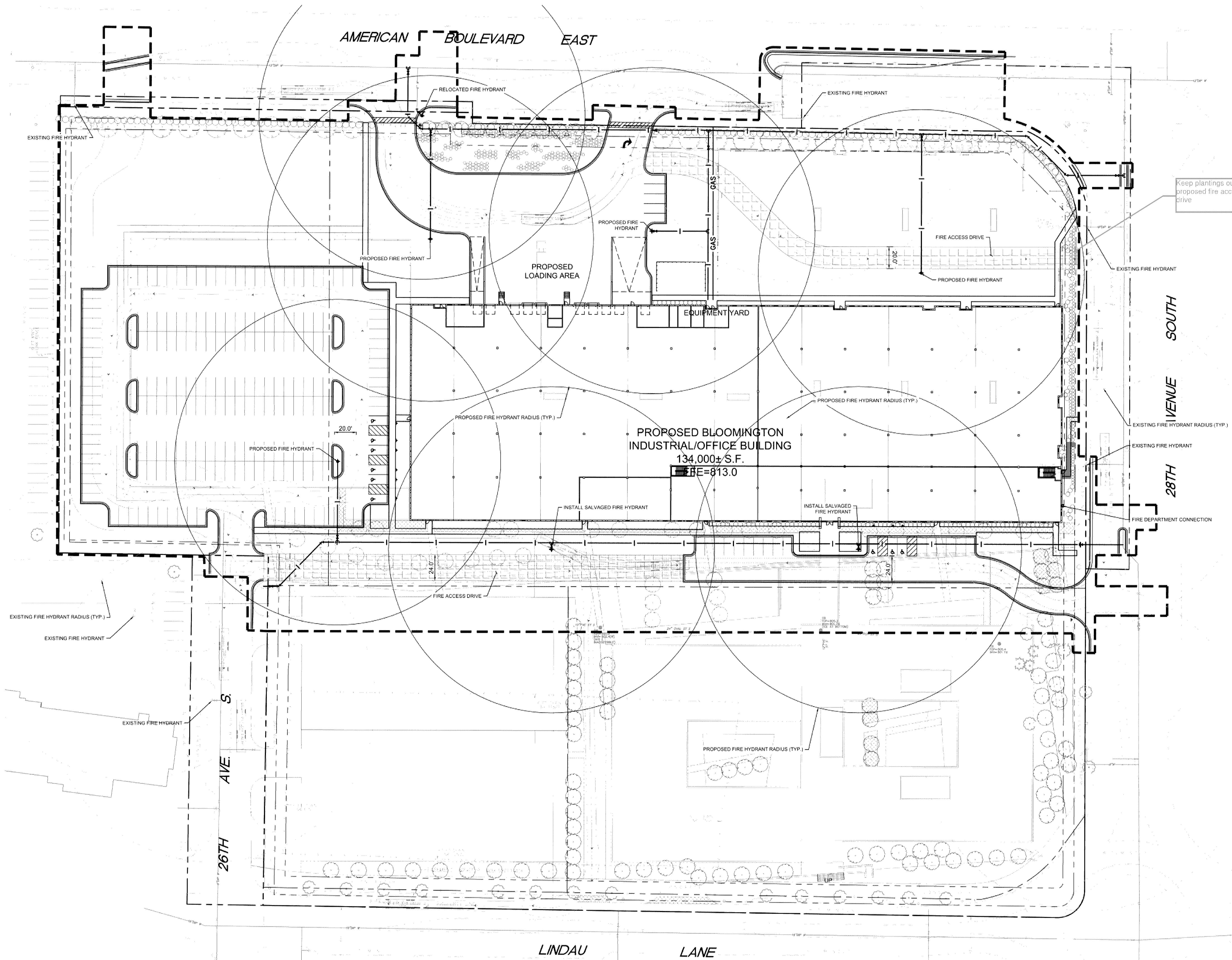
Revisions		
No.	Date	Description

Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 16068709 PIC / AIC: LC8E
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

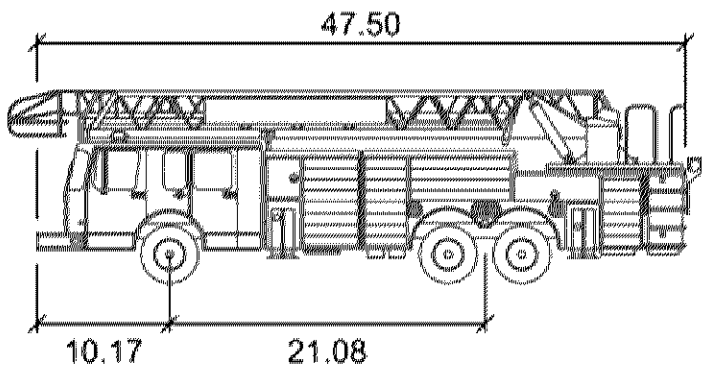
Sheet Title
SITE PLAN

Sheet Number
C400
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K:\TWC_LDEV\CUNINGHAM GROUP\BLOOMINGTON_SICK3 Design\CAD\PlanSheets\C4-FIRE DEPARTMENT ACCESS PLAN.dwg January 14, 2020 - 7:21pm
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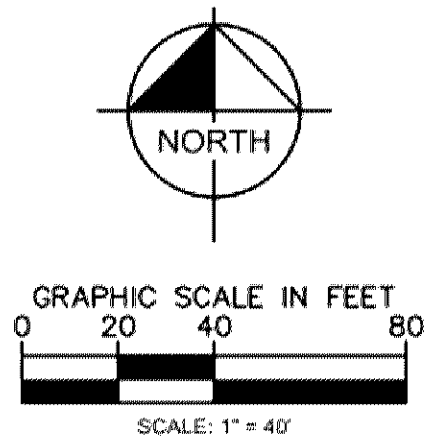
- LEGEND**
- PROPERTY LINE
 - PROPOSED REDUCER
 - PROPOSED TEE
 - PROPOSED GATE VALVE
 - PROPOSED HYDRANT
 - PROPOSED WATERMAIN
 - EXISTING FIRE HYDRANT 150' RADIUS COVERAGE
 - PROPOSED FIRE HYDRANT 150' RADIUS COVERAGE
 - BLOOMINGTON FIRE TRUCK - LADDER 3



Bloomington Fire Ladder 3

	feet
Width	47.50
Track	10.17
Lock to Lock Time	21.08
Steering Angle	

THE VEHICLE MANEUVERING IDENTIFIED ON THIS PLAN WAS PREPARED USING AUTOTURN SOFTWARE AND DOES NOT NECESSARILY REPRESENT ACTUAL CONDITIONS NOR DOES IT ACCOUNT FOR EXTERNAL FACTORS. THIS ANALYSIS SHOULD NOT BE USED AS THE SOLE BASIS FOR THE CLIENT'S DECISION MAKING.



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No.	Date	Description
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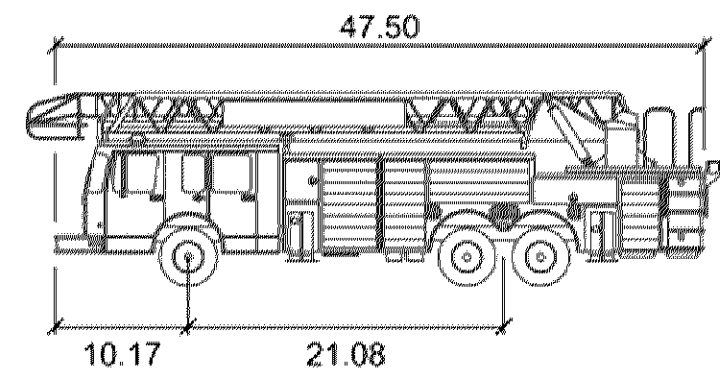
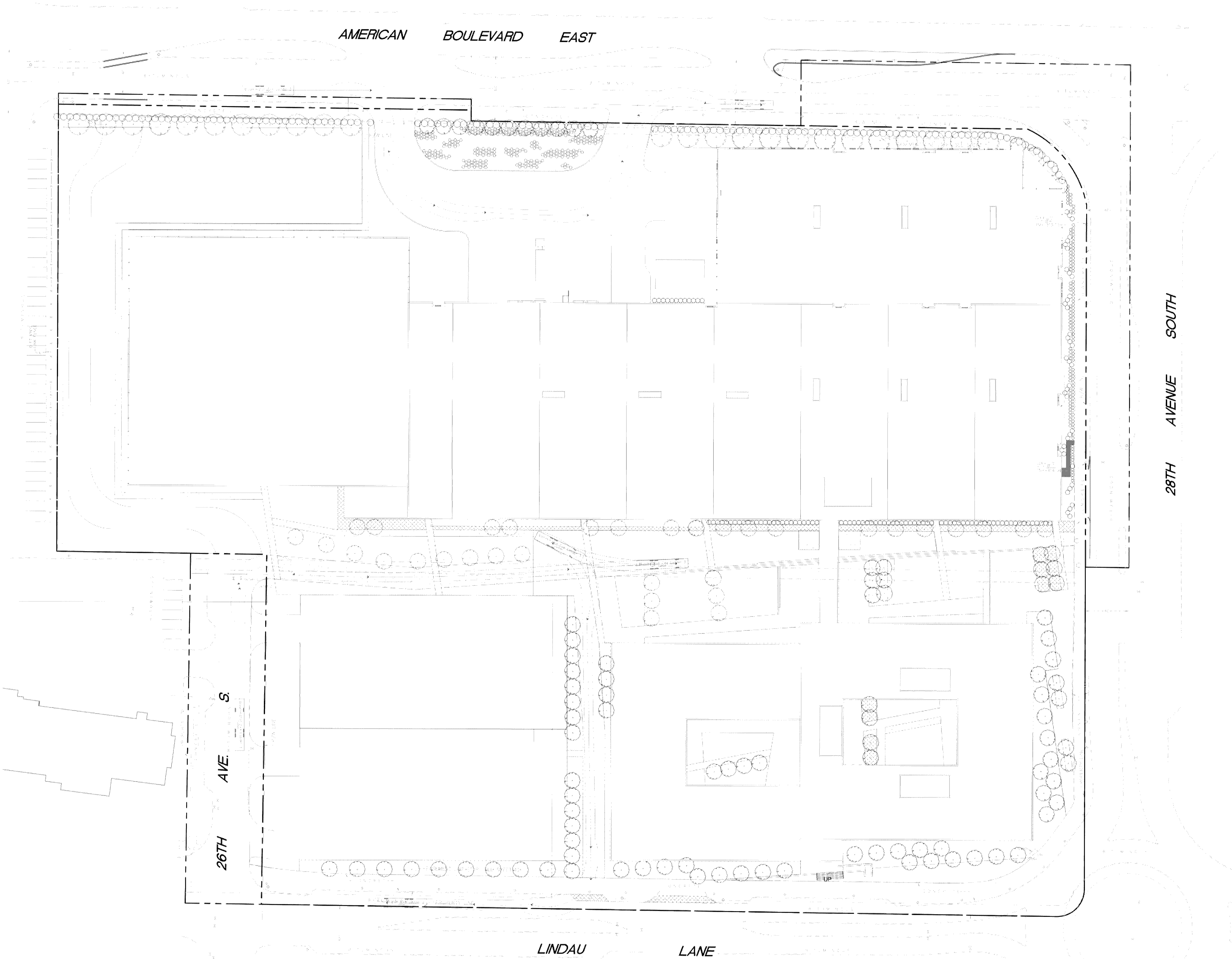
Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / AIC: LC08E
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

Sheet Title
FIRE DEPARTMENT ACCESS PLAN

Sheet Number
C401

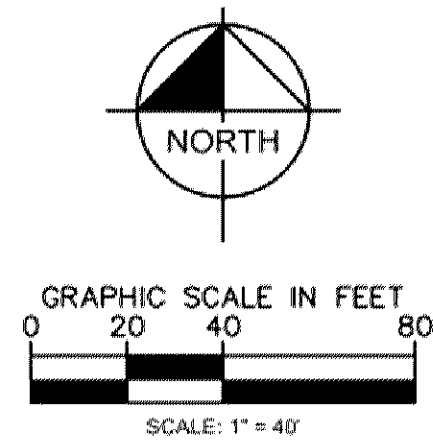
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Bloomington Fire Ladder 3	
feet	
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

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DATE: XX/XX/XXXX JUN 14, 2020

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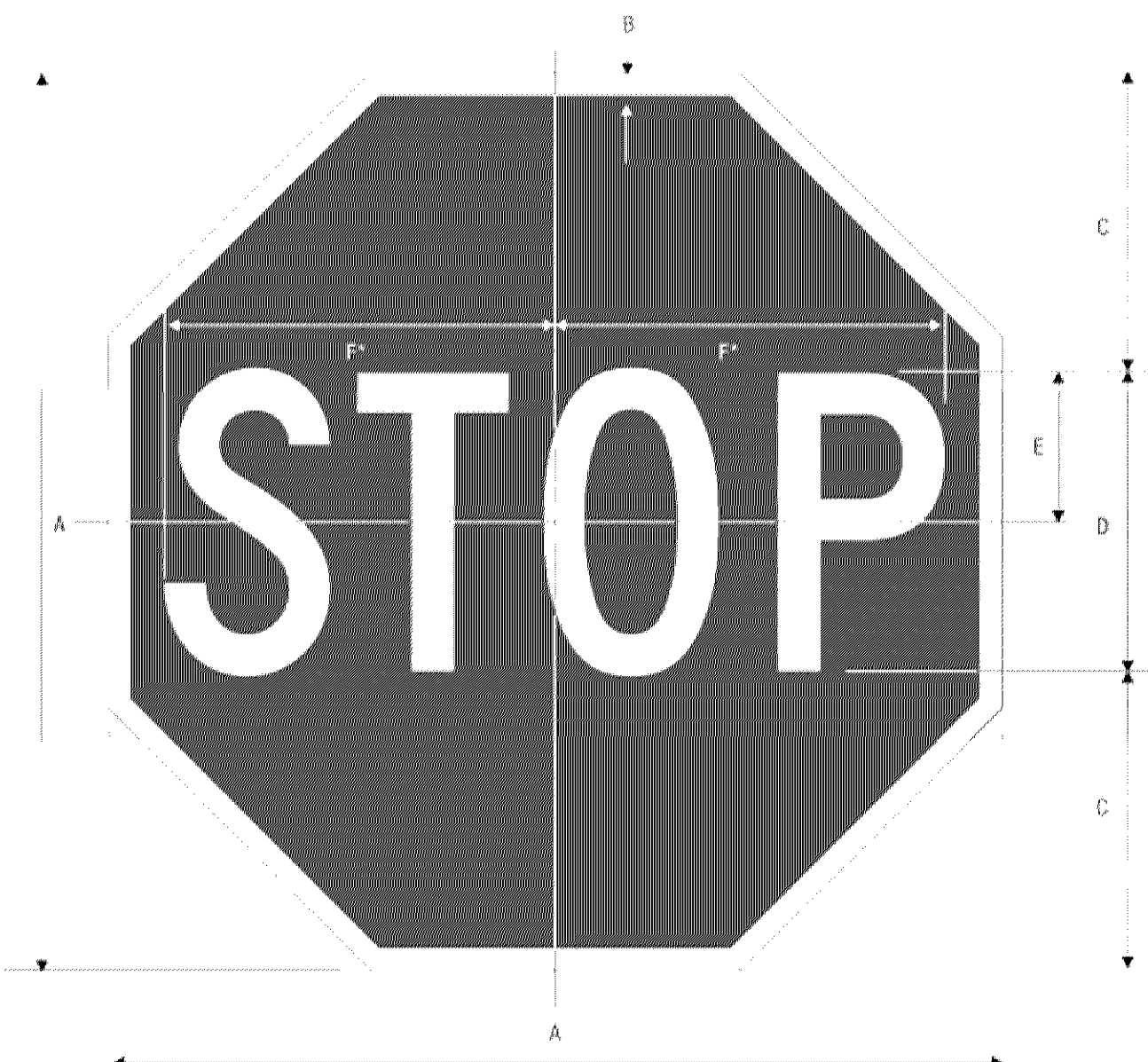
Revisions		
No.	Date	Description

Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / AIC: LC08E
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

Sheet Title
Fire Access Exhibit - Phase 4

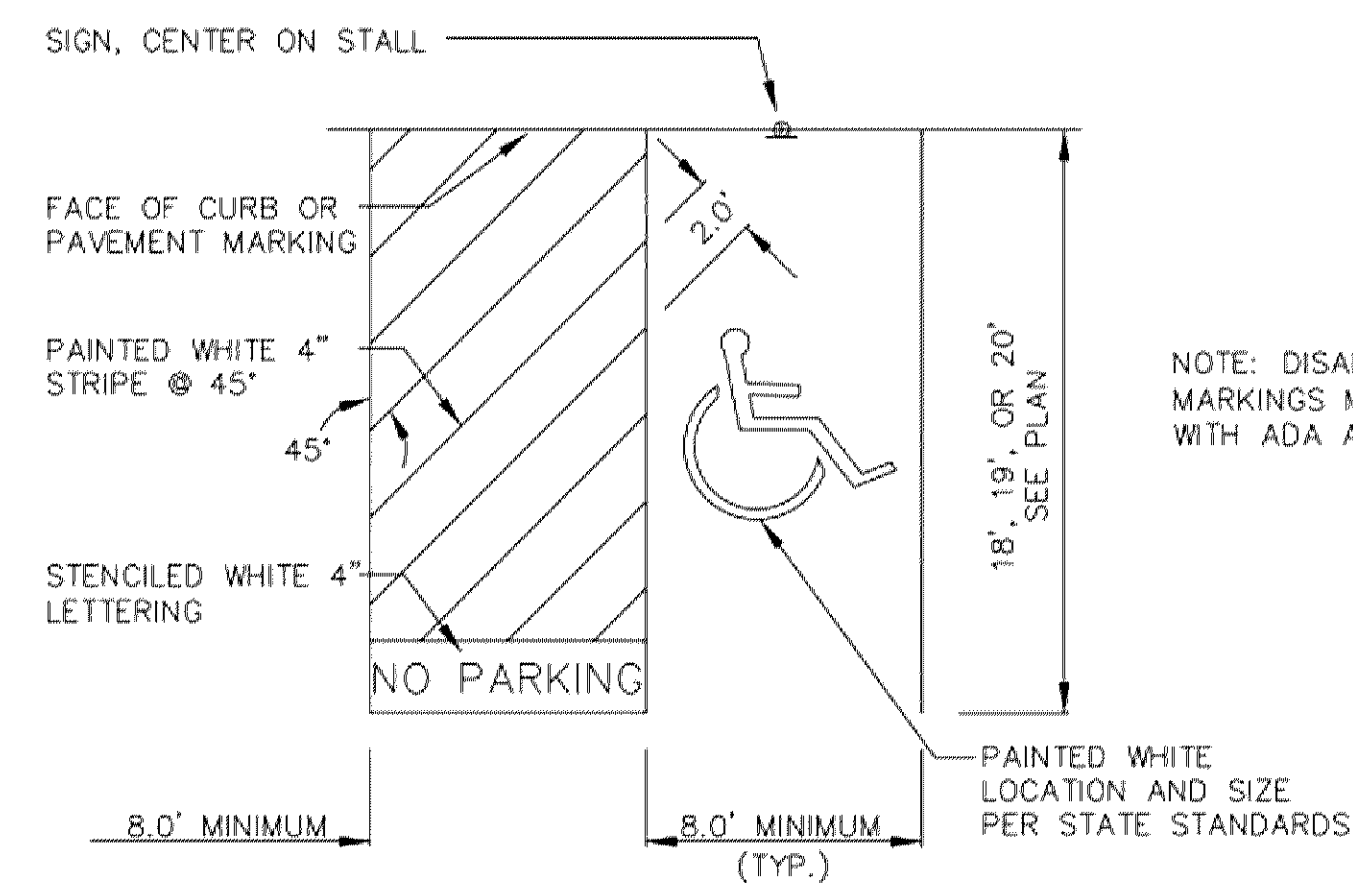
Sheet Number **Current Revision**
EX 1

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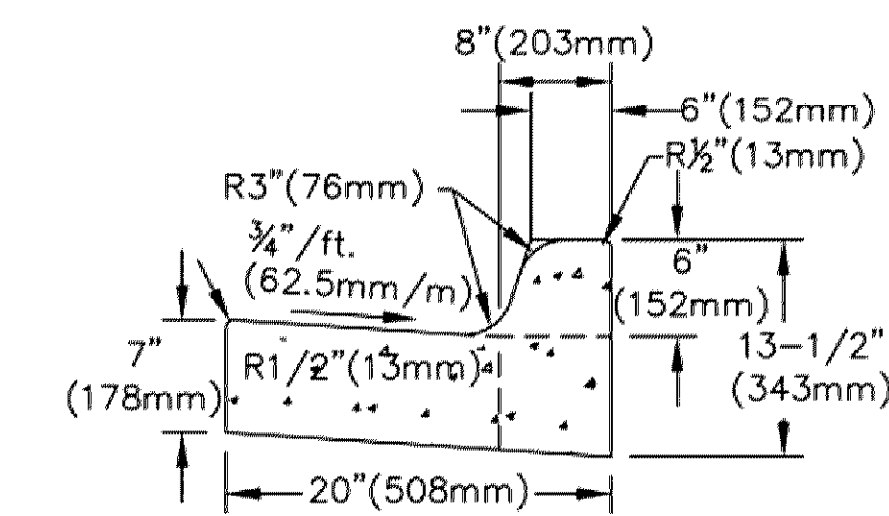


R1-1 STOP					
*Reduce spacing 40%					
A	B	C	D	E	F
18	3.75	8	6 C	3	7.75
24	6.25	8	6 C	4	10
30	7.5	10	10 C	5	12.5
36	8.75	12	12 C	6	15
48	1.25	16	16 C	8	20

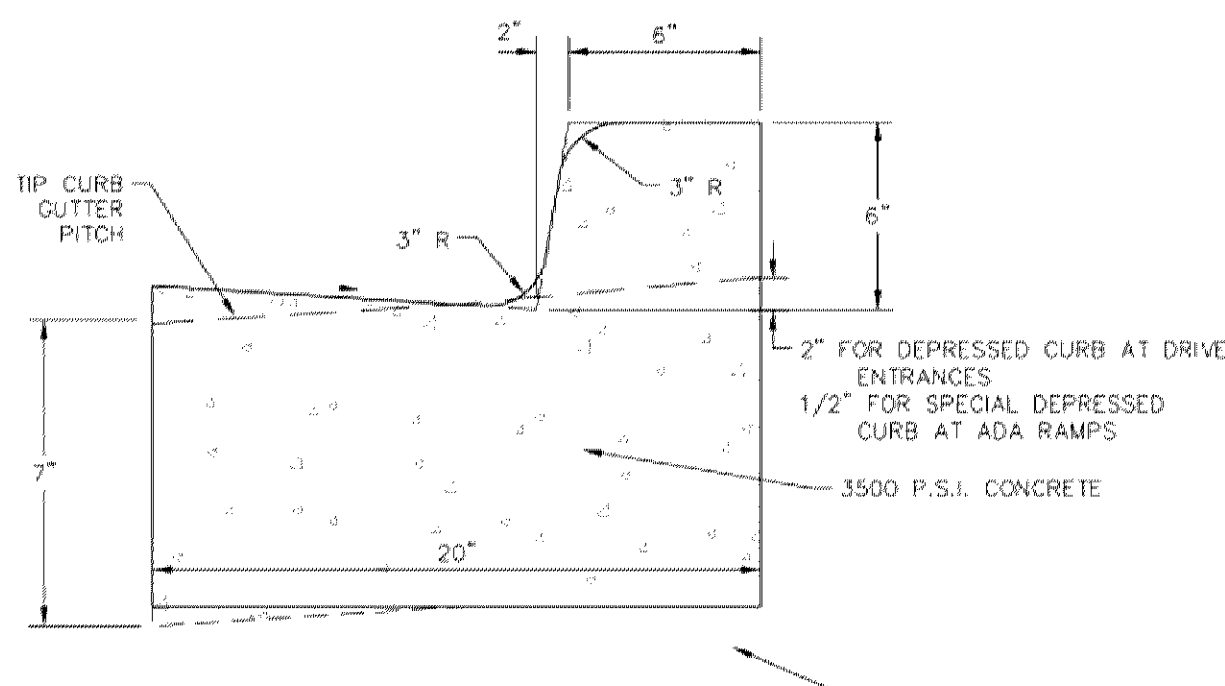
COLORS: LEGEND - WHITE (RETROREFLECTIVE)
BACKGROUND - RED (RETROREFLECTIVE)



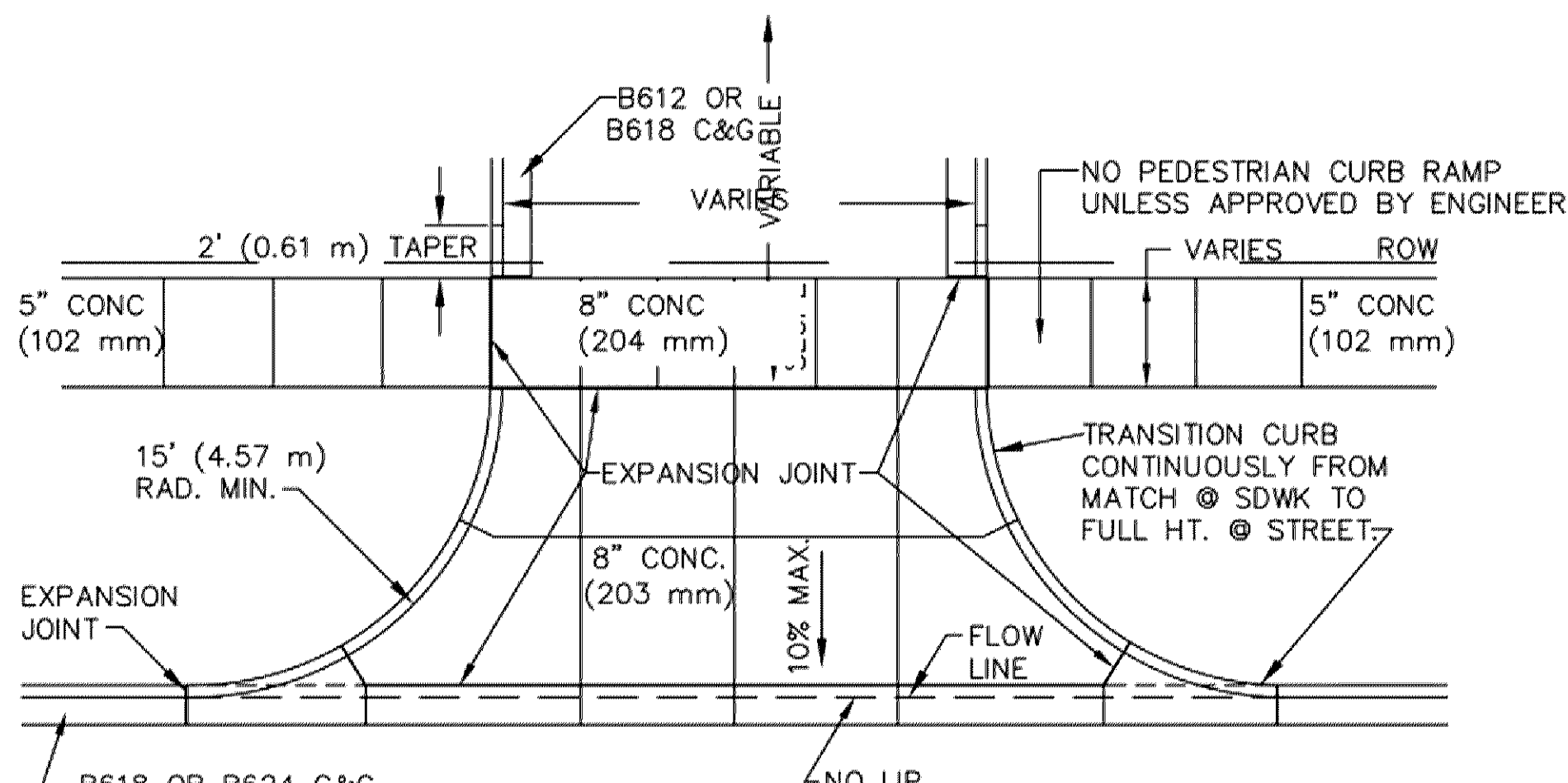
HANDICAP PARKING STALL LAYOUT



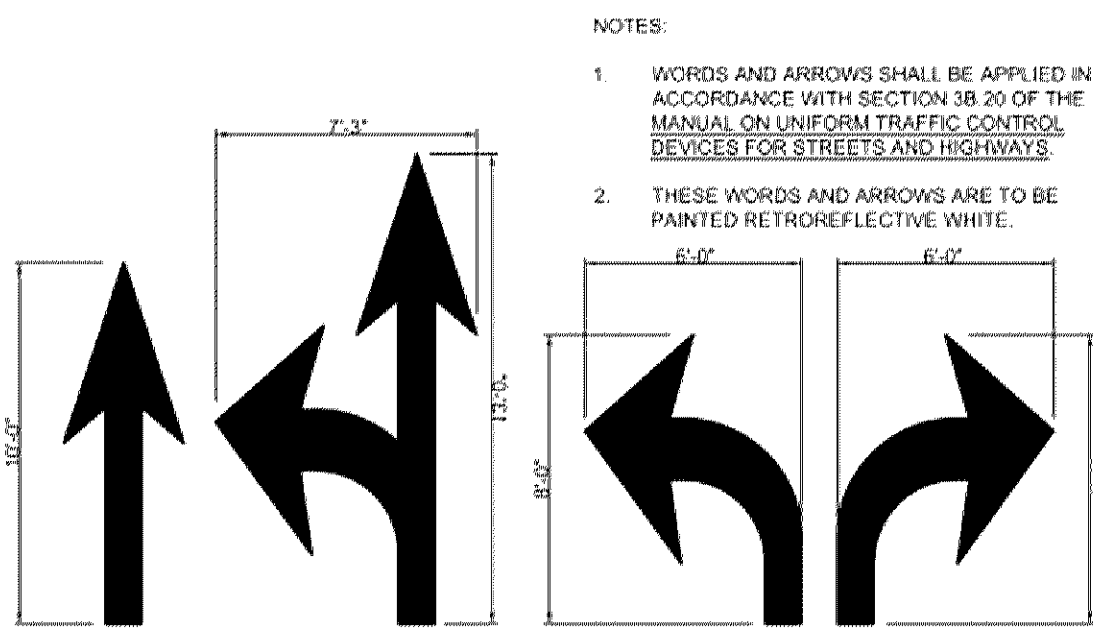
B612 STANDARD CURB & GUTTER
B612_C&G.dwg 4/2009



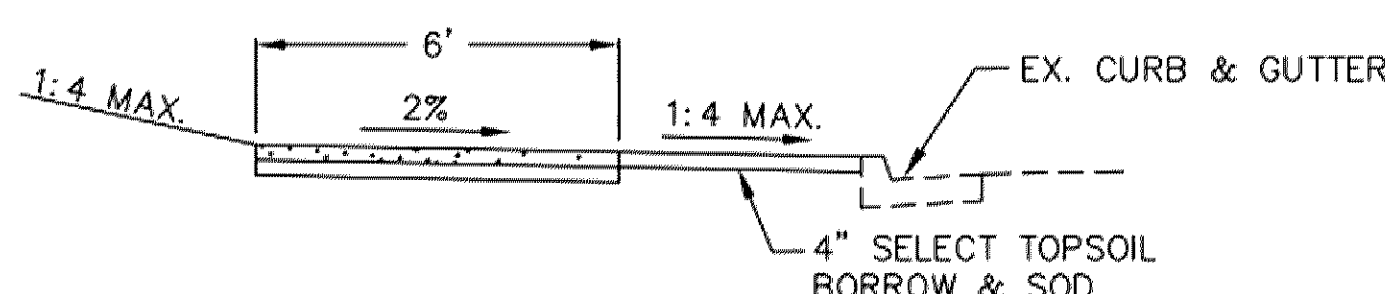
B612 TIP CURB
NTS



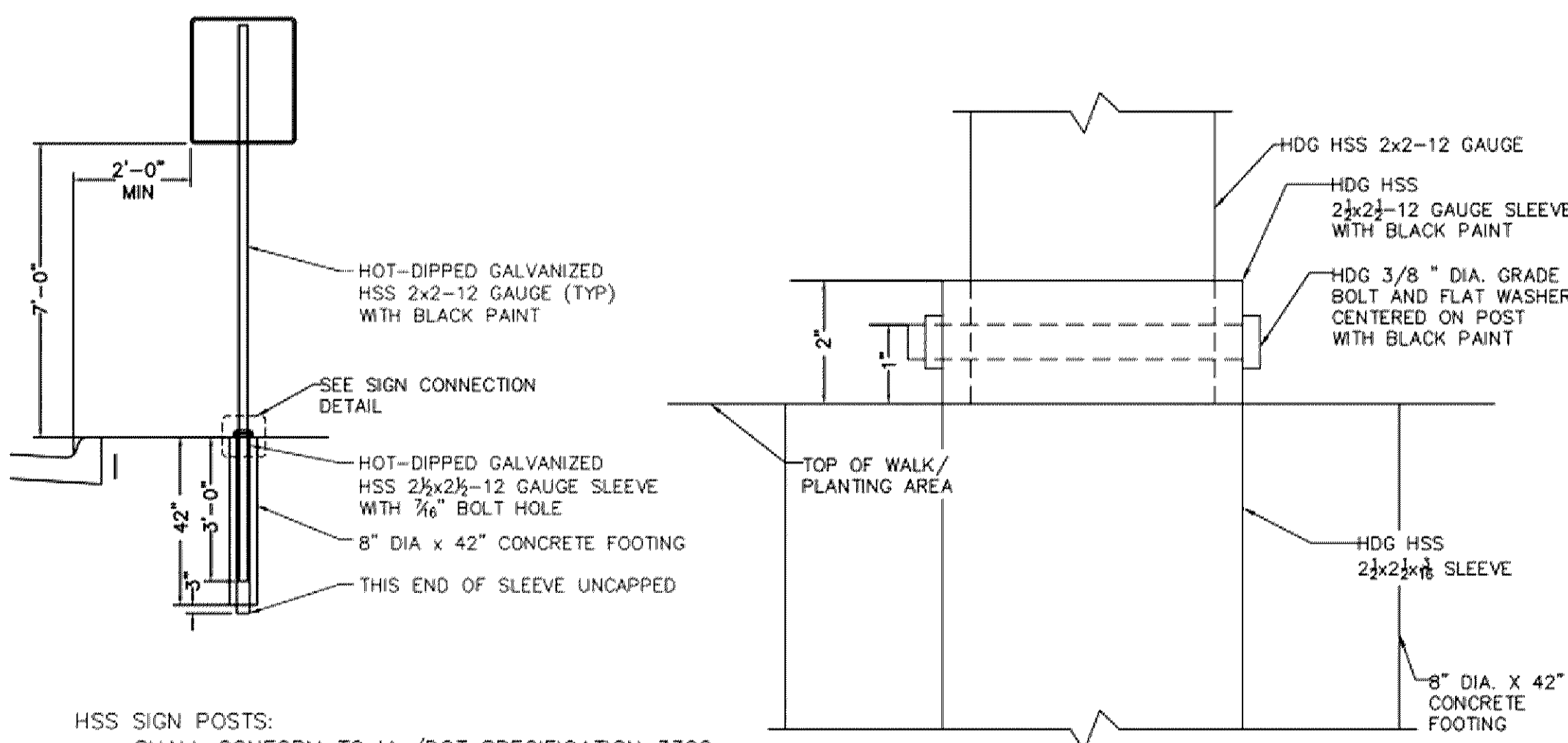
NONRESIDENTIAL DRIVEWAY APPROACH
WITH BOULEVARD SIDEWALK
DRWY_COM.dwg 4/2009



PAVEMENT MARKINGS
NTS

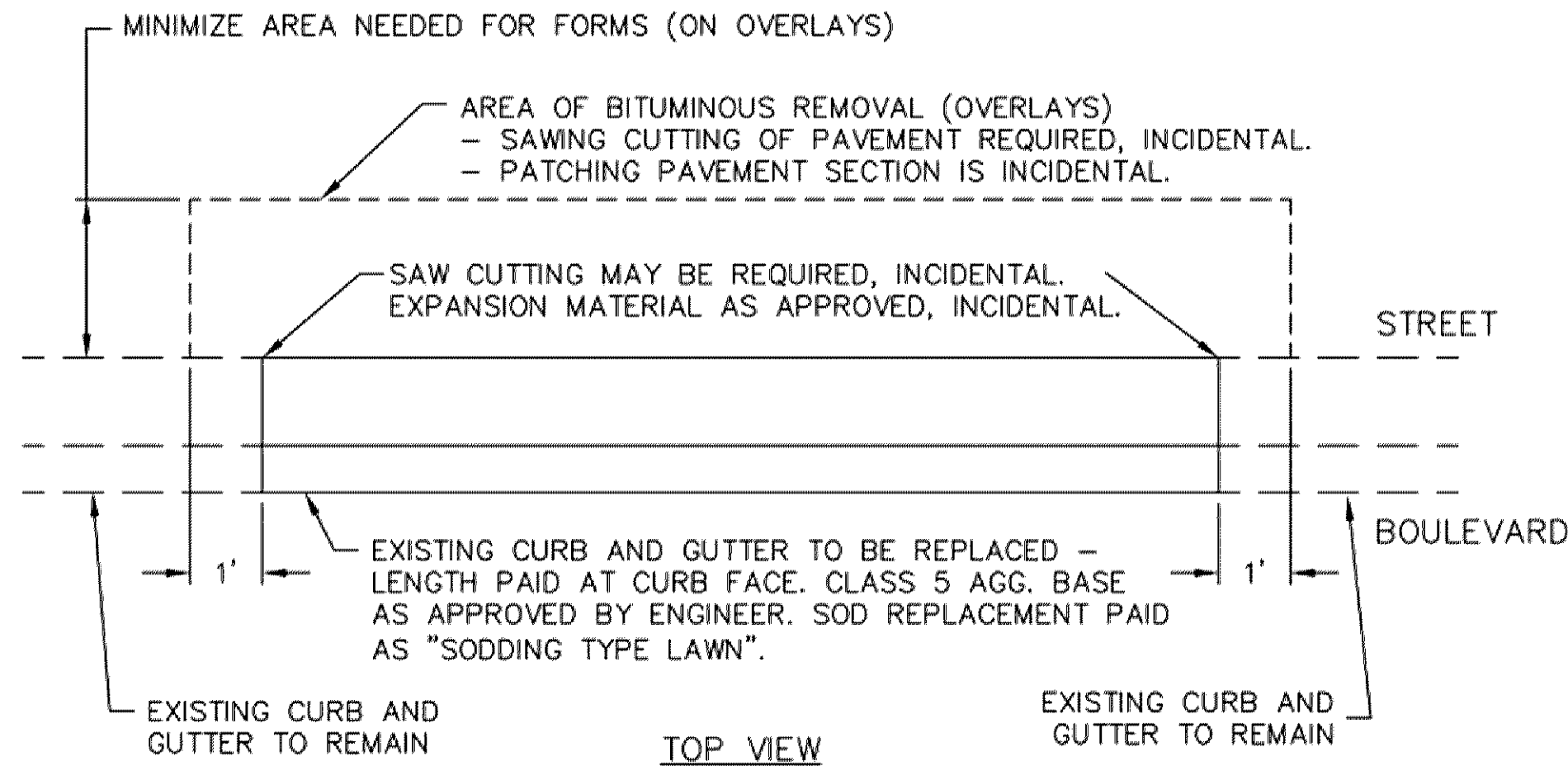


TYPICAL SIDEWALK INSTALLATION
TYP_CONC_WALK.dwg 11/2012



TYPICAL MOUNTING INSTALLATION
NTS

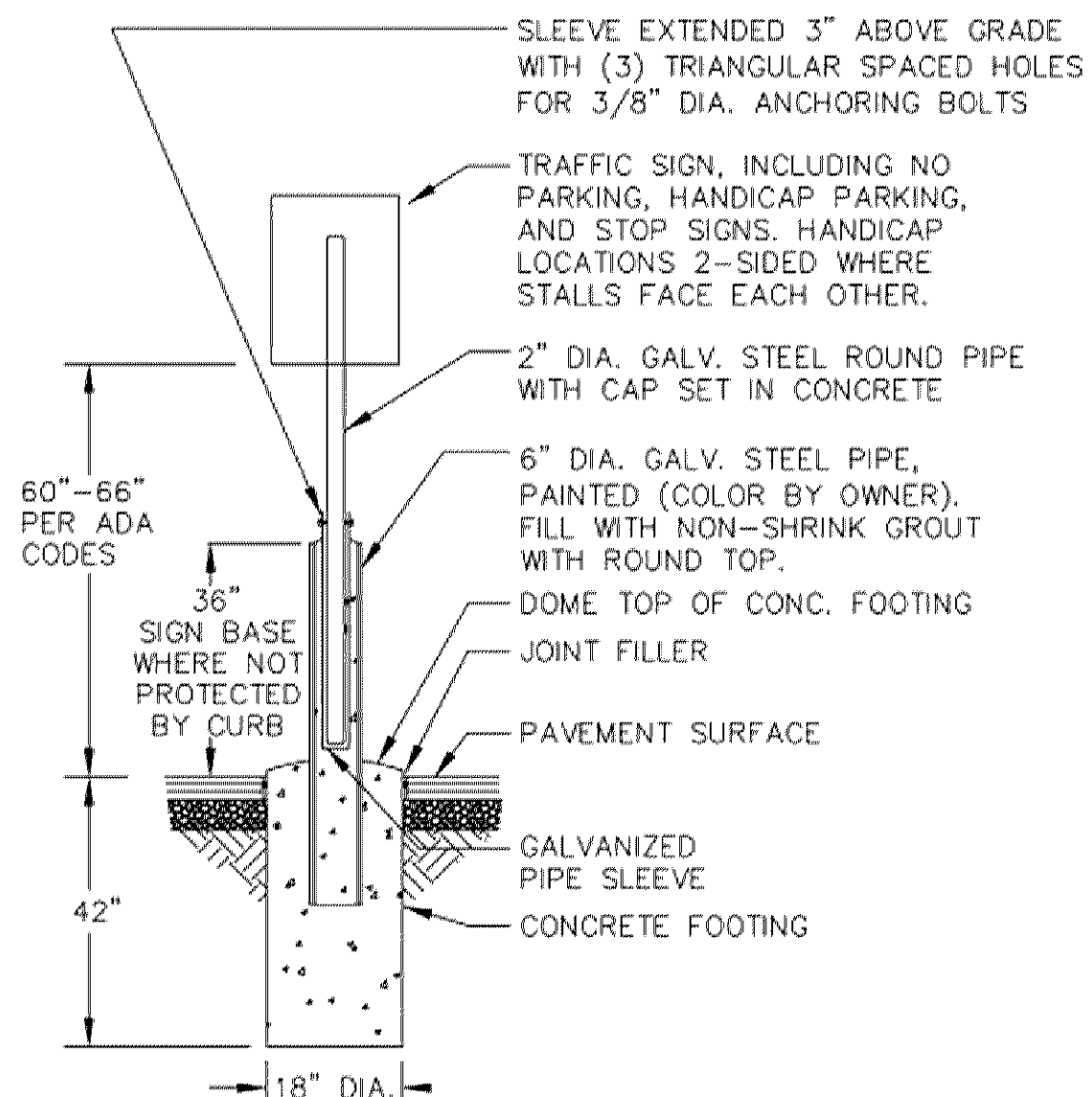
2"x2" SQUARE POST-MOUNTED SIGN



C&G REMOVAL AND REPLACEMENT
C&G_REM_REPLACE.dwg 4/2009

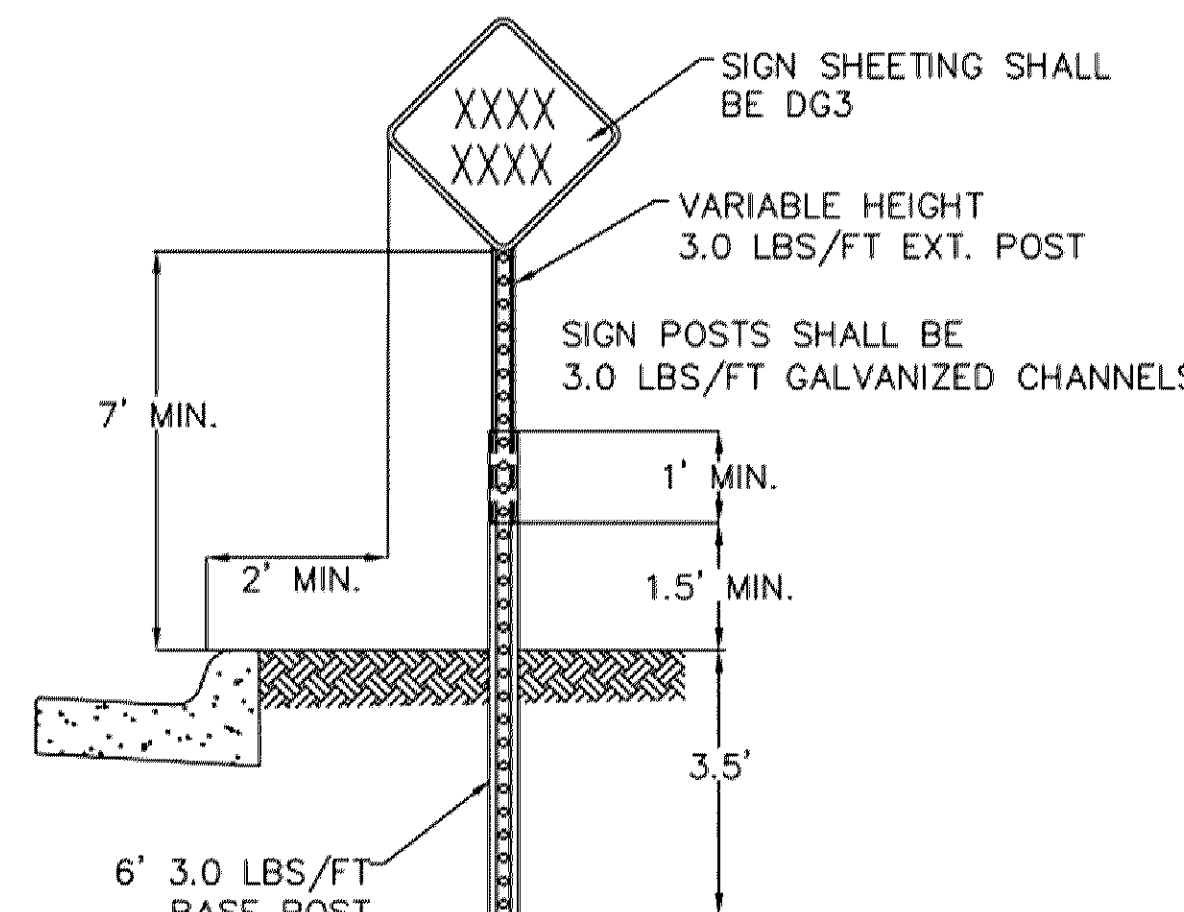


COLORS:
LEGEND AND BORDER - WHITE
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND - BLUE
REDUCE SPACING 50%
SEE APPENDIX "E" FOR SYMBOL PROPORTIONS
NOTE: DISABLED PARKING SIGNAGE MUST BE
PLACED IN ACCORDANCE WITH ADA AND MMUTCD.



HANDICAP SIGN WITH BOLLARD

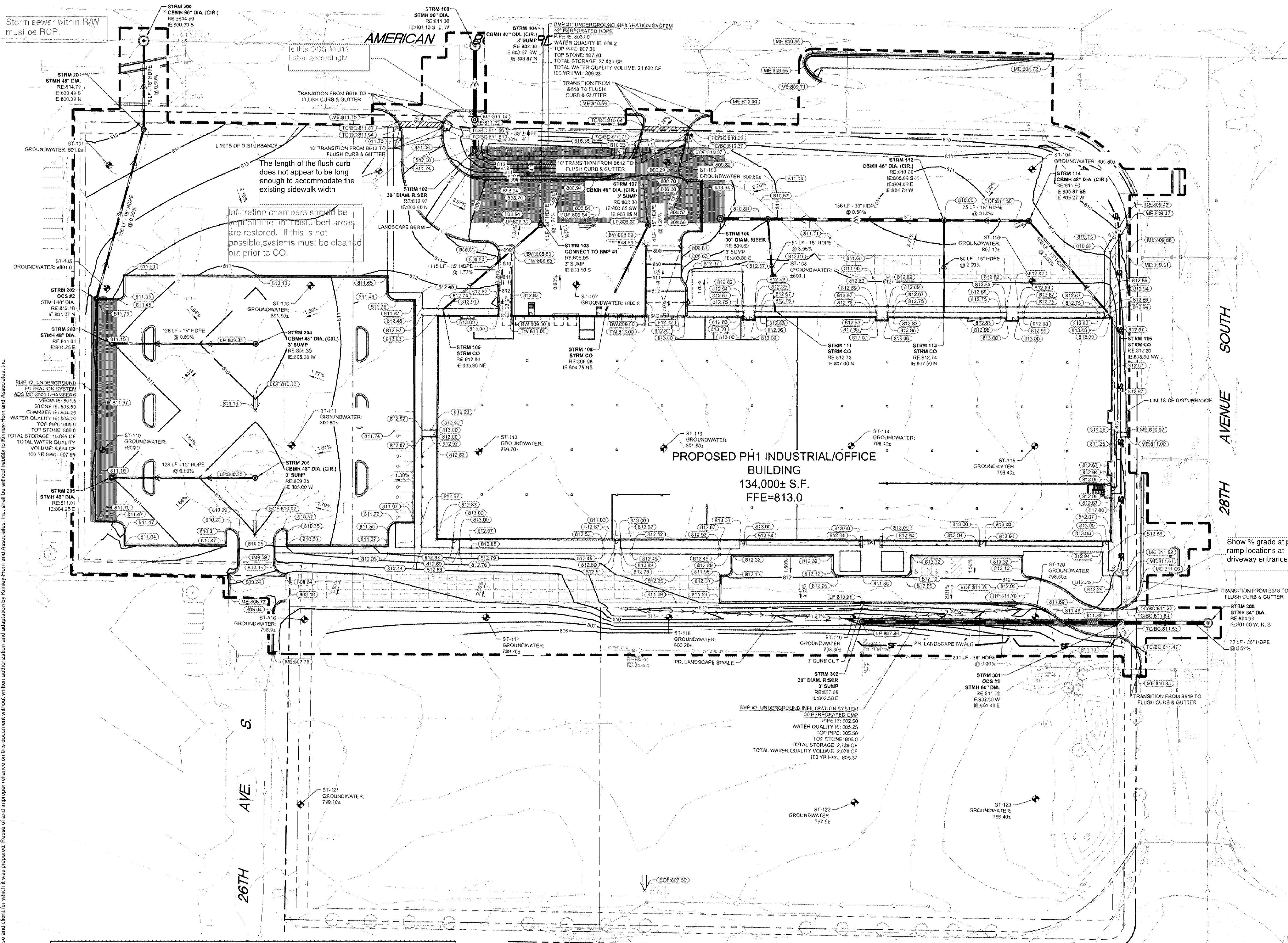
CROSSWALK DETAIL
NTS



NOTE:
ALL TRAFFIC CONTROL DEVICES, INSTALLATION
AND SIGNING SHALL CONFORM TO THE LATEST
VERSION OF THE MINNESOTA MANUAL ON
UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).

GROUND POST-MOUNTED SIGN
TYPICAL INSTALLATION
Sign_Ground_Mount.dwg 10/2012

Revisions		
No.	Date	Description



DRAINAGE SCHEDULE								
STRUCTURE NO.	STRUCTURE/CASTING TYPE	RIM/GRADE ELEVATION	INVERT ELEVATION IN	PIPE SIZE IN	PIPE SLOPE IN	INVERT ELEVATION OUT	PIPE SIZE OUT	PIPE SLOPE OUT
STRM 100	STMH 96" DIA.	811.36	S 801.13	36"	1.33%	N 802.00	36"	1.33%
STRM 101	OCB STMH 60" DIA.	807.73	S 803.80	36"	0.00%	N 802.00	36"	1.33%
STRM 102	30" DIAM. RISER	812.97				N 803.80	36"	0.00%
STRM 103	CONNECT TO BMP #1	805.98	S 803.80	24"	1.77%			
STRM 104	CBMH 48" DIA. (CIR.) 3" SUMP	808.30	SW 803.87	15"	1.77%	N 803.87	24"	1.77%
STRM 105	STRM CO	812.84				NE 805.90	15"	1.77%
STRM 106	CONNECT TO BMP #1	805.17	S 803.80	15"	1.26%			
STRM 107	CBMH 48" DIA. (CIR.) 3" SUMP	808.30	SW 803.85	15"	1.00%	N 803.85	15"	1.26%
STRM 108	STRM CO	808.98				NE 804.75	15"	1.08%
STRM 109	30" DIAM. RISER	809.62	E 803.80	30"	0.50%			
STRM 110	CBMH 48" DIA. (CIR.) 3" SUMP	810.83	E 804.01	30"	0.50%	W 804.01	30"	0.50%
STRM 111	STRM CO	812.73				N 807.00	15"	3.56%
STRM 112	CBMH 48" DIA. (CIR.)	810.00	S 803.89	15"	2.00%	W 804.79	30"	0.50%
STRM 113	STRM CO	812.74				N 807.50	15"	2.00%
STRM 114	CBMH 48" DIA. (CIR.)	811.50	SE 805.87	15"	2.00%	W 805.27	18"	0.50%
STRM 115	STRM CO	812.93				NW 808.00	15"	2.00%
STRM 200	CBMH 96" DIA. (CIR.)	801.56	S 800.00	18"	0.50%	N 800.39	18"	0.50%
STRM 201	STMH 48" DIA.	814.79	S 800.49	18"	0.50%	N 801.27	18"	0.50%
STRM 202	OCB STMH 48" DIA.	812.19				N 801.27	18"	0.50%
STRM 203	STMH 48" DIA.	811.01	E 804.25	15"	0.59%			
STRM 204	CBMH 48" DIA. (CIR.) 3" SUMP	809.35				W 805.00	15"	0.59%
STRM 205	STMH 48" DIA.	811.01	E 804.25	15"	0.59%			
STRM 206	CBMH 48" DIA. (CIR.) 3" SUMP	809.35				W 805.00	15"	0.59%
STRM 300	STMH 84" DIA.	804.93	W 801.00	36"	0.82%			
STRM 301	STMH 60" DIA.	811.22	W 802.30	36"	0.80%	E 801.40	36"	0.82%
STRM 302	30" DIAM. RISER	807.86				E 802.50	36"	0.80%

LEGEND

---	PROPERTY LINE
---	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 CLEANOUT
---	PROPOSED FLARED END SECTION
---	PROPOSED RIPRAP
---	PROPOSED STORM SEWER
---	EXISTING STORM SEWER
---	EXISTING STORM MANHOLE / STORM CATCHBASIN / SANITARY MANHOLE
---	EXISTING STORM CATCHBASIN (ON CURB)
---	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
---	RETAINING WALL
---	PROPOSED CURB AND GUTTER
---	PROPOSED OUTFALL CURB AND GUTTER
---	PROPOSED LANDSCAPE SWALE

GRADING PLAN NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BLOOMINGTON, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
- CONTRACTOR TO CALL SUPERVISOR CALL ONE (800) 362-1186 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
- STORM SEWER PIPE SHALL BE AS FOLLOWS:
RIP PER ASTM C-76
HOPE 12" OR GREATER PER ASTM F-2308
PVC SCH 40 PER ASTM D-3034
STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
RIP PER ASTM C-76 JOINTS PER ASTM C-881 C-980 AND C-443
HOPE PER ASTM D-3212
PVC PER ASTM D-3034 JOINTS PER ASTM D-3212
- CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF 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 SCHEDULE.
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES WITH PROVIDE POSITIVE DRAINAGE.
- INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER.
- 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 4" OF TOPSOIL.
- ALL SPOT ELEVATIONS/CONTOURS ARE TO FINISHED GRADE UNLESS OTHERWISE NOTED.
- ALL SPOT ELEVATIONS ARE TO FLOW LINE UNLESS OTHERWISE NOTED.
- GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATEMENTAL STANDARDS. SLOPES SHALL NOT EXCEED 2% LONGITUDINAL OR EXCEED 7% CROSS SLOPE. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION.
- "MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
- CONTRACTOR TO PROVIDE 3" INSULATION BY 9" WIDE CENTERED ON STORM PIPE IF LESS THAN 4" OF COVER IN PAVEMENT AREAS AND LESS THAN 3" OF COVER IN LANDSCAPE AREAS.
- HOPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING ALOR OR WATERTOP 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.



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BRANDON R. ELEGERT, P.E.
DATE: XXXX/XXXX/XX UN: XXXXX LIC. NO. XXXXX

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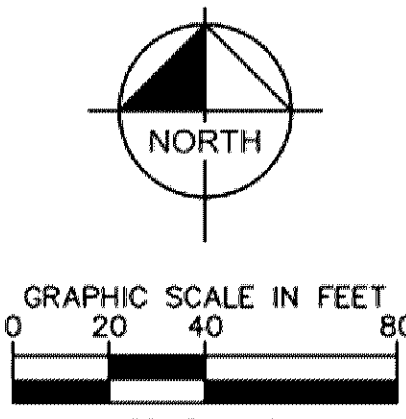
Revisions		
No.	Date	Description

Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / AIC: LC06E
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

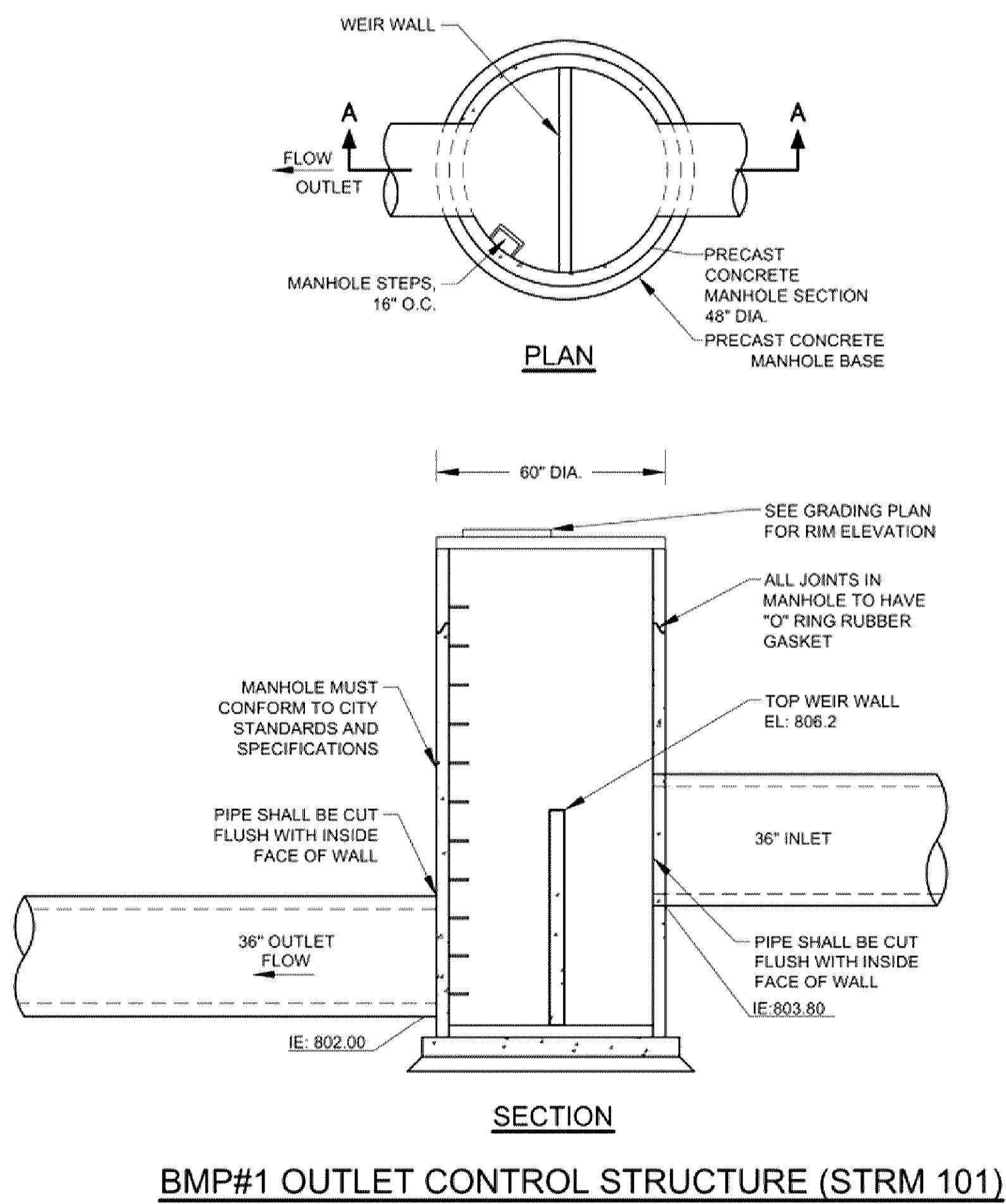
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GRADING AND DRAINAGE PLAN

Sheet Number
C500

Current Revision



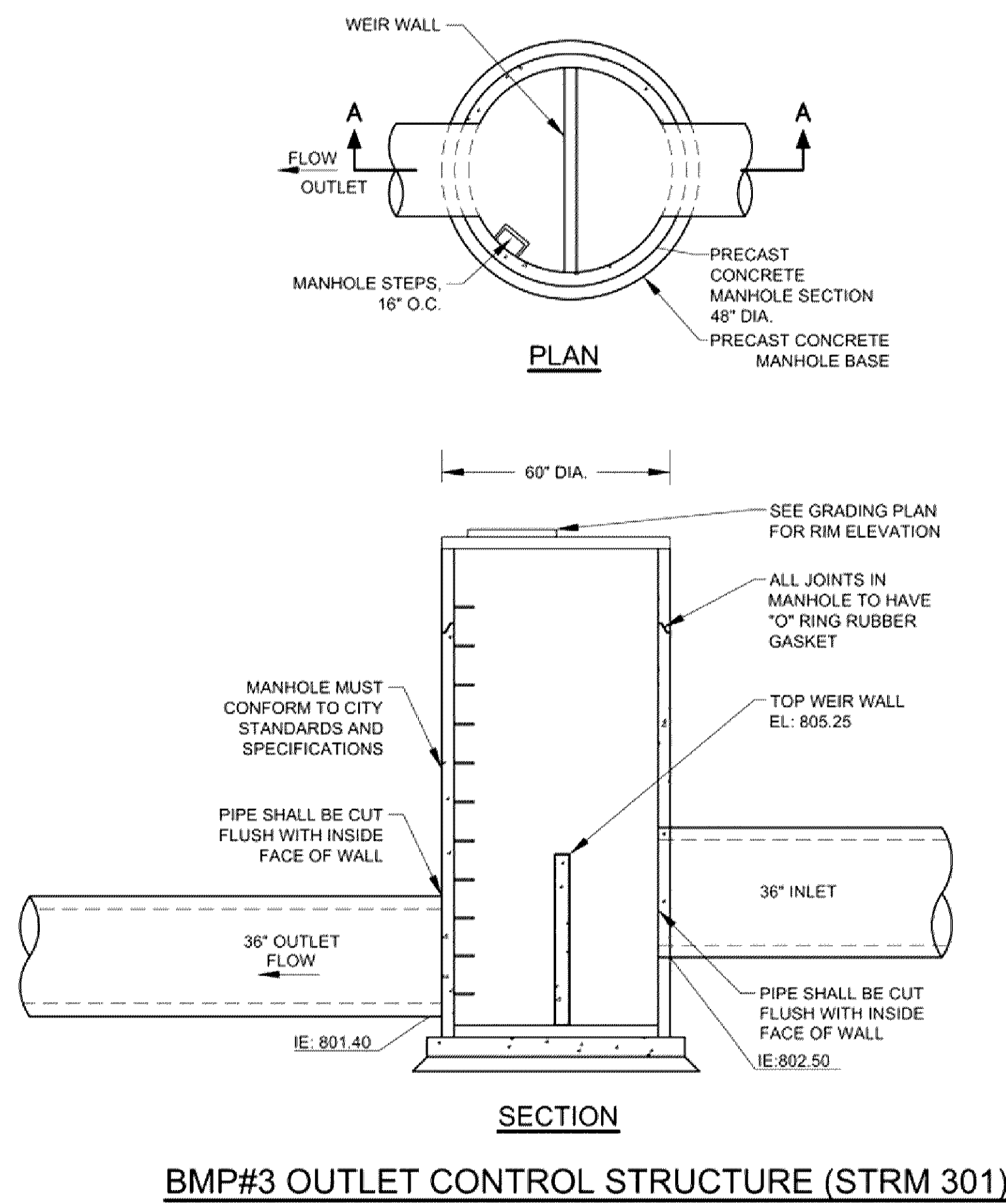
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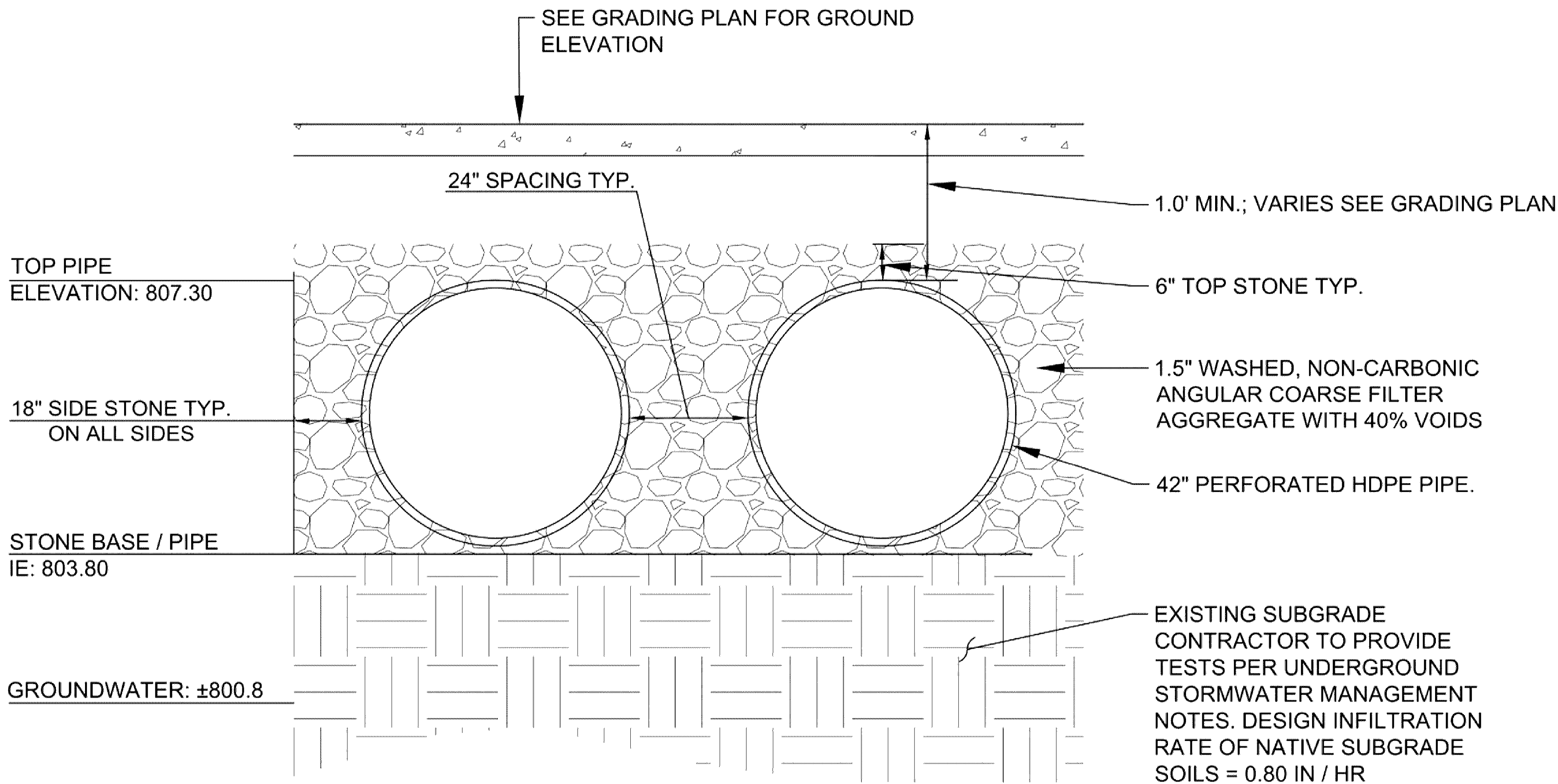
BMP#1 OUTLET CONTROL STRUCTURE (STRM 101)

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 PROVIDE THE RESULTS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE UNDERGROUND SYSTEM.
- CONTRACTOR SHALL OVER-EXCAVATE ALL FILL AS NECESSARY TO NATIVE POORLY GRADED SANDY SOILS. EXCAVATION SHALL BE REPLACED WITH SUITABLE ENGINEERED FILL MEETING THE MNDOT SPECIFICATION FOR COARSE FILTER AGGREGATE PER SECTION 3149.2H. DEPTHS OF FILL/URBAN FILL EXPECTED TO VARY. CONTRACTOR SHALL VERIFY DEPTHS OF EXCAVATION AND PERFORM INFILTROMETER TESTS PRIOR TO INSTALLING UNDERGROUND SYSTEM.
- IF NATIVE SUBGRADE SOILS BELOW FILL ARE DETERMINED TO NOT BE CONDUIVE TO THE DESIGN INFILTRATION REQUIREMENTS, 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.
- 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 BMP'S 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 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.



BMP#3 OUTLET CONTROL STRUCTURE (STRM 301)

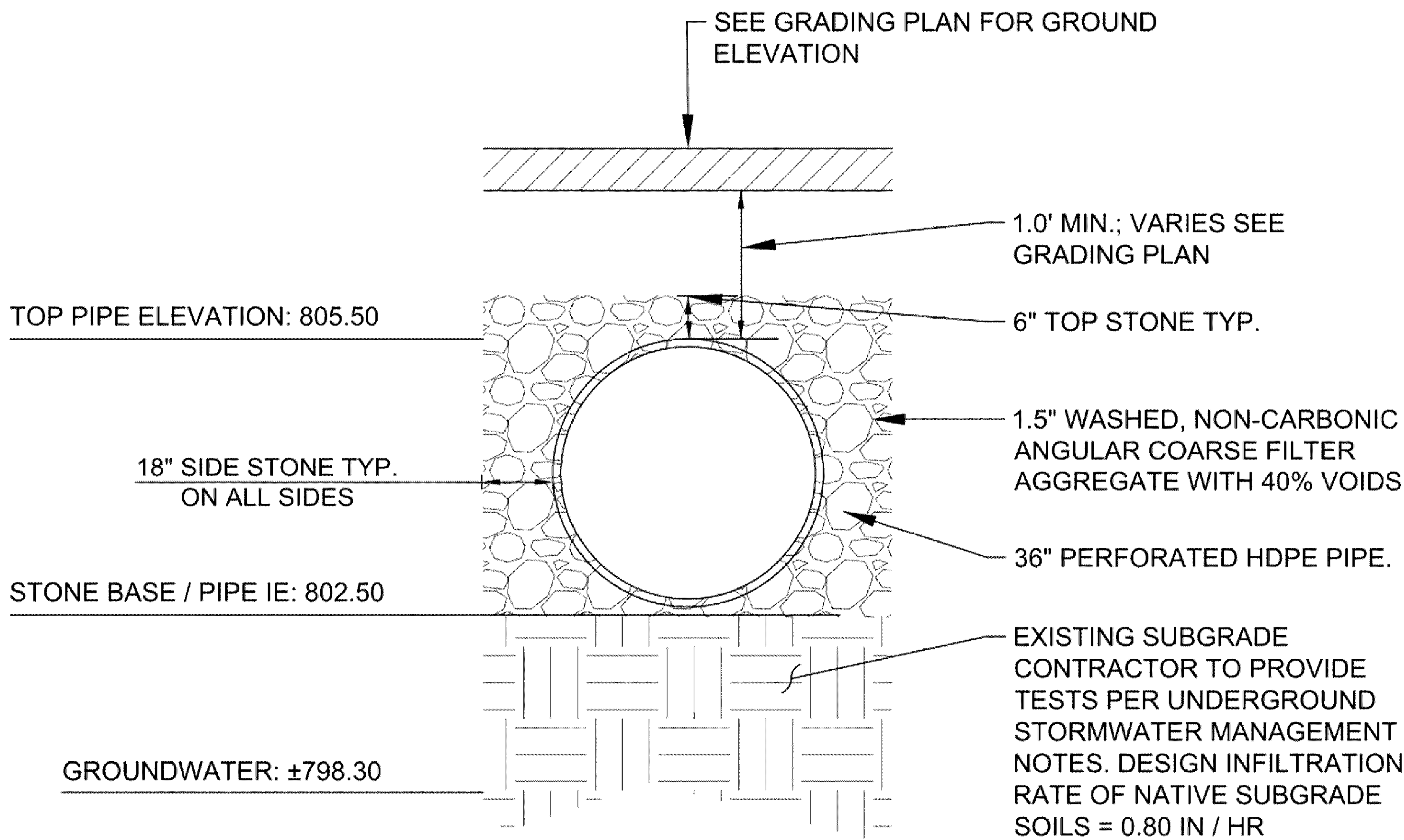


BMP #1

UNDERGROUND INFILTRATION SYSTEM DETAILS NOT TO SCALE

NOTES:

- ALL HDPE CONNECTIONS SHALL BE MADE WITH WATERTIGHT MATERIALS.
- THE CONTRACTOR SHALL TAKE CARE TO PREVENT SEDIMENT AND DEBRIS FROM CLOGGING THE PORE SPACE IN THE COARSE FILTER AGGREGATE.

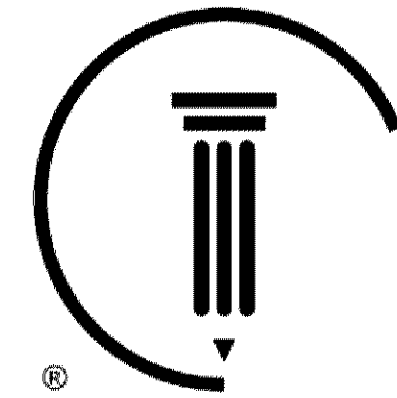


BMP #3

UNDERGROUND INFILTRATION SYSTEM DETAILS NOT TO SCALE

NOTES:

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- THE CONTRACTOR SHALL TAKE CARE TO PREVENT SEDIMENT AND DEBRIS FROM CLOGGING THE PORE SPACE IN THE COARSE FILTER AGGREGATE.



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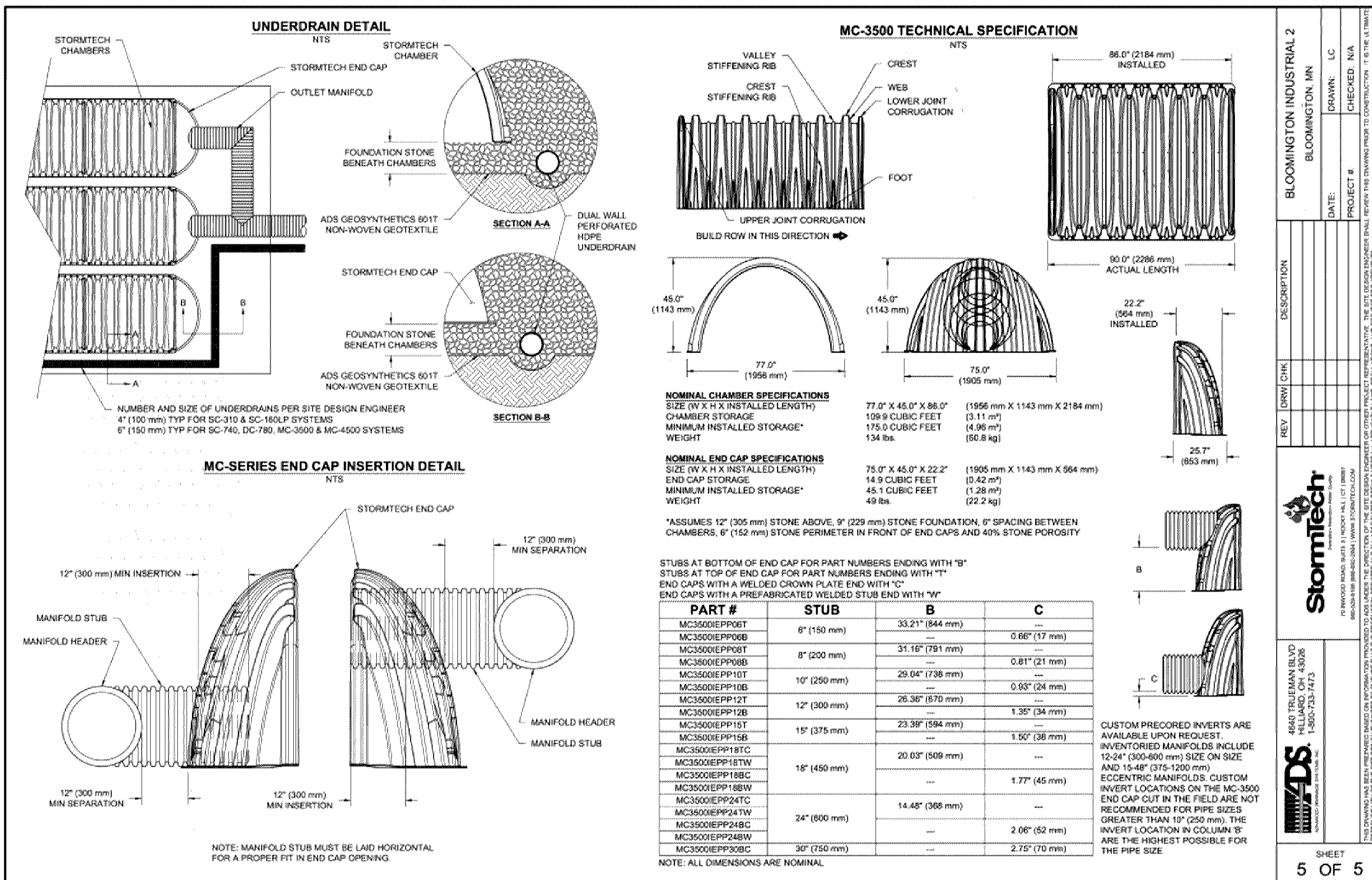
Revisions		
No.	Date	Description

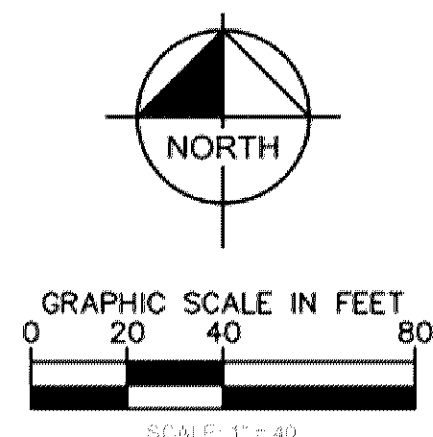
Project Information
Phase: Development Application Date: 01/15/2020
KHA Project No: 160687009 PIC / A/C: LC/BE
SICK TECHNOLOGY CAMPUS
PREPARED FOR
SICK

Sheet Title
GRADING AND DRAINAGE
DETAILS

Sheet Number
C501

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[illegible]

- 1 ALL FILT. MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- 2 SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
 - a. 12" PVC SDR35, SCHEDULE 40, OR EQUIVALENT PER ASTM D3034
 - b. 18" PVC SDR35, SCHEDULE 40, OR EQUIVALENT PER ASTM D3034
 - c. 24" PVC SDR35, SCHEDULE 40, OR EQUIVALENT PER ASTM D3034
 - d. DUCTILE IRON PIPE PER AWWA C100
- 3 WATER LINES SHALL BE AS FOLLOWS:
 - a. 6" LARGER DUCTILE IRON PIPE PER AWWA C100
 - b. 12" AND SMALLER USE CLASS 200
- 4 A MINIMUM OF 1/4" POLYURETHANE IS REQUIRED ON ALL DIP
- 5 MINIMUM TRENCH WIDTH SHALL BE 3' FEET
- 6 ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS
- 7 ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING: 18" VERTICAL CLEARANCE OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE.
- 8 CONTRACTOR SHALL MAINTAIN A MINIMUM OF 6" COVER ON ALL WATER LINES
- 9 IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, AND SEWER LINES, THE SEWER LINES AND SANITARY LINES SHALL BE DEPTHER. THE SANITARY LINE SHALL BE 30", 40" OR 60" WITH MECHANICAL JOINTS AT LEAST 1" SPACING ON BOTH SIDES OF THE SEWER LINE. THE WATER LINES SHALL BE 12" TO 24" WITH MECHANICAL JOINTS WITH THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 1" CLEARANCE. MEETING REQUIREMENTS FOR ALL JOINTS AND ANSI 21 AND ANSI 211 (CLASS 500)
- 10 LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING
- 11 TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATION IN GRADE AREAS, WITH WATERFLOOD ZONE
- 12 ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 20 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- 13 EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES
- 14 REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- 15 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION ANDOR ELEVATION OF EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO ANY WORK ON OR CROSSING OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD SHALL BE USED TO CORROBORATE ANY INFORMATION RECEIVED FROM THE CONTRACTOR. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXCAVATION FIELD LOCATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 16 CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS ANDOR CELEBRATIONS REQUIRED BY ANY UTILITY SERVICE COMPANIES.
- 17 CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS
- 18 REFER TO BUILDING PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN
- 19 BACKFILL DEVICES (DDV AND PR2 ASSEMBLIES) MUST BE LOCATED IN THE INTERIOR OF THE BUILDING, REFER ARCH. PLANS
- 20 CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL GOVERNMENT REGULATIONS REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES
- 21 ALL ONSITE WATERMAIN AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED
- 22 WATER MAIN SUBSTUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING
- 23 HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN A-LOCK OR WATERSTOP GASKET OR BOOT. CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUIV.
- 24 TAPS OR FIVE WAY MANS ARE DONE BY CITY FORCES AND PAID FOR BY THE CITY COORDINATED WITH LIONEL CITY UTILITY SERVICE COMPANIES
- 25 WATER AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL UTILITY AND WATER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY WATER MAIN TAPPING
- 26 ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTED INTERNAL JOINTS MEETING CURRENTLY APPLICABLE STANDARDS FOR FIRE PROTECTION. WELDED JOINTS OR SPECIAL COUPLERS, THE USE OF UNLINED OR UNCOATED PIPE IS NOT ALLOWED
- 27 ALL USED WATER SERVICES MUST BE PROPERLY ABANDONED AT THE MAIN. ALL UNUSED SANITARY SERVICE SERVICES MUST BE PROPERLY ABANDONED AT THE PROPERTY LINE
- 28 UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. CONTACT CITY OF BLOOMINGTON UTILITIES DIVISION (562-953-8677) FOR PERMITTING
- 29 RESTORE UTILITY TRENCHES PER STANDARDS LISTED IN ARTICLE 5, CH 1 OF THE BLOOMINGTON CITY CODE (SEE UTILITY DETAILS)
- 30 INTERIOR CHIMNEY SALS SHALL BE INSTALLED ON ALL SANITARY MANHOLES

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.

BRANDON R. ELEGERT, P.E.

DATE:	XX/XX/XXXX	MN LIC. NO.	XXXXX
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Revisions		
No.	Date	Description

Project Information

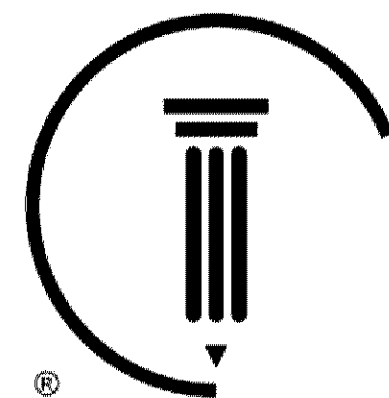
Phase: Development Application Date: 01/15/2020
KHA Project No.: 160687009 PIC / A/C: LC/BE

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SICK

Sheet Title
UTILITY PLAN

Sheet Number Current Revision

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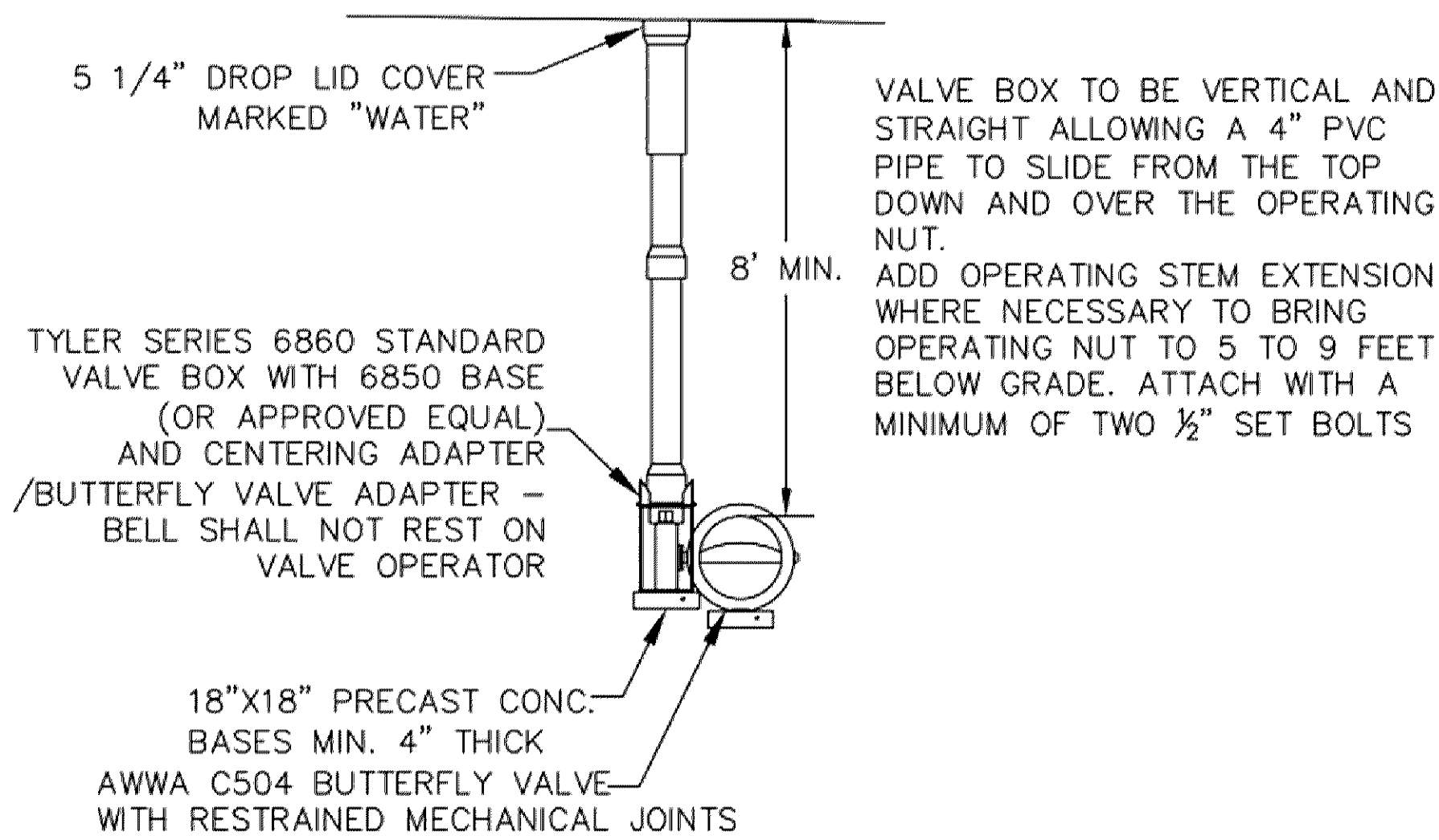
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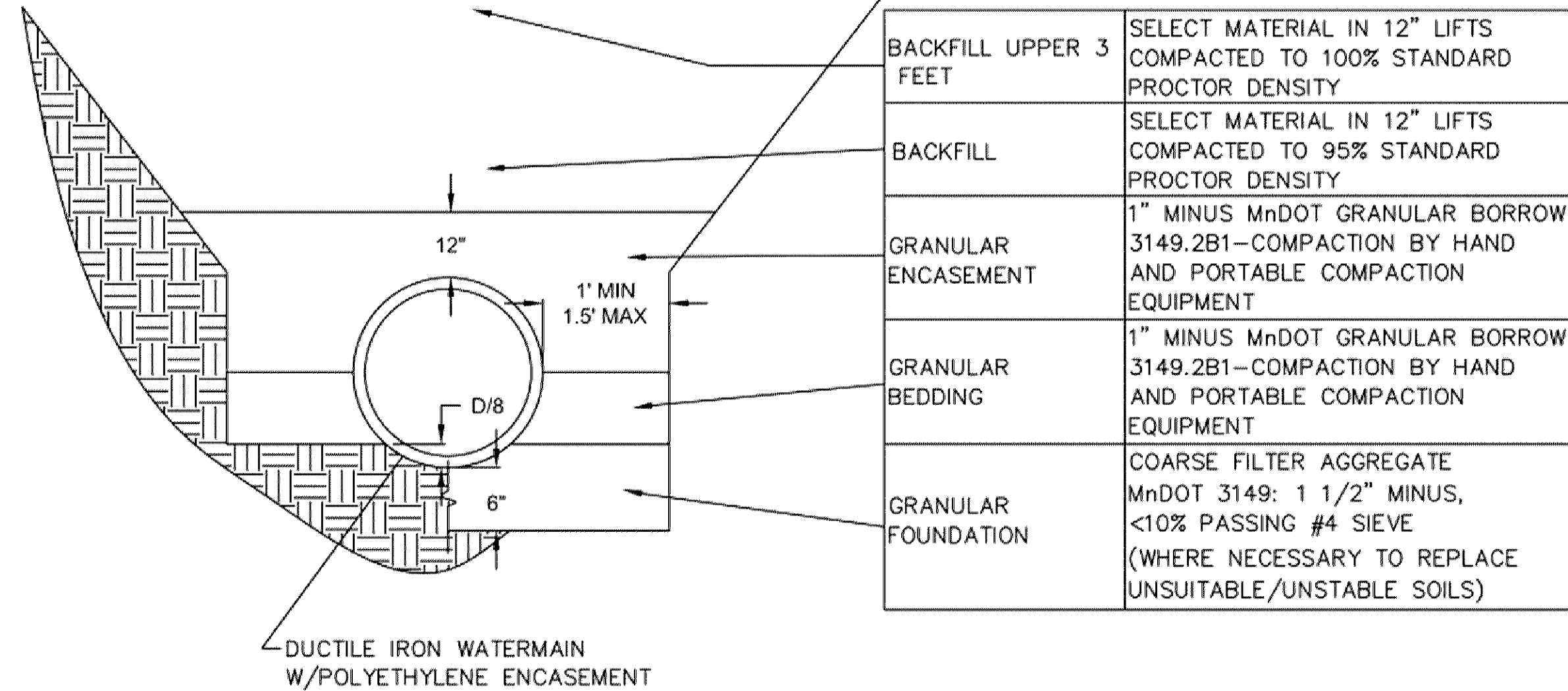
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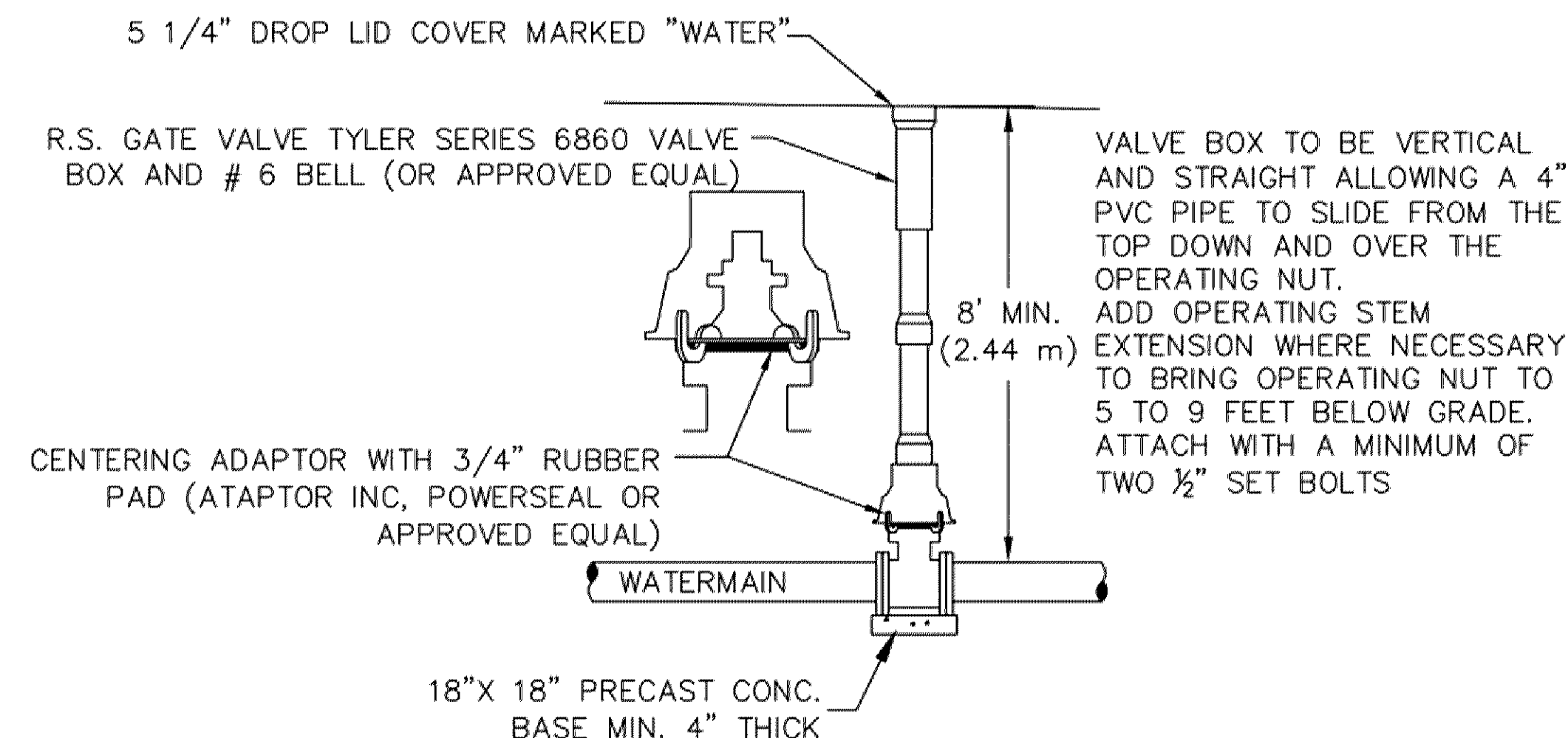
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This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Review of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



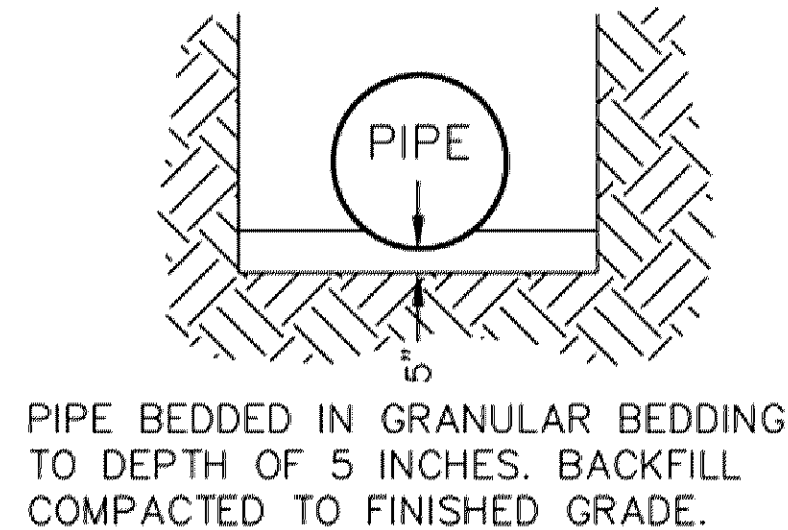
TYPICAL BUTTERFLY VALVE INSTALLATION
BUTTERFLY_VALVE.dwg 1/2015



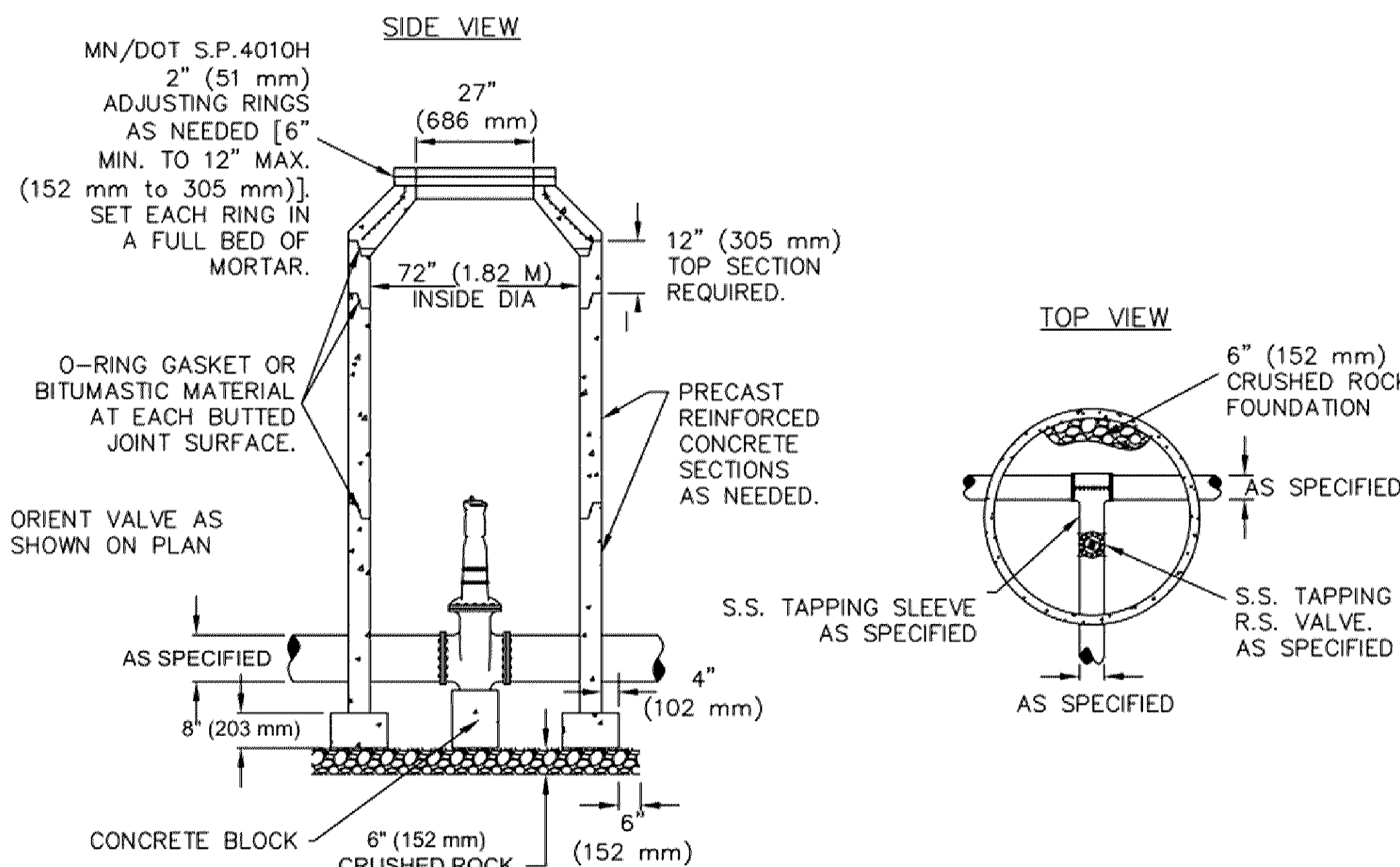
TYPICAL WATER MAIN INSTALLATION DETAIL
WATERMAIN_INST.DWG 11/2012



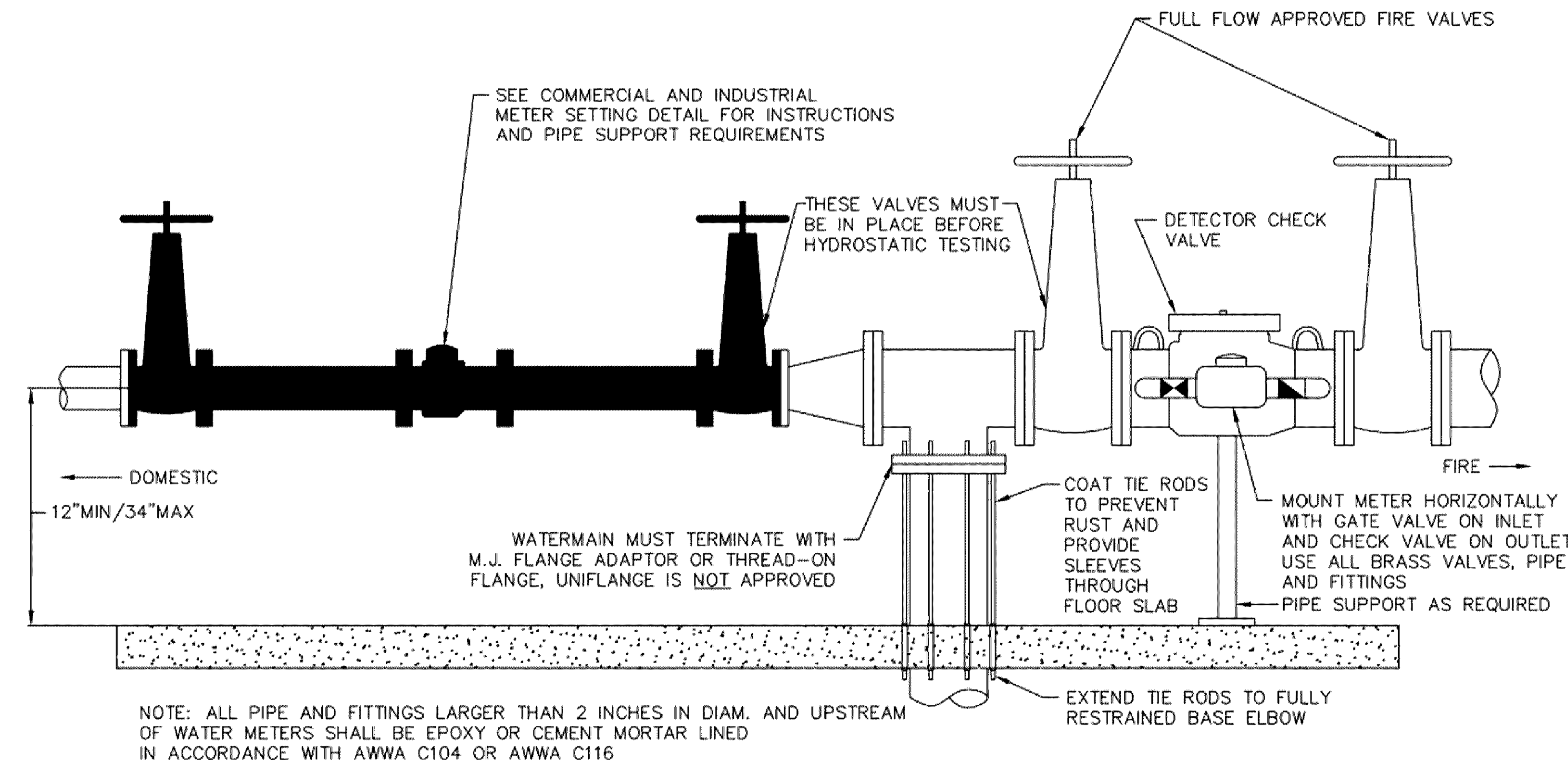
TYPICAL VALVE INSTALLATION
VALVE.dwg 1/2015



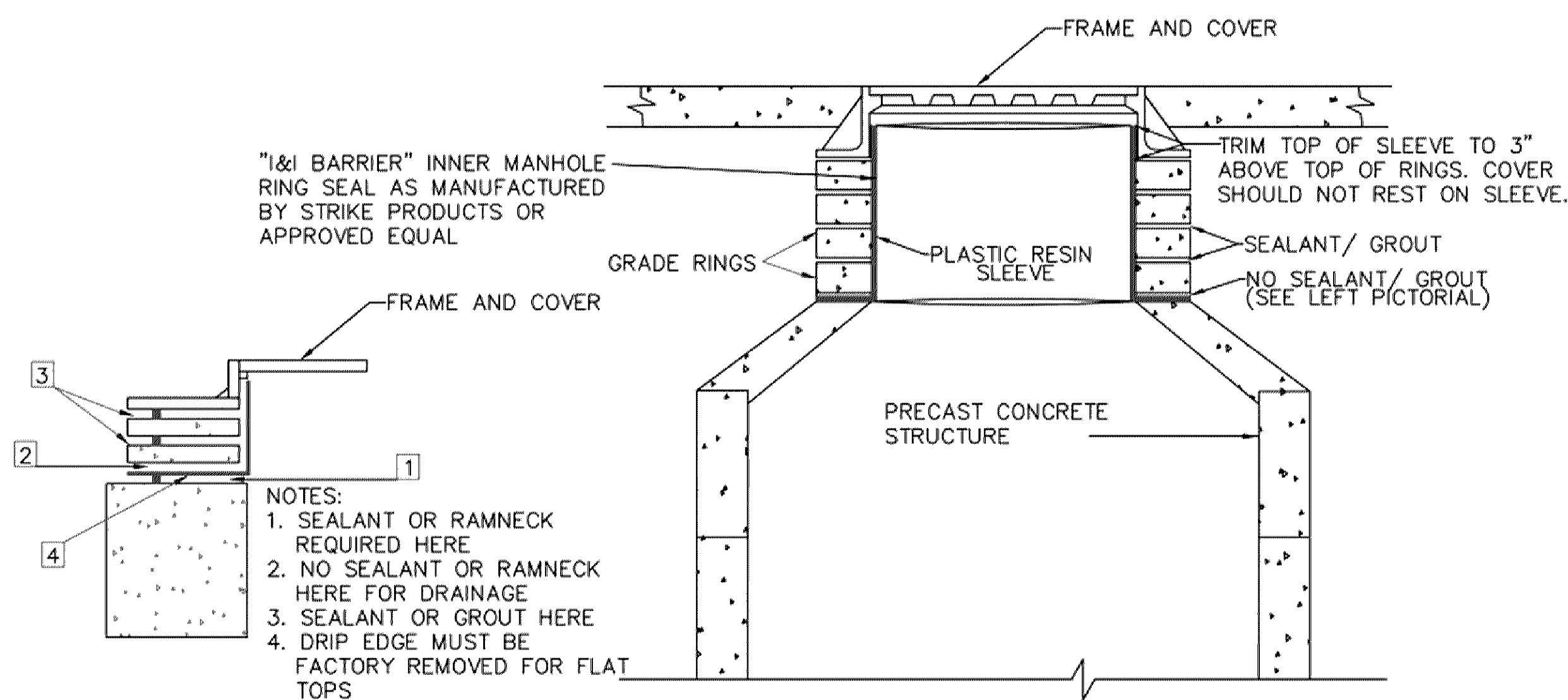
PIPE BEDDING DETAIL
PIPE-BED.DWG 4/2009



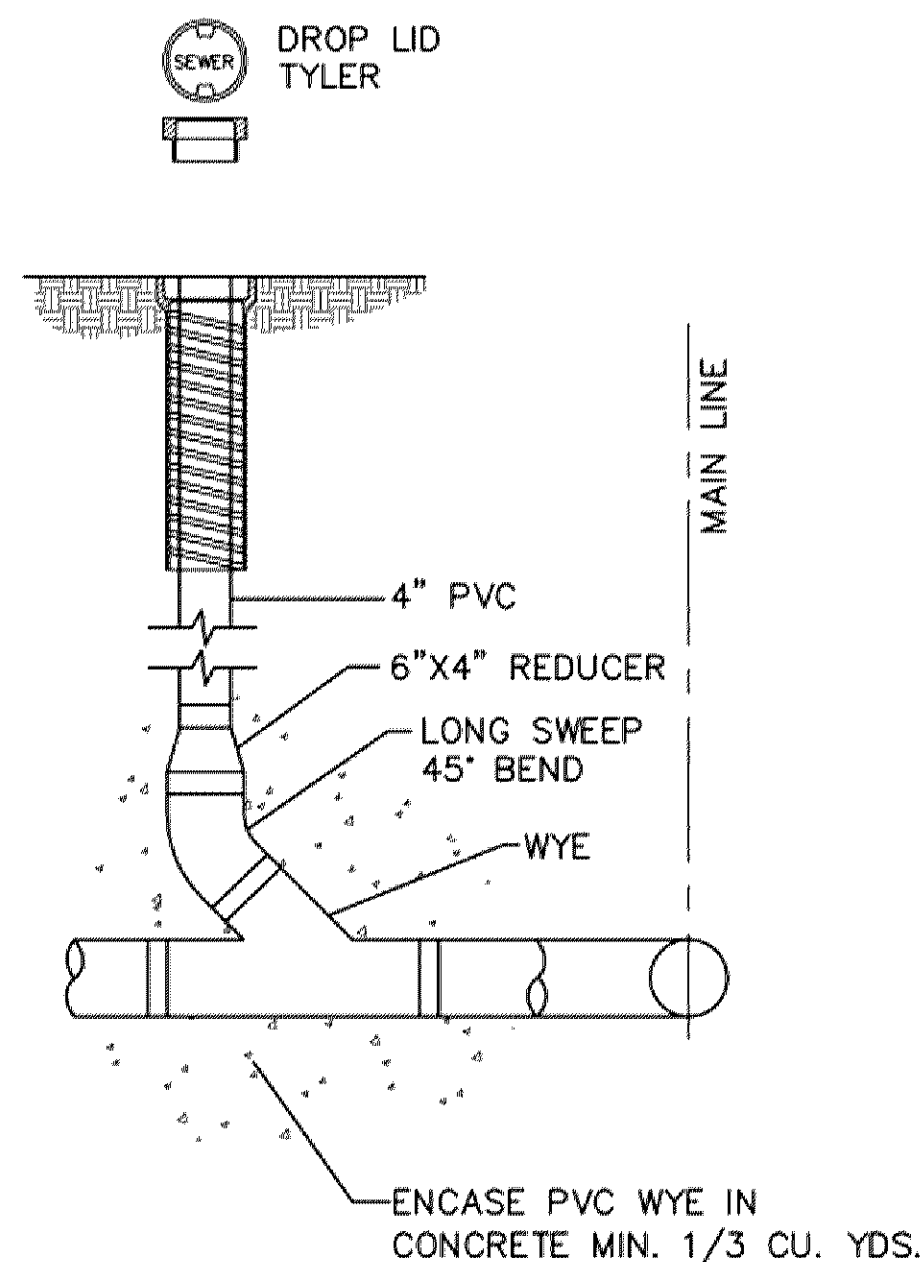
STANDARD TEE/VALVE MANHOLE
VALVE-T_MH.dwg 5/2013



TYPICAL DOMESTIC AND FIRE SERVICE
FIRE-DOMEST SERV.dwg 1/2015



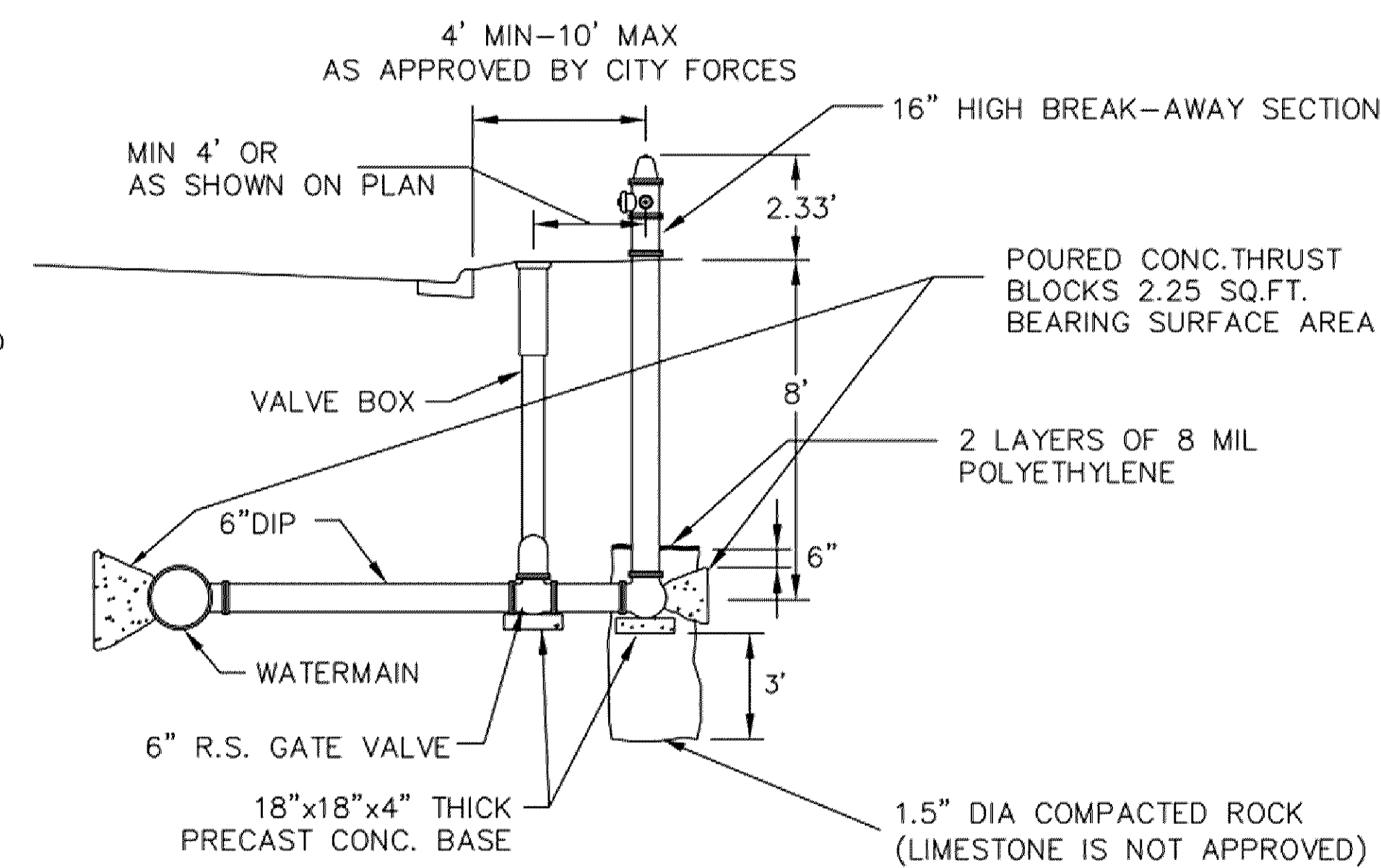
INTERNAL CHIMNEY SEAL
Internal Chimney Seal.dwg 1/2015



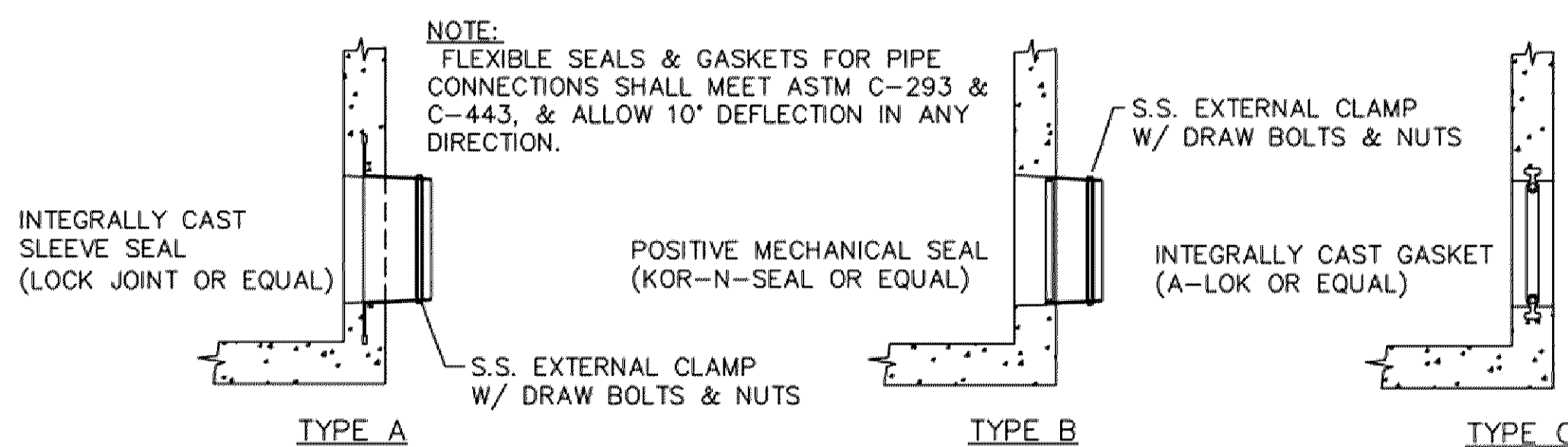
NOTES:
G.V. BOX TOP SECTION WITH DROP LID (SEWER)
ENCLOSE LONG SWEEP BEND OR COMBINATION
WYE IN CONCRETE AS SHOWN.

SANITARY SEWER CLEANOUT

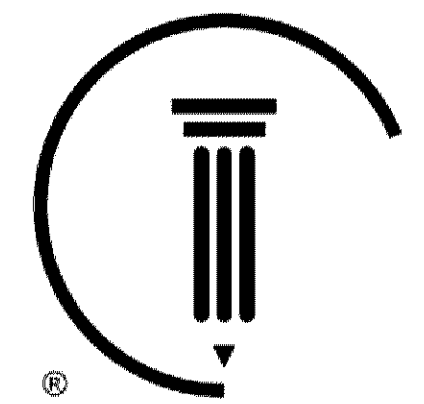
- HYDRANT TO BE:
 - WATEROUS PACER CLASSIC.
 - MUELLER SUPERCENTURION 250 MODEL A-423.
 - OR APPROVED EQUAL.
- EQUIP WITH THREE HOSE NOZZLES/CONNECTIONS AS FOLLOWS:
 - ONE - FACTORY INSTALLED 5 INCH STORZ PUMPER NOZZLE/CONNECTOR, INCLUDING A MANUFACTURER SUPPLIED AND INSTALLED ANODIZED ALUMINUM NOZZLE CAP WITH A 1.5 INCH PENTAGON NUT AND NO ROCKER LUG.
 - TWO - 2.5 INCH HOSE NOZZLES/CONNECTIONS (WITH NATIONAL STANDARD THREADS) AND STANDARD NOZZLE CAPS WITH 1.5 INCH PENTAGON NUTS, AND NO ROCKER LUGS.
- USE SS NUTS AND BOLTS AS APPROVED BY THE ENGINEER.
- ALL EXPOSED WATERMAIN SHALL BE WRAPPED WITH POLYETHYLENE IN ACCORDANCE WITH AWWA C-105.
- BARREL TO BE BRIGHT RED.
- ALL VALVES TO OPEN COUNTER-CLOCKWISE.
- SEE TYPICAL VALVE INSTALLATION DETAIL FOR VALVE DETAILS.
- WATEROUS PACER CLASSIC HYDRANTS SHALL INCLUDE INSTALLATION OF THE MANUFACTURERS MOST CURRENT ANTI-CHATTER BRASS UPPER VALVE WASHER.



TYPICAL HYDRANT INSTALLATION
Hyd_instl.dwg 1/2015



WATER TIGHT PIPE CONNECTIONS
MH_PIPE_CON.dwg 4/2009



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