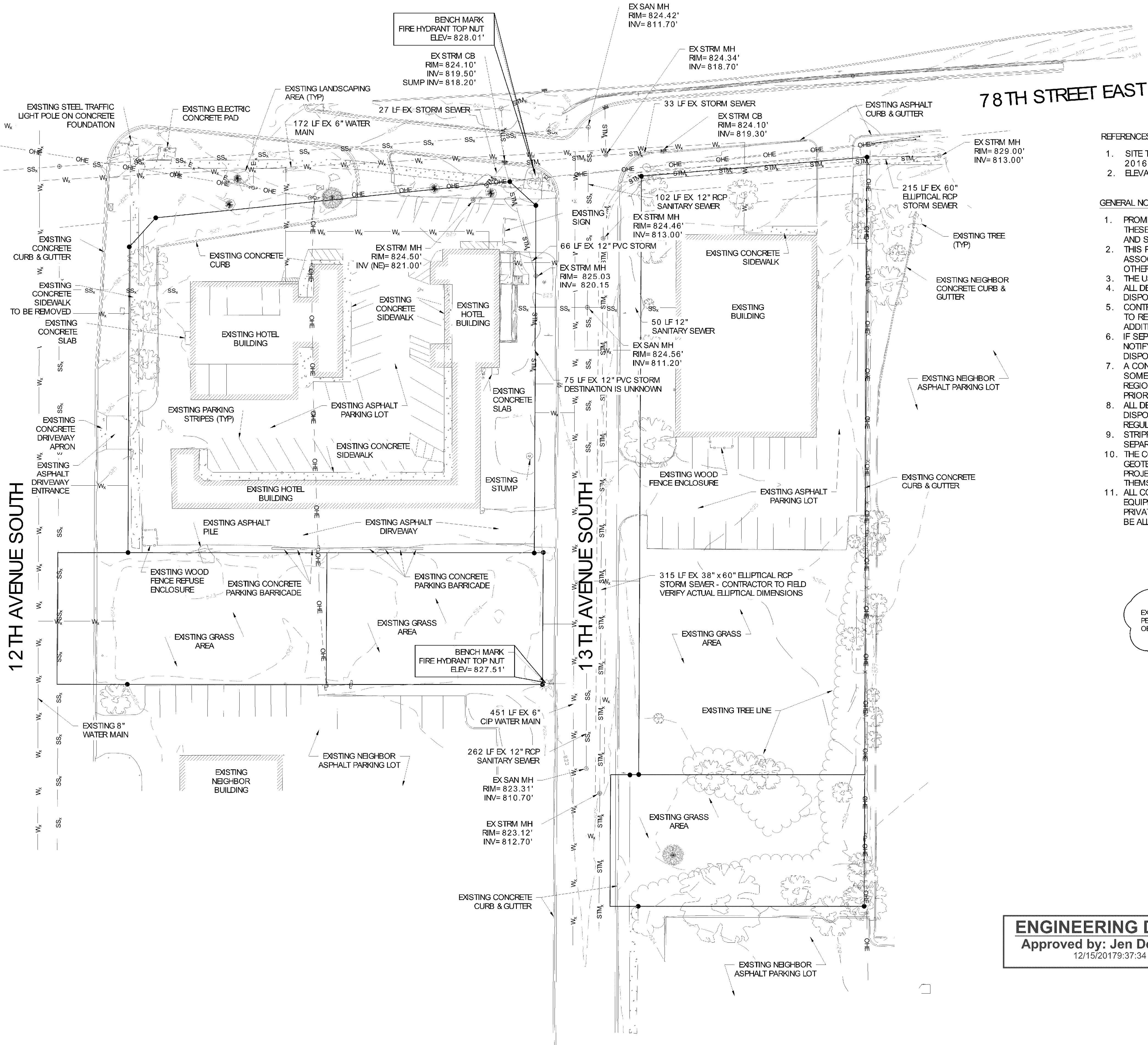


PL201700039



- REFERENCES
1. SITE TOPOGRAPHIC SURVEY COMPLETED BY BOHLEN SURVEYING & ASSOCIATES, 2016 & UPDATED IN 2017.
 2. ELEVATION CONTOURS ARE IN 1 FOOT INTERVALS.

- GENERAL NOTES
1. PROMPTLY INFORM THE ENGINEER OF ANY ERROR OR DISCREPANCY DISCOVERED IN THESE DRAWINGS OR SPECIFICATIONS OR CONFLICTS BETWEEN THE DRAWINGS AND SPECIFICATIONS IN ORDER THAT ADJUSTMENTS CAN BE MADE.
 2. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS AND/OR RIGHT-OF-WAYS ASSOCIATED WITH UTILITIES, ROADS, DRAINAGE AREAS, ETC. SHOWN OR OTHERWISE.
 3. THE USE OF EXPLOSIVES AS A DEMOLITION METHOD WILL NOT BE PERMITTED.
 4. ALL DEBRIS FROM CONCRETE REMOVAL TO BE TAKEN OFF SITE AND PROPERLY DISPOSED OF BY CONTRACTOR.
 5. CONTRACTOR TO REPAIR/REPLACE ANY PORTIONS OF EXISTING SIDEWALK INTENDED TO REMAIN, THAT SUSTAINS DAMAGE BY CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.
 6. IF SEPTIC TANK OR OTHER UNDERGROUND TANKS OR UTILITIES ARE ENCOUNTERED, NOTIFY ENGINEER OR OWNER, BEFORE REMOVAL. COMPLETELY REMOVE TANKS AND DISPOSE OFF SITE AND PROPERLY DISCONNECT AND SEAL ALL UTILITIES.
 7. A CONCERTED EFFORT TO LOCATE ALL EXISTING UTILITIES WAS MADE, HOWEVER, SOME EXISTING UTILITIES MAY NOT BE SHOWN. CONTRACTOR SHALL CONTACT REGIONAL AND LOCAL UTILITY COMPANIES FOR LOCATION OF EXISTING UTILITIES PRIOR TO ANY DEMOLITION AND OR EXCAVATION ACTIVITIES.
 8. ALL DEMOLITION DEBRIS, INCLUDING THAT FROM CLEARING ACTIVITIES TO BE DISPOSED OF OFF SITE SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
 9. STRIPPED TOPSOIL AND EXCAVATED FILL MATERIAL SHALL BE STOCKPILED SEPARATELY.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE MOST UP-TO-DATE GEOTECHNICAL REPORT COMPLETED BY RAMAKER & ASSOCIATES FOR THIS PROJECT. IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR FAMILIARIZE THEMSELVES WITH SAID REPORT.
 11. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.

EXISTING UTILITY SERVICE LOCATIONS UPDATED PER CITY OF BLOOMINGTON GIS INFORMATION OBTAINED IN NOVEMBER, 2017.

ENGINEERING DIVISION
Approved by: Jen Desrude, PE
12/15/2017 9:37:34 AM

- LEGEND
- EXISTING PROPERTY CORNER
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - EXISTING EASEMENT
 - STM EXISTING STORM SEWER
 - SS EXISTING SANITARY SEWER
 - W EXISTING WATERMAIN AND WATER SERVICE
 - E EXISTING BURIED ELECTRIC
 - OHE EXISTING OVERHEAD ELECTRIC
 - EXISTING EASEMENT
 - EXISTING LOT LINES

CITIES EDGE ARCHITECTS

103 Fifteenth Ave NW, Willmar, MN 56201
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Certification & Seal:
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.

JAMES R. SKOWRONSKI
REGISTERED PROFESSIONAL ENGINEER
No. 42202
Date: 11/16/2017
Signature: [Signature]
Type of Printed Name: [Printed Name]

5	11/17/17	ADDENDUM #07
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

DATE ISSUED: 06/07/2017
ISSUE PERMITTING
PHASE PROJECT TITLE

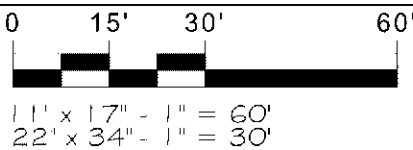
HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

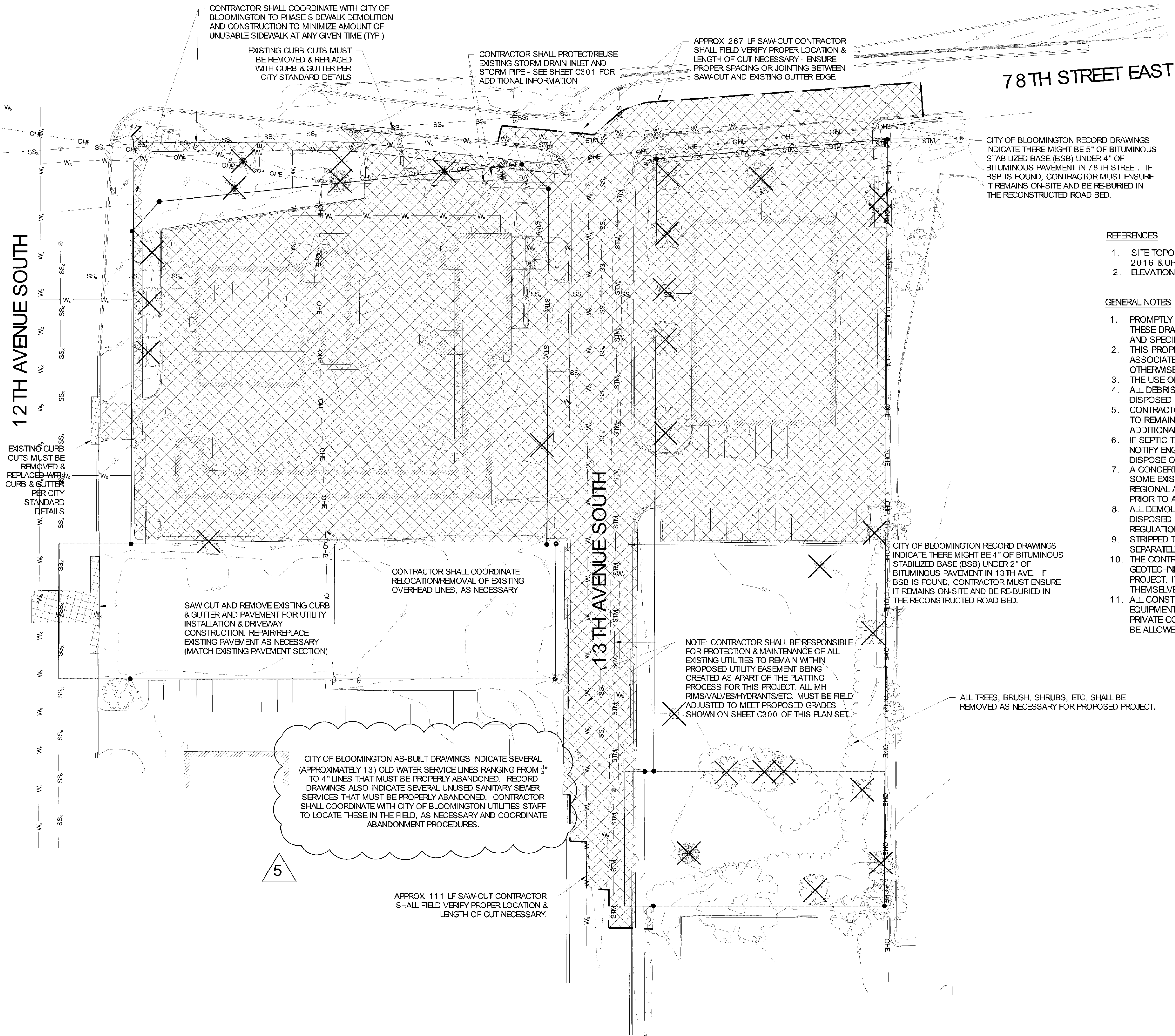
SHEET TITLE:

EXISTING CONDITIONS



PROJECT NUMBER: **33476**
SHEET NUMBER: **C100**

PL201700039



REFERENCES

1. SITE TOPOGRAPHIC SURVEY COMPLETED BY BOHLEN SURVEYING & ASSOCIATES, 2016 & UPDATED IN 2017.
2. ELEVATION CONTOURS ARE IN 1 FOOT INTERVALS.

GENERAL NOTES

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10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE MOST UP-TO-DATE GEOTECHNICAL REPORT COMPLETED BY RAMAKER & ASSOCIATES FOR THIS PROJECT. IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR FAMILIARIZE THEMSELVES WITH SAID REPORT.
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EXISTING UTILITY SERVICE LOCATIONS UPDATED PER CITY OF BLOOMINGTON GIS INFORMATION OBTAINED IN NOVEMBER, 2017.

5

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING INFRASTRUCTURE TO BE DEMOLISHED, EXCEPT AS NOTED
- EXISTING PROPERTY CORNER
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING BURIED ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING EASEMENT
- EXISTING LOT LINES

CITIES EDGE ARCHITECTS

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Certification & Seal:
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.



Signature: James R. Skowronski Date: 11/16/2017
Typed or Printed Name: JAMES R. SKOWRONSKI Registration Number: 42202

5	11/17/17	ADDENDUM #07
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

DATE ISSUED: 06/07/2017
ISSUE PHASE: PERMITTING
PROJECT TITLE:

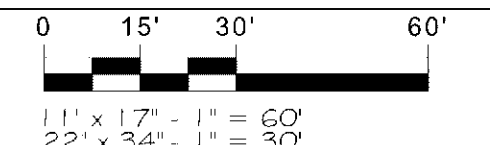
HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

DEMOLITION PLAN



PROJECT NUMBER: 33476
SHEET NUMBER: C101

PL201700039



Certification & Seal:
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.



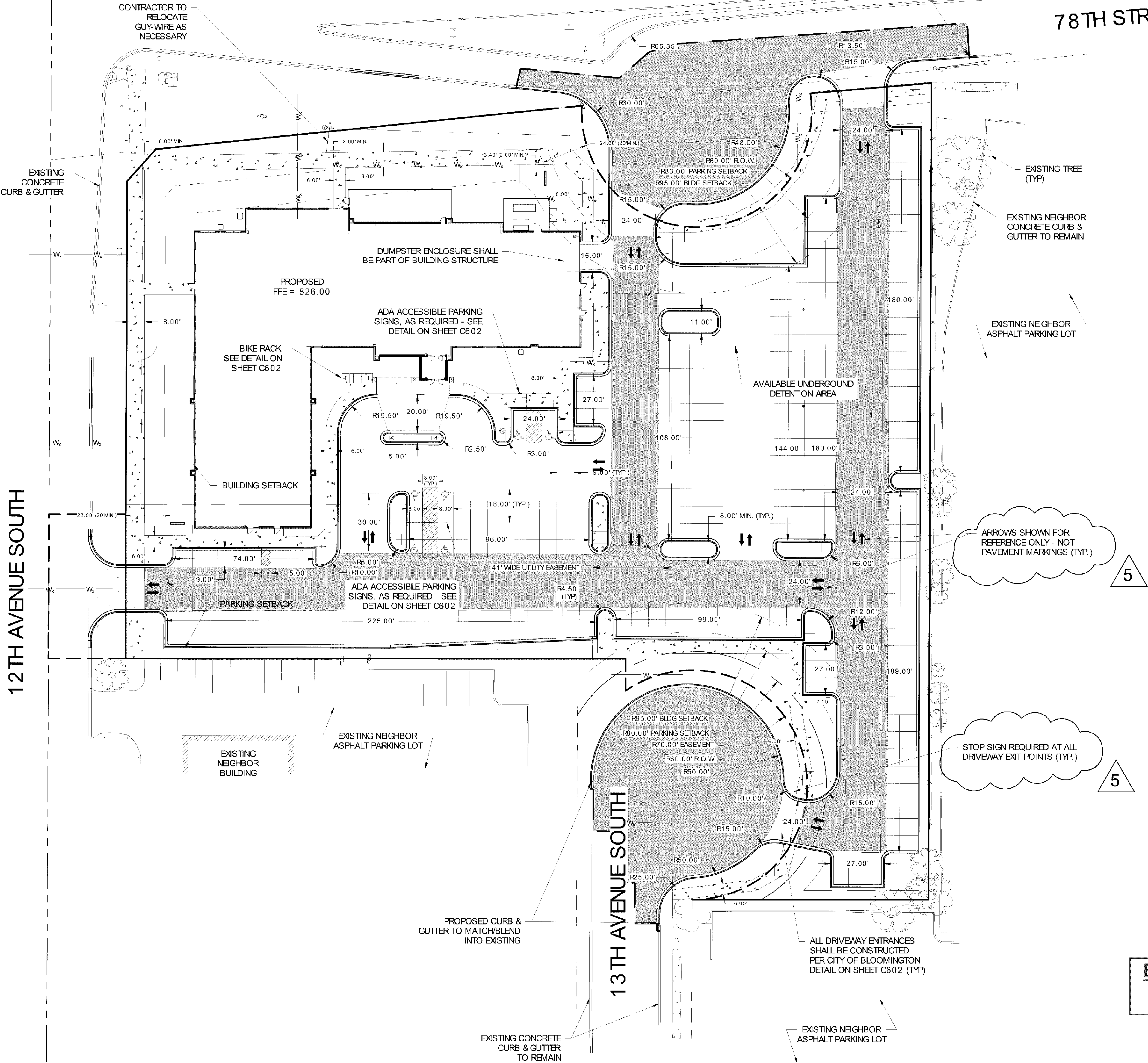
Signature: *James R. Skowronski* Date: 11/16/2017
Type of Printed Name: JAMES R. SKOWRONSKI Registration Number: 42202

GENERAL NOTES

1. ALL TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL MEET ALL REQUIREMENTS OF THE MMUTCD - ALL PARKING STALLS TO BE PAINTED WITH WHITE STRIPING.
2. DIMENSIONS ON CURB AND GUTTER ARE TO THE FACE OF THE CURB, INCLUDING RADIUS DIMENSIONS (UNLESS NOTED OTHERWISE)
3. GEOTECHNICAL INVESTIGATION REPORT AVAILABLE UPON REQUEST
4. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING SHALL BE ON-SITE - NO ON-STREET PARKING/LOADING/UNLOADING ALLOWED.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. TEMPORARY STREET SIGNS, LIGHTING, AND ADDRESSES SHALL BE PROVIDED DURING CONSTRUCTION.
7. CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT APPLICATION FOR OBSTRUCTIONS AND CONCRETE WORK WITHIN RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT CITY OF BLOOMINGTON FOR PERMIT APPLICATION AND FOR FEE INFORMATION.
8. PUBLIC WORKS PERMIT APPLICATION FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY IS REQUIRED PRIOR TO REMOVAL OR INSTALLATION OF SANITARY, WATER, OR STORM WORK WITHIN THE PUBLIC RIGHT-OF-WAY. CONTACT UTILITIES AT 952-563-4568 FOR PERMIT APPLICATION AND FOR FEE INFORMATION.
9. ALL PUBLIC SIDEWALKS SHALL NOT BE OBSTRUCTED.
10. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL PLAN UTILIZING LAYOUTS FROM THE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL, LATEST VERSION, PRIOR TO ANY WORK AFFECTING THE PUBLIC STREETS.
11. CUL-DE-SACS SHALL BE CONSTRUCTED TO CITY OF BLOOMINGTON STANDARD AND SPECIFICATIONS FOR PAVEMENT CROSS SECTIONS, CONSTRUCTION METHODS, ETC.

SITE INFORMATION

1. PARCEL AREA = 2.83 ACRES (SUBJECT TO REPLAT APPROVAL)
2. CURRENT ZONING: FD-2 (POSSIBLE REZONE TO C-4)
3. CURRENT USE: HOTEL
4. PAST USE: VARIED
5. REQUIRED PARKING: 171 ROOMS = 188 REQUIRED STALLS
6. PROPOSED PARKING:
 - 6.1. (165) REGULAR PARKING STALLS
 - 6.2. (6) HANDICAP STALLS
 - 6.3. (171) TOTAL PARKING STALLS (91.4% OF REQ'D PARKING)



ENGINEERING DIVISION
Approved by: Jen Desrude, PE
12/15/2017 9:37:42 AM

LEGEND	
	PROPOSED CONCRETE
	PROPOSED LIGHT DUTY PAVEMENT
	PROPOSED HEAVY DUTY PAVEMENT
	CURB & GUTTER
	LOT LINE

5	11/17/17	ADDENDUM #07
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

DATE ISSUED: 06/07/2017

ISSUE PERMITTING

PROJECT TITLE

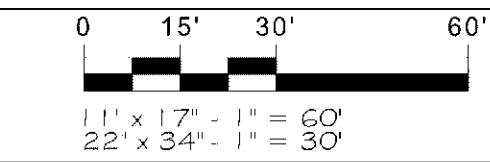
**HOLIDAY INN
EXPRESS & SUITES
5 STORIES
171 UNITS**

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE

**PROPOSED SITE
CONDITIONS**



PROJECT NUMBER: **33476**
SHEET NUMBER: **C200**

PL201700039



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Signature: *James R. Skowronski* Date: 8/23/2017
Type of Printed Name: JAMES R. SKOWRONSKI Registration Number: 42202

GRADING AND STORM DRAINAGE NOTES

1. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE. SPOT GRADES SHOWN ARE TO FINISHED GRADE OR FLOWLINE GRADE AT CURB & GUTTER. UNLESS T.O.C. (TOP OF CURB) IS NOTED. CLEAR ALL TREES, BRUSH, STUMPS AND OTHER ORGANIC MATERIAL FROM AREAS TO BE FILLED.
2. REMOVE ALL UNSUITABLE MATERIAL (MUCK OR NON-COMPACTABLE MATERIAL) FROM AREAS TO BE FILLED.
3. CONTRACTOR SHALL, WHEN GRADING BETWEEN CONTOURS AND BETWEEN POINTS OF SPOT ELEVATIONS, GRADE ON A UNIFORM SLOPE.
4. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED SOIL, GRASS SEED AND/OR MULCH UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED.
5. CONTRACTOR SHALL, BEFORE BEGINNING GRADING WORK ON SITE, INSTALL SILT FENCE AS SHOWN ON THE PLANS. AS SEDIMENT BUILD UP AROUND SILT FENCE, REMOVE SEDIMENT AND REPLACE WHERE EROSION HAS TAKEN PLACE.
6. EACH SECTION OF PIPE SHALL BE LAID TO SPECIFIED LINE AND LAID UPGRADE.
7. CONTRACTOR SHALL REMOVE ALL DEBRIS AND OTHER MATERIALS RESULTING FROM DEMOLITION AND DISPOSE OFF SITE UNLESS OTHERWISE ADVISED BY OWNER.
8. CONTRACTOR SHALL KEEP ALL ROADS ADJACENT TO THE SITE CLEAN DURING CONSTRUCTION.
9. CONTRACTOR SHALL BE AWARE OF EXISTING UTILITY LINES DURING PIPE LINE INSTALLATION. CALL ALL UTILITY COMPANIES FOR LOCATIONS ON SITE.
10. ALL ROADWAY AND DRAINAGE CONSTRUCTION ARE TO CONFORM TO LOCAL AGENCY STANDARD SPECIFICATIONS. (LATEST REVISION AT THE BEGINNING OF CONSTRUCTION.)
11. ALL NEWLY CONSTRUCTED SLOPES WHICH ARE STEEPER THAN 3 TO 1 MUST BE STABILIZED BY INSTALLATION OF EROSION CONTROL MATTING AND SEEDS AS SOON AS PRACTICABLE.
12. CONTRACTOR SHALL CONTACT UTILITIES DIVISION (952-563-8777) REGARDING PERMIT FOR STORM SEWER CONSTRUCTION.
13. TEMPORARY STREET SIGNS, LIGHTING, AND ADDRESSES SHALL BE PROVIDED DURING CONSTRUCTION.
14. CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT APPLICATION FOR OBSTRUCTIONS AND CONCRETE WORK WITHIN RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT CITY OF BLOOMINGTON FOR PERMIT APPLICATION AND FOR FEE INFORMATION.
15. PUBLIC WORKS PERMIT APPLICATION FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY IS REQUIRED PRIOR TO REMOVAL OR INSTALLATION OF SANITARY, WATER, OR STORM WORK WITHIN THE PUBLIC RIGHT-OF-WAY. CONTACT UTILITIES AT 952-563-4568 FOR PERMIT APPLICATION AND FOR FEE INFORMATION.
16. ALL PUBLIC SIDEWALKS SHALL NOT BE OBSTRUCTED.
17. CONTRACTOR SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL PLAN UTILIZING LAYOUTS FROM THE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL, LATEST VERSION, PRIOR TO ANY WORK AFFECTING PUBLIC ROADWAYS.
18. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING SHALL BE ON-SITE. NO ON-STREET PARKING/LOADING/UNLOADING ALLOWED.
19. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
20. HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES SHALL BE MADE WITH WATER TIGHT MATERIALS, UTILIZING AN A-LOOK 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.

SITE INFORMATION

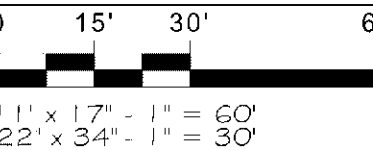
1. PARCEL AREA = 2.83 ACRES (SUBJECT TO REPLAT APPROVAL)
2. TOTAL AREA OF DISTURBANCE = ± 3.29 ACRES
3. CURRENT ZONING: FD-2 (POSSIBLE REZONE TO C-4)
4. CURRENT USE: HOTEL
5. PAST USE: VARIED

LEGEND

- PROPOSED ACCEPTING CURB & GUTTER
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- ⊕ SOIL BORING LOCATION
- STM --- PROPOSED STORM SEWER
- STM --- EXISTING STORM SEWER
- LOT LINE

ENGINEERING DIVISION
Approved by: Jen Desrude, PE
12/15/2017 9:37:49 AM

GRADING PLAN

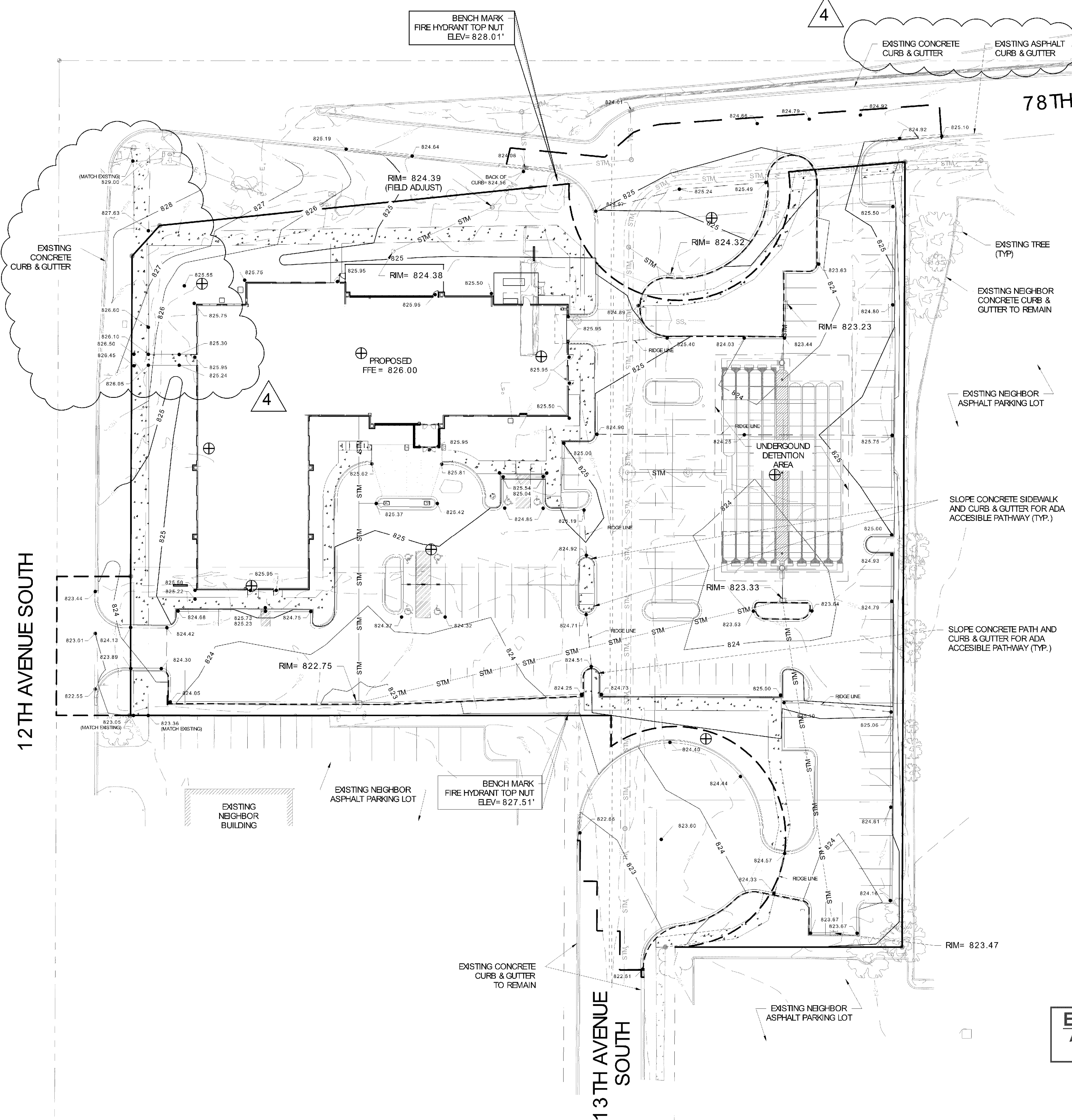


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SHEET NUMBER: C300

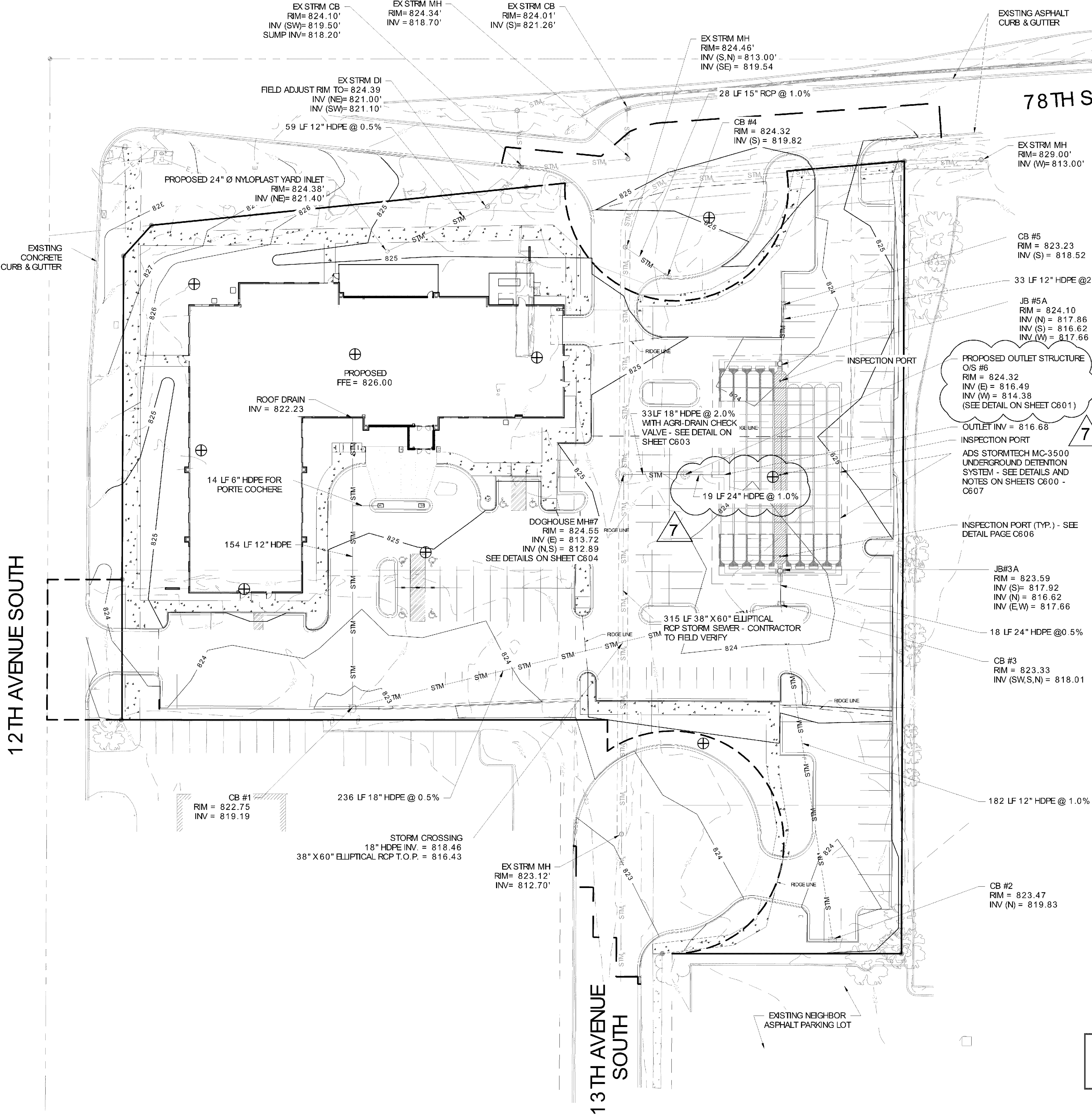
12TH AVENUE SOUTH

13TH AVENUE SOUTH

78TH STREET EAST



PL201700039



GRADING AND STORM DRAINAGE NOTES

1. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE
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11. UTILITY PERMITS ARE REQUIRED FOR CONNECTION TO THE PUBLIC STORM SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.

SITE INFORMATION

1. PARCEL AREA = 2.83 ACRES (SUBJECT TO REPLAT APPROVAL)
2. TOTAL AREA OF DISTURBANCE = ± 3.29 ACRES (INCLUDES WORK AND REVISIONS IN PUBLIC RIGHT-OF-WAY)
3. CURRENT ZONING: FD-2 (POSSIBLE REZONE TO C-4)
4. CURRENT USE: HOTEL
5. PAST USE: VARIED

LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- SOIL BORING LOCATION
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- LOT LINE

ENGINEERING DIVISION
Approved by: Jen Desrude, PE
12/15/2017 9:37:56 AM

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Signature: James R. Skowronski
Type of Printed Name: James R. Skowronski
Date: 12/11/2017
Registration Number: 42202

7	12/11/17	ADDENDUM #09
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

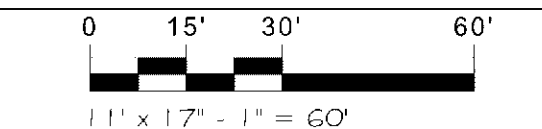
DATE ISSUED: 06/07/2017
ISSUE PERMITTING
PHASE
PROJECT TITLE

HOLIDAY INN
EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:
STORM DRAINAGE
PLAN



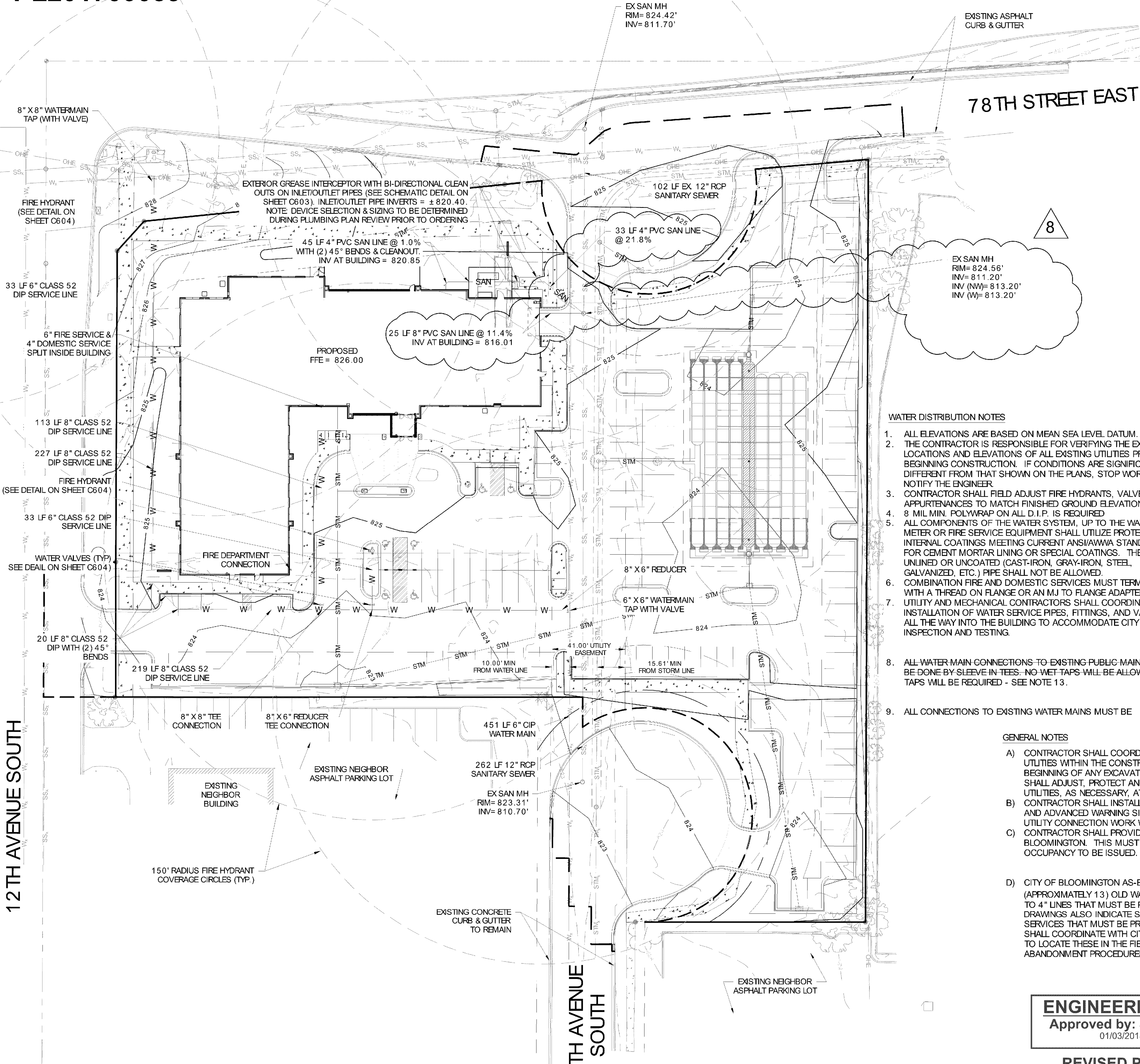
PROJECT NUMBER: 33476
SHEET NUMBER: C301

PL201700039

12TH AVENUE SOUTH

13TH AVENUE SOUTH

78TH STREET EAST



SANITARY SEWER NOTES

- ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. IF CONDITIONS ARE SIGNIFICANTLY DIFFERENT FROM THAT SHOWN ON THE PLANS, STOP WORK AND NOTIFY THE ENGINEER.
- CONTRACTOR SHALL FIELD ADJUST MANHOLE RIMS, CLEANOUTS, AND APPURTENANCES TO MATCH FINISHED GROUND ELEVATION.
- ALL WATER AND SEWER LINES MUST HAVE A MINIMUM OF 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION.
- ALL SEWER SERVICES SHALL BE 8 INCHES IN DIAMETER UNLESS OTHERWISE NOTED.
- CONTRACTOR TO COORDINATE CONNECTION TO EXISTING SANITARY SEWER SYSTEM.
- UTILITY AND MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION OF SEWER SERVICES ALL THE WAY INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT UTILITIES (952-563-4568) FOR PERMIT INFORMATION.
- UTILITY PERMITS ARE REQUIRED FOR CONNECTION TO THE SANITARY SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.
- ALL UNUSED SANITARY SEWER SERVICES MUST BE PROPERLY ABANDONED AT THE PROPERTY LINE.
- CONTACT MET COUNCIL (651-602-1378) FOR SEWER AVAILABILITY CHARGE (SAC) DETERMINATION.
- UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER SERVICES PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- USE SCHEDULE 40, SDR 26, OR BETTER FOR PVC SEWER SERVICES.
- CONTRACTOR SHALL ENSURE EXTERIOR GREASE INTERCEPTOR HAS 3.5-FOOT COVER FROM GRADE TO TOP OF TANK, AS WELL AS 5.0-FOOT MINIMUM COVER OVER THE INLET/OUTLET PIPES. ALSO, A MINIMUM OF 4" THICK HIGH DENSITY POLYSTYRENE INSULATION MUST BE PROVIDED OVER TANK AND OVER INLET/OUTLET PIPES UNTIL 7-FOET OF COVER IS OBTAINED.

WATER DISTRIBUTION NOTES

- ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. IF CONDITIONS ARE SIGNIFICANTLY DIFFERENT FROM THAT SHOWN ON THE PLANS, STOP WORK AND NOTIFY THE ENGINEER.
- CONTRACTOR SHALL FIELD ADJUST FIRE HYDRANTS, VALVES AND APPURTENANCES TO MATCH FINISHED GROUND ELEVATION.
- 8 MIL MIN. POLYWRAP ON ALL D.I.P. IS REQUIRED.
- ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT SHALL UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSI/AWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED (CAST-IRON, GRAY-IRON, STEEL, GALVANIZED, ETC.) PIPE SHALL NOT BE ALLOWED.
- COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.
- UTILITY AND MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION OF WATER SERVICE PIPES, FITTINGS, AND VALVES ALL THE WAY INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- ALL WATER MAIN CONNECTIONS TO EXISTING PUBLIC MAINS WILL BE DONE BY SLEEVE IN TEES. NO WET TAPS WILL BE ALLOWED. TAPS WILL BE REQUIRED - SEE NOTE 13.
- ALL CONNECTIONS TO EXISTING WATER MAINS MUST BE

PERFORMED DURING LOW FLOW TIMES.

- CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT UTILITIES (952-563-4568) FOR PERMIT INFORMATION.
- UTILITY PERMITS ARE REQUIRED FOR CONNECTION TO THE PUBLIC WATER SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.
- ALL UNUSED WATER SERVICES MUST BE PROPERLY ABANDONED AT THE MAIN.
- TAPS OF LIVE WATER MAINS ARE DONE BY CITY FORCES AND PAID FOR AND COORDINATED WITH THE CONTRACTOR.
- UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER SERVICES 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.
- 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.
- A MINIMUM 10-FOET HORIZONTAL SEPARATION AND 18-INCH VERTICAL SEPARATION IS REQUIRED BETWEEN WATERMAIN AND SEWERS. CITY CREWS MUST HAVE ACCESS TO ALL MANHOLES AND VALVES AT ALL TIMES DURING PROJECT.
- CONTRACTOR SHALL ENSURE A MINIMUM 8-FOET, MAXIMUM 10-FOET OF COVER OVER ALL WATER LINES, VALVES, SERVICES, ETC.

GENERAL NOTES

- CONTRACTOR SHALL COORDINATE THE LOCATION OF EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO THE BEGINNING OF ANY EXCAVATION OR DRILLING WORK. CONTRACTOR SHALL ADJUST, PROTECT AND REPAIR ANY DAMAGE TO SAID UTILITIES, AS NECESSARY, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL INSTALL THE NECESSARY TRAFFIC CONTROL AND ADVANCED WARNING SIGNS 48 HOURS PRIOR TO PERFORMING UTILITY CONNECTION WORK WITHIN PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL PROVIDE UTILITY AS-BUILTS TO THE CITY OF BLOOMINGTON. THIS MUST BE COMPLETED FOR CERTIFICATE OF OCCUPANCY TO BE ISSUED.
- CITY OF BLOOMINGTON AS-BUILT DRAWINGS INDICATE SEVERAL (APPROXIMATELY 13) OLD WATER SERVICE LINES RANGING FROM 3" TO 4" LINES THAT MUST BE PROPERLY ABANDONED. RECORD DRAWINGS ALSO INDICATE SEVERAL UNUSED SANITARY SEWER SERVICES THAT MUST BE PROPERLY ABANDONED. CONTRACTOR SHALL COORDINATE WITH CITY OF BLOOMINGTON UTILITIES STAFF TO LOCATE THESE IN THE FIELD, AS NECESSARY AND COORDINATE ABANDONMENT PROCEDURES.

LEGEND

- | | |
|-----|-------------------------|
| --- | EXISTING MAJOR CONTOURS |
| --- | EXISTING MINOR CONTOURS |
| --- | PROPOSED MAJOR CONTOURS |
| --- | PROPOSED MINOR CONTOURS |
| STM | PROPOSED STORM SEWER |
| W | PROPOSED WATER MAIN |
| SAN | PROPOSED SANITARY SEWER |
| STM | EXISTING STORM SEWER |
| W | EXISTING WATERMAIN |
| SS | EXISTING SANITARY SEWER |
| --- | LOT LINE |

ENGINEERING DIVISION

Approved by: Jen Desrude, PE
01/03/2018 12:18:53 PM

REVISED PLAN SHEET

CITIES EDGE ARCHITECTS

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Certification & Seal:
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.



Signature: James R. Skowronski
Date: 1/03/2018
Type of Printed Name: James R. Skowronski
Registration Number: 42202

8	01/03/18	ADDENDUM #10
7	12/11/17	ADDENDUM #09
6	11/28/17	ADDENDUM #08
5	11/17/17	ADDENDUM #07
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

DATE ISSUED: 06/07/2017

ISSUE PERMITTING

PROJECT TITLE

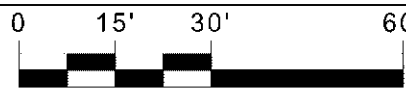
HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER
HAWKEYE HOTELS

PROJECT LOCATION
BLOOMINGTON, MN

SHEET TITLE

PROPOSED UTILITY PLAN



PROJECT NUMBER 33476

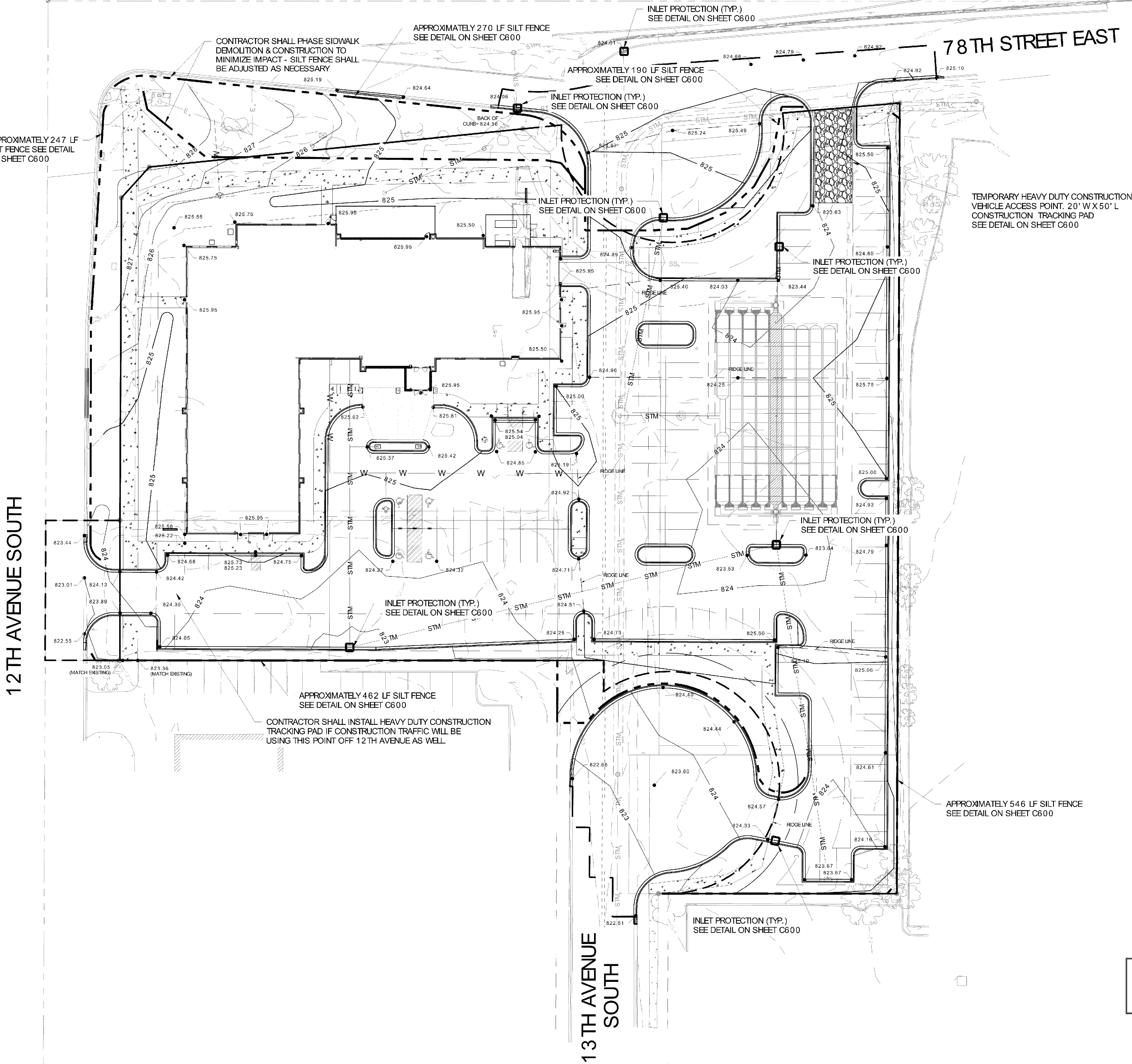
SHEET NUMBER C400

PL201700039

12TH AVENUE SOUTH

13TH AVENUE SOUTH

78TH STREET EAST



AREAS OF SITE

- TOTAL AREA OF SITE = 2.83 ACRES
- TOTAL AREA OF DISTURBANCE = ± 3.29 ACRES

EROSION CONTROL / SEEDING

PROVIDE VEGETATIVE COVER TO NEWLY GRADED AREAS BY ACCEPTABLE SEEDING METHODS AND MIXTURES. SEEDING FOR TEMPORARY EROSION CONTROL SHALL BE AS FOLLOWS:

SPECIES	LBS./ACRE	
OATS	131*	* SPRING AND SUMMER SEEDING
CEREAL RYE	131**	** FALL SEEDING
WINTER WHEAT	131**	
ANNUAL RYEGRASS	80**	

CONSTRUCTION PHASING

- CONSTRUCTION IS ANTICIPATED TO BEGIN IN THE SUMMER OF 2017. DEMOLITION AND REMOVAL OF ANY EXISTING MATERIALS WILL OCCUR FIRST
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, EROSION CONTROL MEASURES SHALL BE PUT IN PLACE AND MAINTAINED UNTIL SOIL STABILIZATION HAS TAKEN PLACE
- AFTER EROSION CONTROL MEASURES ARE IN-PLACE, SITE GRADING AND UTILITY INSTALLATION WORK CAN BEGIN
- FOLLOWING INITIAL GRADING WORK, THE CONCRETE BUILDING FOUNDATION/SLAB CAN BE CONSTRUCTED
- CONSTRUCTION ON THE BUILDING CAN THEN BEGIN IN COORDINATION WITH REMAINING SITE IMPROVEMENTS, INCLUDING AGGREGATE BASE COURSE INSTALLATION, CURB AND GUTTER CONSTRUCTION, ASPHALT PAVING, CONCRETE WORK, ETC.

EROSION CONTROL NOTES

- CONTRACTOR SHALL HAVE ALL EROSION CONTROL MEASURES IN PLACE AND APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF EXCAVATION ACTIVITIES.
- ALL SILT FENCES SHALL BE INSPECTED DAILY. CLEANING, ADJUSTING AND REPLACING EROSION MEASURES SHALL BE DONE AS NECESSARY THROUGHOUT CONSTRUCTION. ALL EROSION MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORK DAY.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PER THE DETAILS OR AS DIRECTED BY THE ENGINEER.
- SEDIMENT FROM OVERLAND FLOW SHALL BE PREVENTED FROM LEAVING THE WORK SITE BY INSTALLING SILT FENCING PARALLEL TO THE CONTOURS LOCATED DOWNHILL FROM THE WORK AREA.
- STONE TRACKING PADS SHALL BE INSTALLED AT ALL CONSTRUCTION SITE EXITS TO PREVENT TRACKING OF SOIL. TRACKED SOIL SHALL BE COLLECTED FROM PAVED ROADS LOCATED NEAR THE CONSTRUCTION SITE AT THE END OF EACH WORKING DAY OR AS DIRECTED BY THE ENGINEER.
- EXISTING VEGETATION SHALL BE REMOVED ONLY AS NECESSARY TO PERFORM CONSTRUCTION ACTIVITIES. CLEARING OF LARGE AREAS THAT ARE CLEARLY OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE PERMITTED.
- ALL DISTURBED AREAS SHALL BE RESTORED AND VEGETATED AS SOON AS POSSIBLE AFTER DISTURBANCE.
- EROSION MEASURES SHALL NOT BE REMOVED UNTIL THE AREAS SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- TEMPORARY MULCH SHALL BE PLACED WITHIN 30 DAYS OF GRADING OPERATIONS. ALL AREAS OF EXPOSED SOIL SHALL BE COVERED WITH A STRAW MULCH. MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS PER ACRE. MINIMUM IMMEDIATELY AFTER SPREADING. THE STRAW MULCH SHALL BE PROTECTED BY COVERING WITH A MAT OR CRIMPING. MULCHING SHALL BE REPLACED AND CRIMPED AS NECESSARY TO MAINTAIN ADEQUATE COVER UNTIL PERMANENT.
- ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STABILITY OF ALL GRADED AND/OR CLEARED AREAS UNTIL PERMANENT GROUND COVER IS ESTABLISHED. ANY AREAS DAMAGED BY EROSION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AND PROTECTED FROM FURTHER EROSION AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR MUST TAKE ALL NECESSARY MEASURES TO MINIMIZE TRACKING MUD ONTO PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL REMOVE MUD/SOIL DAILY TO PREVENT TRACKING.
- ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE, BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.
- TEMPORARY VEGETATIVE COVER MUST BE PROVIDED CONSISTING OF A SUITABLE, FAST-GROWING, DENSE GRASS SEED MIX SPREAD AT 1.5 TIMES THE USUAL RATE PER ACRE. IF TEMPORARY COVER IS TO REMAIN IN PLACE BEYOND THE PRESENT GROWING SEASON, TWO-THIRDS OF THE SEED MIX SHALL BE COMPOSED OF PERENNIAL GRASSES.
- SEEDS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION.

LEGEND

---	EXISTING MAJOR CONTOURS
---	EXISTING MINOR CONTOURS
---	PROPOSED MAJOR CONTOURS
---	PROPOSED MINOR CONTOURS
□	INLET PROTECTION
▨	CONSTRUCTION TRACKING PAD
---	SILT FENCE
---	LOT LINE

ENGINEERING DIVISION
Approved by: Jen Desrude, PE
12/15/2019 3:38:09 AM

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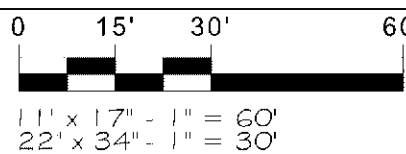


Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.



Signature: James R. Skowronski
Date: 6/07/2017
Type of Printed Name: James R. Skowronski
Registration Number: 42202

MARK	DATE	DESCRIPTION
DATE ISSUED:	06/07/2017	
ISSUE PHASE:	PERMITTING	
PROJECT TITLE:	HOLIDAY INN EXPRESS & SUITES 5 STORIES 171 UNITS	
PROJECT OWNER:	HAWKEYE HOTELS	
PROJECT LOCATION:	BLOOMINGTON, MN	
SHEET TITLE:	EROSION CONTROL PLAN	
PROJECT NUMBER:	33476	
SHEET NUMBER:	C500	



PL201700039

GENERAL NOTES

- A. PROJECT OFFICE WALL SWPPP POSTINGS:
THE FOLLOWING ITEMS MUST BE POSTED TOGETHER IN A SINGLE, ORGANIZED LOCATION ON A WALL INSIDE THE PROJECT OFFICE: 1) SWPPP SITE MAPS (ALL PHASES); 2) SWPPP DETAIL SHEETS; 3) MAP SHOWING LOCATION OF OFFSITE IMPORT OR EXPORT FACILITY; 4) REVISIONS TO DETAILS, SITE MAPS, OR SWPPP-RELATED RFIS; 5) SITE SWPPP BINDER; 6) SWCT PLACARD; 7) CURRENT OWNER STORMWATER COMPLIANCE TRAINING CERTIFICATES FOR SUPERINTENDENT(S) AND COMPLIANCE OFFICER(S); AND 8) CERTIFICATIONS AND/OR TRAINING CERTIFICATES REQUIRED TO PERFORM INSPECTIONS BY THE APPLICABLE CONSTRUCTION GENERAL PERMIT OR AUTHORITY HAVING JURISDICTION.
- B. PERMITTED PROJECT AREA:
FOR PURPOSES OF THIS SWPPP AND ASSOCIATED STORMWATER PERMIT, 'PERMITTED PROJECT AREA' IS DEFINED AS ANY AND ALL AREAS WITHIN THE PROJECT LIMITS OF DISTURBANCE, AS SHOWN ON THE SWPPP SITE MAPS AND IDENTIFIED IN THE NOTICE OF INTENT TO THE AGENCY. ALL GROUND-DISTURBING AND CONSTRUCTION-RELATED ACTIVITIES (MATERIAL STORAGE, DUMPSTERS, PARKING AREAS, PROJECT OFFICE TRAILER, ETC.) MUST BE INCLUDED WITHIN THE PERMITTED PROJECT AREA LIMITS OF DISTURBANCE.

OFFSITE AREA(S) TO BE DISTURBED AS PART OF THIS PROJECT (NOT ON OWNER PROPERTY):

- WORK ASSOCIATED WITH UTILITY INSTALLATION AND/OR CUL-DE-SAC CONSTRUCTION ALONG 78TH STREET EAST, 13TH AVENUE SOUTH, AND 12TH AVENUE SOUTH.

ALL AREAS OUTSIDE THE PERMITTED PROJECT AREA (I.E., LIMITS OF DISTURBANCE) ACQUIRED FOR USE BY THE GC OR A SUBCONTRACTOR OF THE GC (BORROW SOURCES, DISPOSAL AREAS, ETC.) MUST BE MANAGED IN ACCORDANCE WITH APPENDIX E - TAB 21 OF THE 02370 SPECIFICATION. THE CONTRACTOR IS REQUIRED TO LOCATE OFFICE TRAILERS AND MATERIAL STORAGE AREAS FOR THE PROJECT WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR MAY REQUEST USE OF OFF-SITE LOCATIONS FOR OFFICE TRAILERS OR NON-ERODIBLE MATERIAL STORAGE. HOWEVER, APPROVAL MUST BE OBTAINED FROM THE CONSTRUCTION MANAGER PRIOR TO THEIR USE. REQUESTS WILL BE REVIEWED ON A CASE BY CASE BASIS AND IF APPROVED, LIMITATIONS ON USE WILL BE PROVIDED.

- C. SPECIAL PROJECT AREAS:
THERE ARE NO SPECIAL PROJECTS, LOCATED BEYOND THE OWNER PERMITTED PROJECT AREA, REQUIRING INSPECTION AND MAINTENANCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT.

- D.1. NON-STORMWATER DISCHARGES:
THE GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES PROHIBITS MOST NON-STORMWATER DISCHARGES DURING THE CONSTRUCTION PHASE. ALLOWABLE NON-STORMWATER DISCHARGES THAT OCCUR DURING CONSTRUCTION ON THIS PROJECT, ARE INCLUDED IN THE SECTION 5.2 OF THE GENERAL PERMIT.

BEST MANAGEMENT PRACTICES (BMPS) MUST BE IMPLEMENTED FOR THE GENERAL PERMIT ALLOWABLE DISCHARGES FOR THE DURATION OF THE PERMIT. THE TECHNIQUES DESCRIBED IN THIS SWPPP FOCUS ON PROVIDING CONTROL OF POLLUTANT DISCHARGES WITH PRACTICAL APPROACHES THAT UTILIZE READILY AVAILABLE EXPERTISE, MATERIAL, AND EQUIPMENT.

NON-STORMWATER COMPONENTS OF SITE DISCHARGES MUST BE UNCONTAMINATED NON-TURBID WATER. ALL NON-STORMWATER DISCHARGES MUST BE ROUTED TO A STORMWATER CONTROL PRIOR TO DISCHARGE. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN RETENTION PONDS UNTIL IT INFILTRATES OR EVAPORATES. WHEN NON-STORMWATER IS DISCHARGED FROM THE SITE, IT MUST BE DONE IN A MANNER SUCH THAT IT DOES NOT CAUSE EROSION OF THE SOIL DURING DISCHARGE.

- D.2. POWER WASHING:
PROCESS WATER SUCH AS POWER WASHING WATER AND CONCRETE CUTTING EFFLUENT, AMONG OTHERS, MUST BE COLLECTED FOR TREATMENT AND DISPOSAL. IT MUST NOT BE FLUSHED INTO THE SITE STORM DRAIN SYSTEM OR DISCHARGED OFF-SITE.

- D. DISCHARGE POINTS:
ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENTATION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE AND/OR IMPACTS TO RECEIVING WATERS. SEDIMENT ACCUMULATION DOWNGRADEMENT OF DISCHARGE LOCATIONS SHALL BE REPORTED AS A SEDIMENT DISCHARGE (SEE APPENDIX E - TAB 14, SEDIMENT RELEASES, OF THE 02370 SPECIFICATION) AND THE POTENTIAL UPSTREAM CAUSE SHALL BE INVESTIGATED TO PREVENT FUTURE OCCURRENCE. CONTACT THE CONSTRUCTION MANAGER (CM), CIVIL ENGINEERING CONSULTANT (CEC) AND STORMWATER COMPLIANCE TEAM (SWCT) TO DETERMINE APPROPRIATE ACTION FOR CLEANUP OF DISCHARGED SEDIMENT THAT MAY BE OUTSIDE OF THE LIMITS OF DISTURBANCE. SEE SAMPLING AND MONITORING OF EFFLUENT PLAN (IF APPLICABLE).

EROSION AND SEDIMENT CONTROL NOTES

- A. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- B. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- C. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- D. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH SWPPP IMPLEMENTATION SEQUENCE, OR AS REQUIRED BY THE APPLICABLE GENERAL PERMIT. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
- E. ALL DENUDE/BARE AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITIES, WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING AND/OR BLANKETS. COMPLETION MUST BE ACHIEVED WITHIN 14 DAYS.
- F. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED IMMEDIATELY, AND COMPLETED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- G. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE APPLIED PER REQUIREMENTS IN THESE EBS CONTROL NOTES.

- H. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE OFF-SITE.

- I. ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION 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 QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE SITE PLANS.

- J. STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION, THAT WILL ALSO PROVIDE STORM WATER MANAGEMENT AFTER CONSTRUCTION, ARE INCLUDED IN THE CONTRACT DOCUMENTS. THE SITE-SPECIFIC POST CONSTRUCTION STORM WATER OPERATION AND MAINTENANCE (O&M) MANUAL IS INCLUDED IN THE CONTRACT DOCUMENTS.

- H. ALL PERMANENT CONTROLS AND SYSTEMS MUST BE INSTALLED AND FUNCTIONING AS DESIGNED AND FREE OF ACCUMULATED SEDIMENT AND DEBRIS DURING FINAL PROJECT INSPECTION AND APPROVAL.

HAZARDOUS MATERIAL MANAGEMENT & SPILL REPORTING

ANY HAZARDOUS OR POTENTIALLY HAZARDOUS MATERIAL THAT IS BROUGHT ONTO THE CONSTRUCTION SITE SHALL BE HANDLED PROPERLY TO REDUCE THE POTENTIAL FOR STORMWATER POLLUTION. ALL MATERIALS USED ON THIS CONSTRUCTION SITE SHALL BE PROPERLY STORED, HANDLED, DISPENSED AND DISPOSED OF FOLLOWING ALL APPLICABLE LABEL DIRECTIONS. FLAMMABLE AND COMBUSTIBLE LIQUIDS SHALL BE STORED AND HANDLED ACCORDING TO APPLICABLE REGULATIONS, AND, AT A MINIMUM, ACCORDING TO 29 CFR 1926.152. ONLY APPROVED CONTAINERS AND PORTABLE TANKS SHALL BE USED FOR STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.

MATERIAL SAFETY DATA SHEETS (MSDS) INFORMATION SHALL BE KEPT ON SITE FOR ANY AND ALL APPLICABLE MATERIALS. HOWEVER, MSDS MAY ALSO BE ACCESSED VIA TELEPHONE OR OTHER ELECTRONIC MEANS OR APPARATUS.

IN THE EVENT OF AN ACCIDENTAL SPILL, IMMEDIATE ACTION SHALL BE TAKEN BY THE GC TO CONTAIN AND REMOVE THE SPILLED MATERIAL. THE SPILL SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES, AS REQUIRED UNDER THE PROVISIONS OF THE CLEAN WATER ACT, ANY SPILL OR DISCHARGE ENTERING WATERS OF THE UNITED STATES SHALL BE PROPERLY REPORTED.

ALL HAZARDOUS MATERIALS, INCLUDING CONTAMINATED SOIL AND LIQUID CONCRETE WASTE, SHALL BE DISPOSED OF BY THE CONTRACTOR IN THE MANNER SPECIFIED BY FEDERAL, STATE AND LOCAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.

THE GC SHALL PREPARE A WRITTEN RECORD OF ANY SPILL AND ASSOCIATED CLEAN-UP ACTIVITIES OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF 1 GALLON OR REPORTABLE QUANTITIES, WHICHEVER IS LESS, ON THE DAY OF THE SPILL. THE GC SHALL PROVIDE NOTICE TO OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL. COPIES OF SPILL CRITICAL INCIDENT REPORTS SHALL BE PRINTED AND MAINTAINED IN THE JOBSITE BINDER.

ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA OR THE STATE OR LOCAL AGENCY REGULATIONS, SHALL BE IMMEDIATELY REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) AND THE MINNESOTA POLLUTION CONTROL AGENCY (1-800-422-0798).

THE STATE REQUIRES REPORTING WHEN:

- THERE IS AN IMPACT TO HUMAN HEALTH
- THERE IS AN IMPACT TO THE ENVIRONMENT
- THERE IS A FIRE, EXPLOSION, OR SAFETY HAZARD
- A SPILL IS NOT IMMEDIATELY CLEANED UP
- THE SPILL WAS MORE THAN THE REPORTABLE QUANTITY OF 1 GALLON OF A PETROLEUM PRODUCT

THE REPORT SHOULD BE FILED WITH THE MINNESOTA POLLUTION CONTROL AGENCY WITHIN 24 HOURS OF A SPILL OCCURRING.

THE REPORTABLE QUANTITY FOR HAZARDOUS MATERIALS CAN BE FOUND IN 40 CFR 302 AND THE US EPA WEBSITE:

[HTTP://WWW.EPA.GOV/SUPERFUND/POLICY/RELEASE/RG](http://www.epa.gov/superfund/policy/release/rg), AND THE ADMINISTRATIVE RULES OF MINNESOTA.

TO MINIMIZE THE POTENTIAL FOR A SPILL OF PETROLEUM PRODUCT OR HAZARDOUS MATERIALS TO COME IN CONTACT WITH STORMWATER, THE FOLLOWING STEPS SHALL BE IMPLEMENTED:

- 1) ALL MATERIALS WITH HAZARDOUS PROPERTIES, SUCH AS PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS, SOAPS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, BASES, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE, CURING COMPOUNDS AND ADDITIVES, ETC., SHALL BE STORED IN A SECURE LOCATION, UNDER COVER AND IN APPROPRIATE, TIGHTLY SEALED CONTAINERS WHEN NOT IN USE.
- 2) THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.
- 3) A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND ITS LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGE AND SHOWN ON SITE MAPS.
 - a. THE SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.
 - b. CONTENTS SHALL BE INSPECTED DAILY DURING THE DAILY STORMWATER INSPECTION.
- 4) ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE.
- 5) ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL.
- 6) THE DISPOSAL OF EXCESS OR USED PRODUCTS SHALL BE IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND REGULATIONS.

GENERAL CONTRACTOR:
BENSON-ORTH
10700 HIGHWAY 55, SUITE 310
PLYMOUTH, MN 55441

INDIVIDUAL NAME

INDIVIDUAL TRAINING INFORMATION:

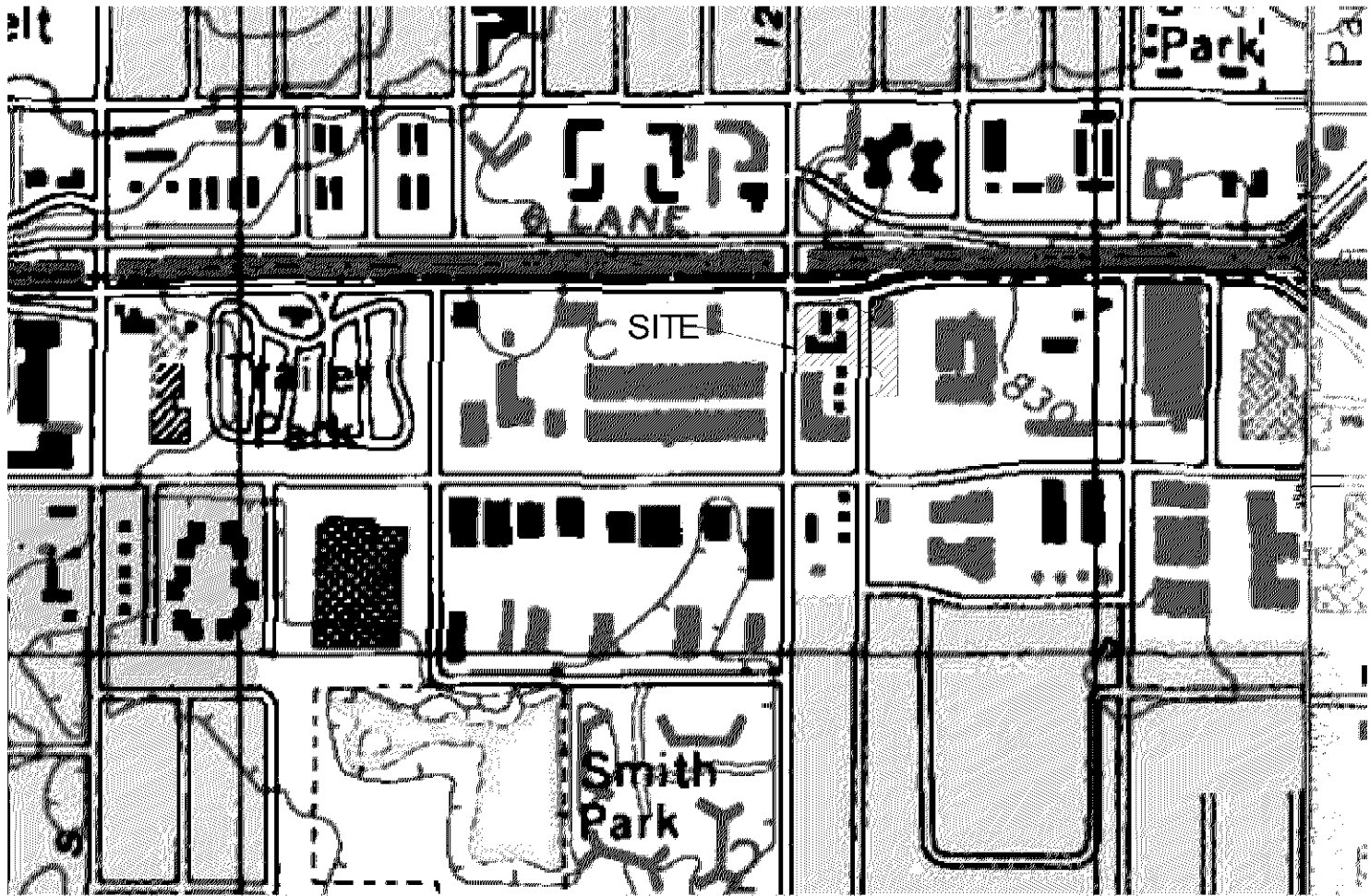
NOTE: THIS PROJECT HAS AN AGREEMENT THAT THE GC WILL BE THE RESPONSIBLE PARTY FOR THE CREATION OF THE SWPPP - THE CONTRACTOR SHALL PROVIDE NECESSARY STAFF NAMES AND TRAINING INFORMATION, AS REQUIRED

PREPARED FOR:
HAWKEYE HOTELS
1601 N. ROOSEVELT AVENUE
BURLINGTON, IA 52601

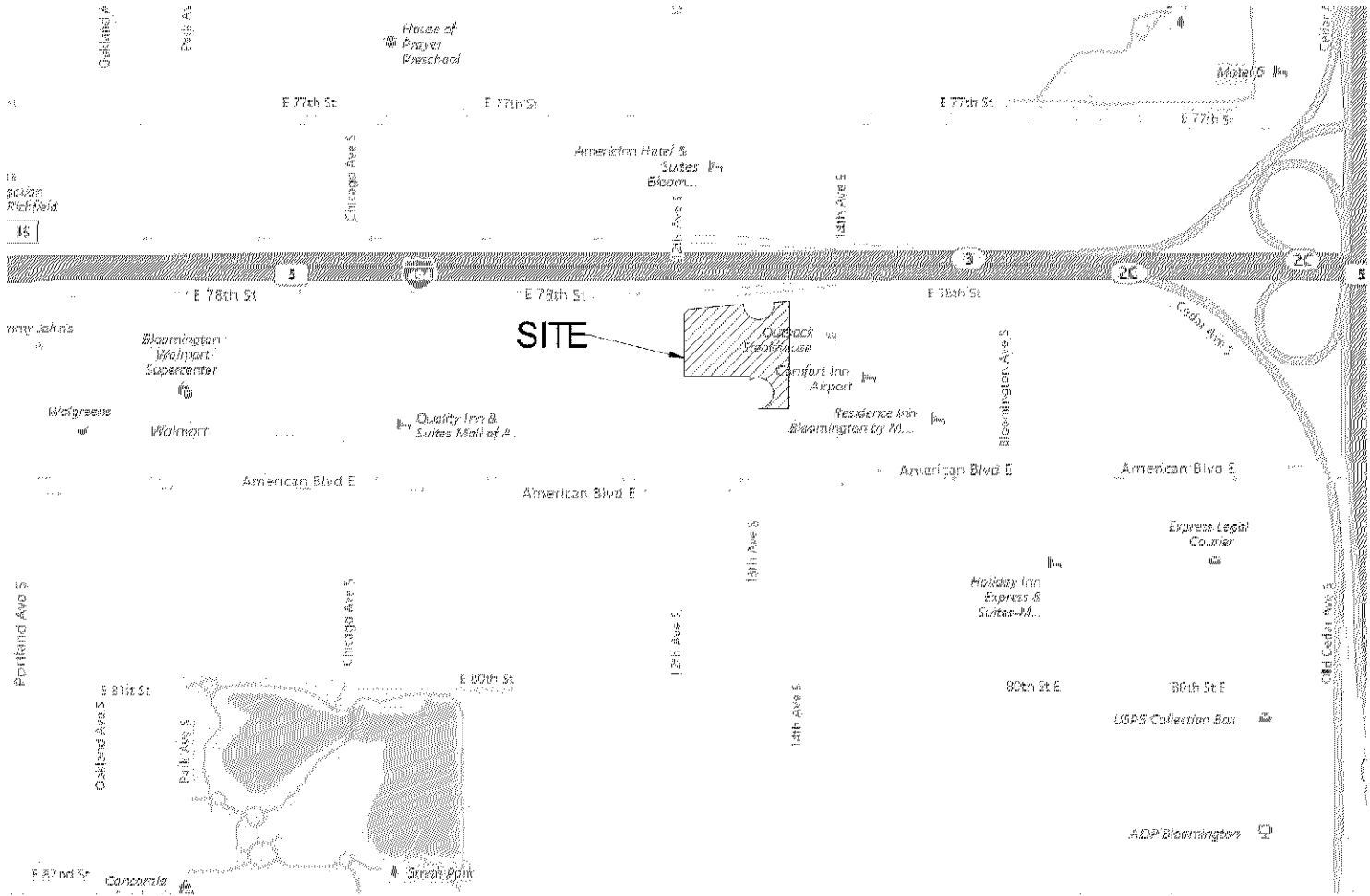
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL PLAN SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CIVIL ENGINEER

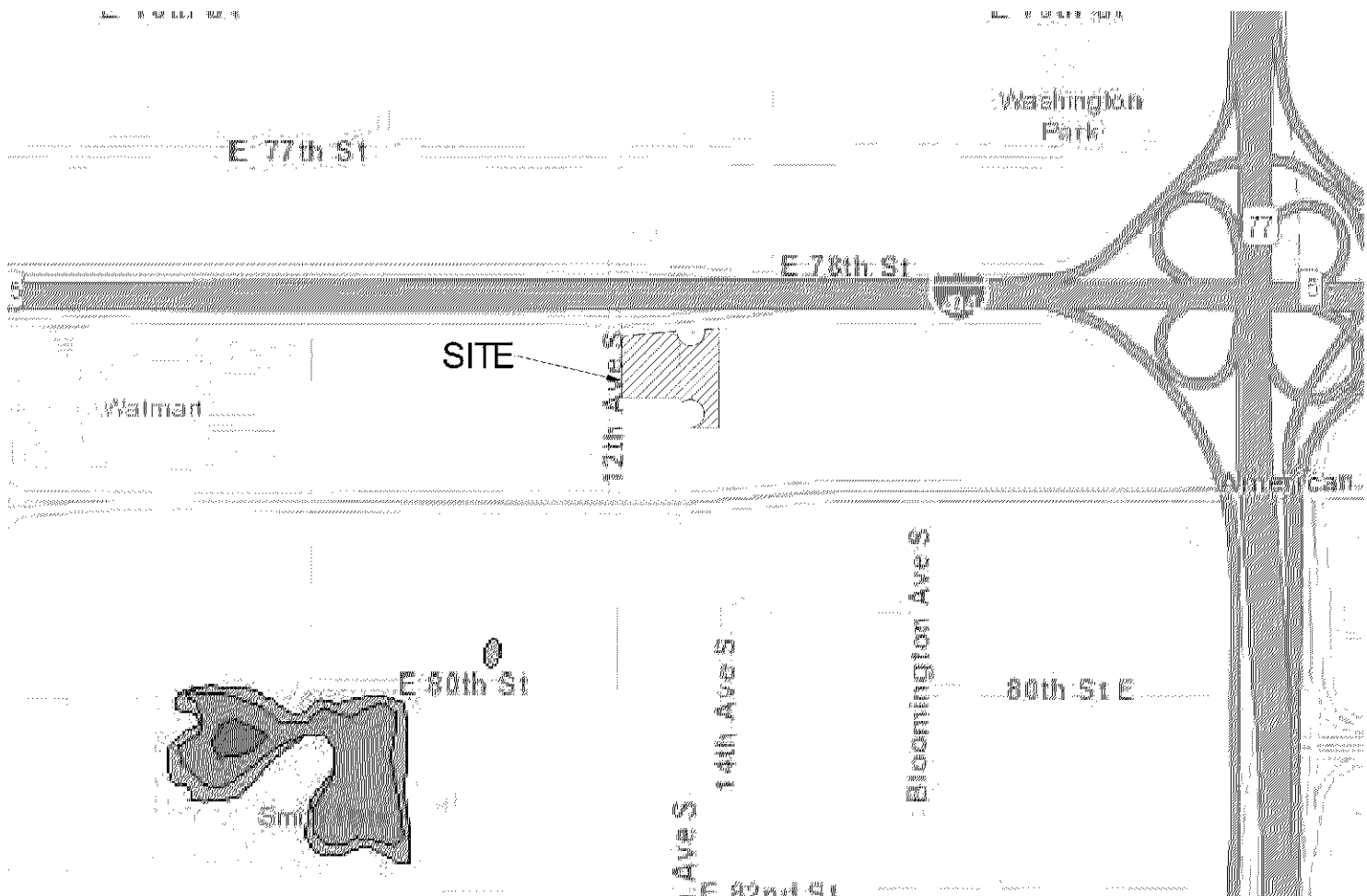


USGS QUADRANGLE MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

IMPORTANT: GC IS TO USE CITY OF GOLDEN VALLEY IDENTIFIED TRUCK ROUTES. GC TO USE THE SHORTEST ROUTE TO THE SITE FROM A CITY OF GOLDEN VALLEY IDENTIFIED TRUCK ROUTE



NATIONAL WETLAND INVENTORY MAP
NOT TO SCALE



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Certification & Seal:
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.



Signature: *James R. Skowronski* Date: 8/23/2017
Type of Printed Name: JAMES R. SKOWRONSKI Registration Number: 42202

MARK	DATE	DESCRIPTION
4	8/23/17	ADDENDUM #04

DATE ISSUED: 06/07/2017

ISSUE PHASE: PERMITTING

PROJECT TITLE:

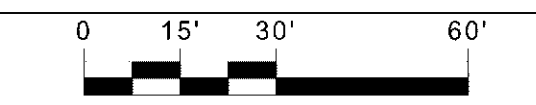
HOLIDAY INN
EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

SWPPP NOTES

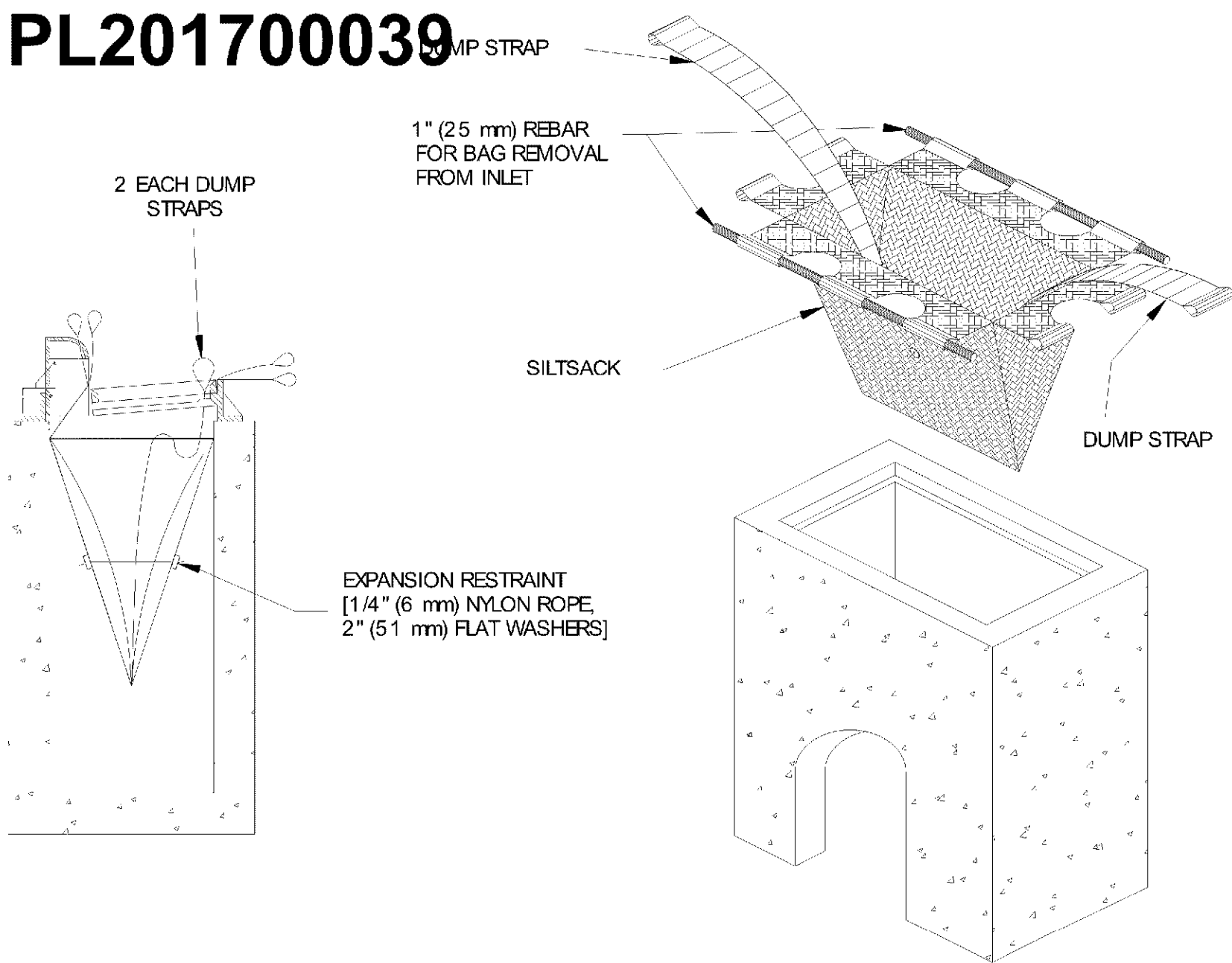


1" = 15'
2 1/2" = 30'

PROJECT NUMBER: 33476

SHEET NUMBER: C501

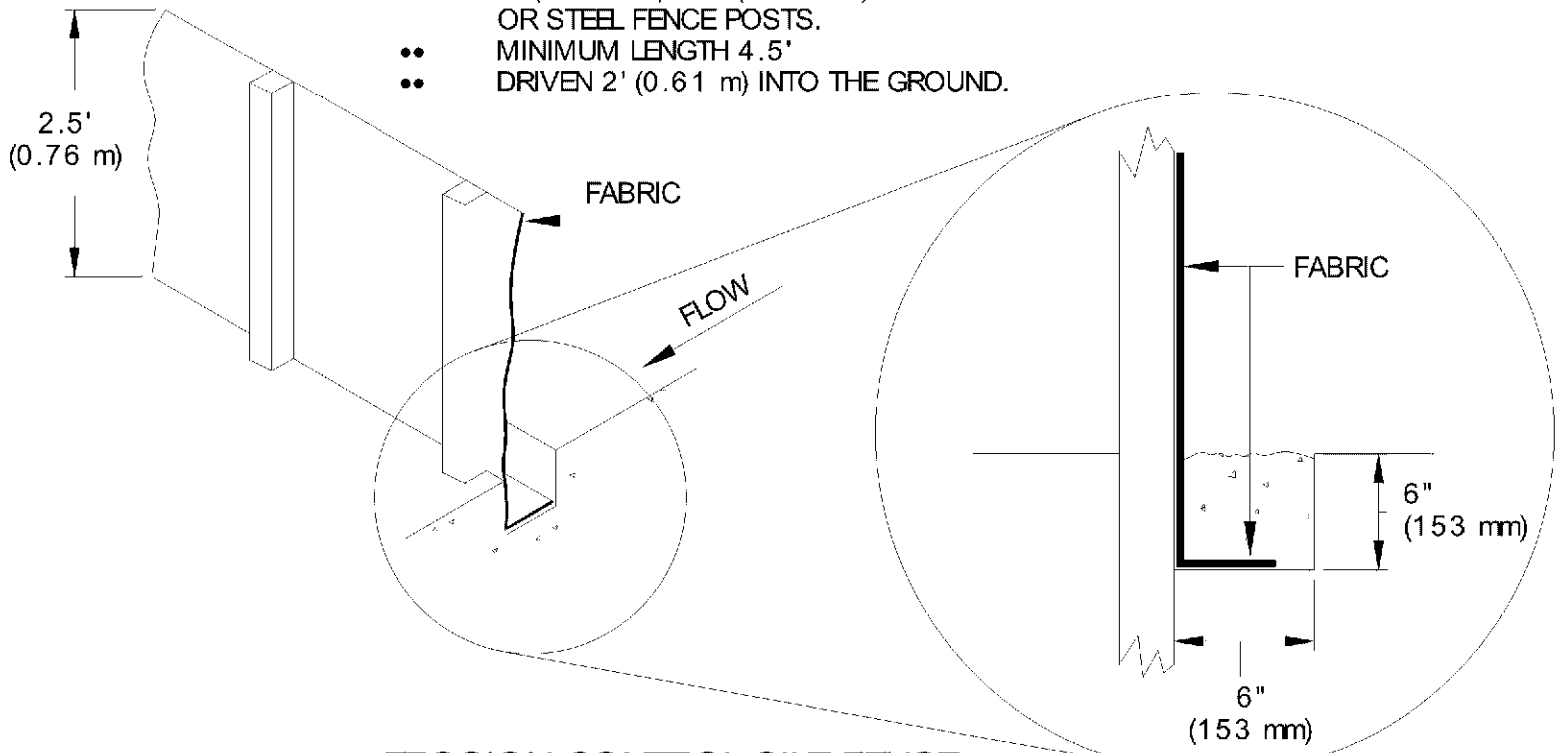
PL201700039



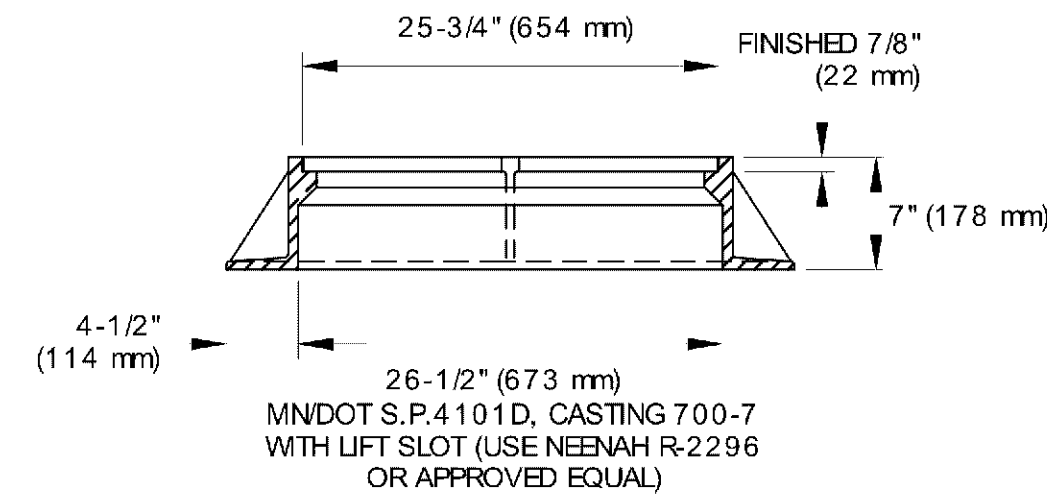
INLET PROTECTION, SEDIMENT FILTER SACK (DURING CONSTRUCTION)

NOTES:

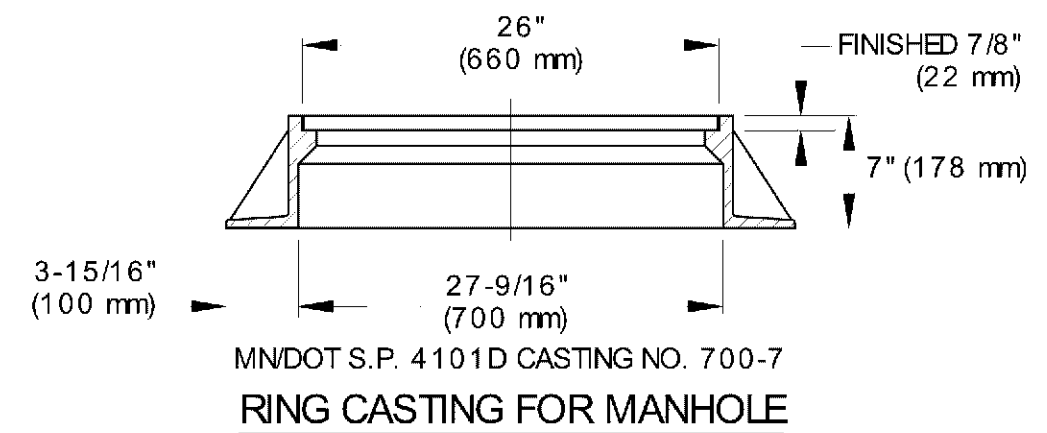
- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP TRENCH AND BACKFILLED IMMEDIATELY.
- POSTS SHALL BE:
 - 4" (1.22 m) ON CENTER
 - 2" (50.8 mm) X 2" (50.8 mm) HARDWOOD, PINE OR STEEL FENCE POSTS.
 - MINIMUM LENGTH 4.5'
 - DRIVEN 2' (0.61 m) INTO THE GROUND.



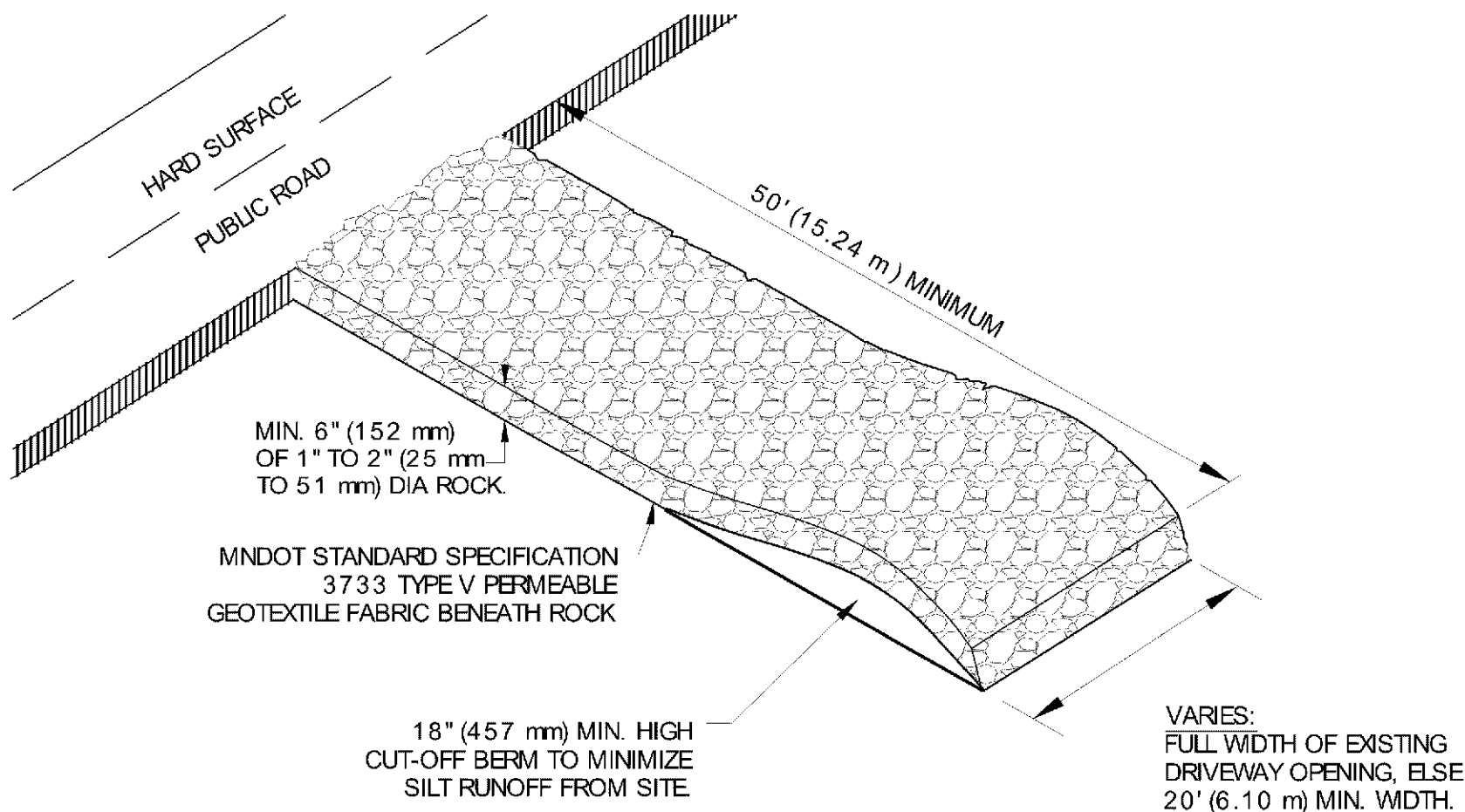
EROSION CONTROL SILT FENCE



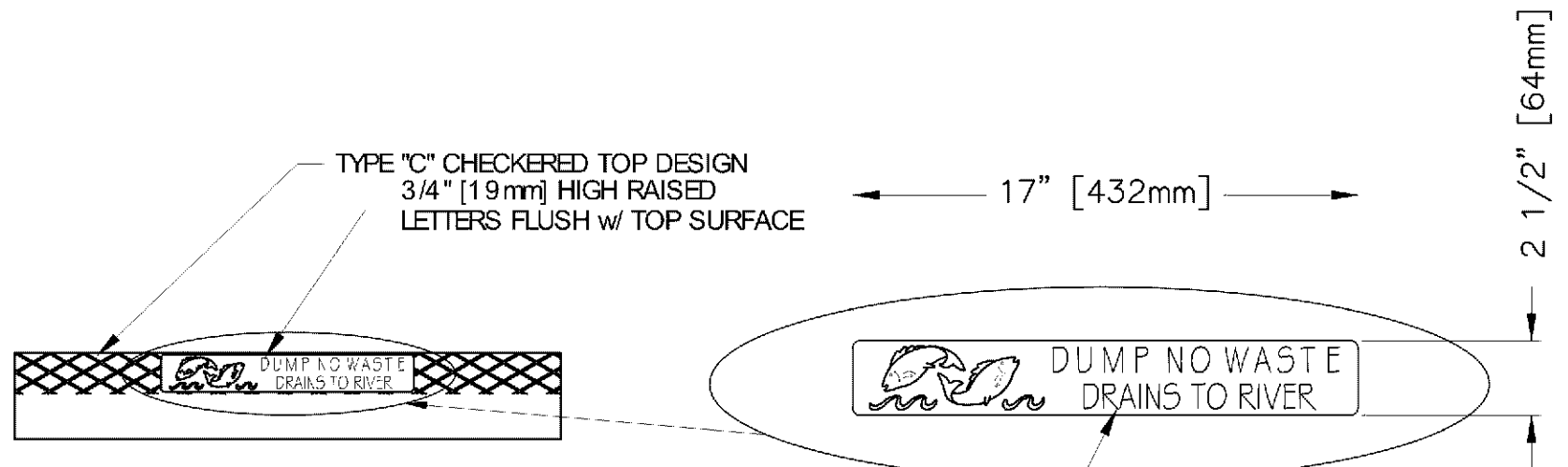
STANDARD MANHOLE FRAME



RING CASTING FOR MANHOLE



ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS

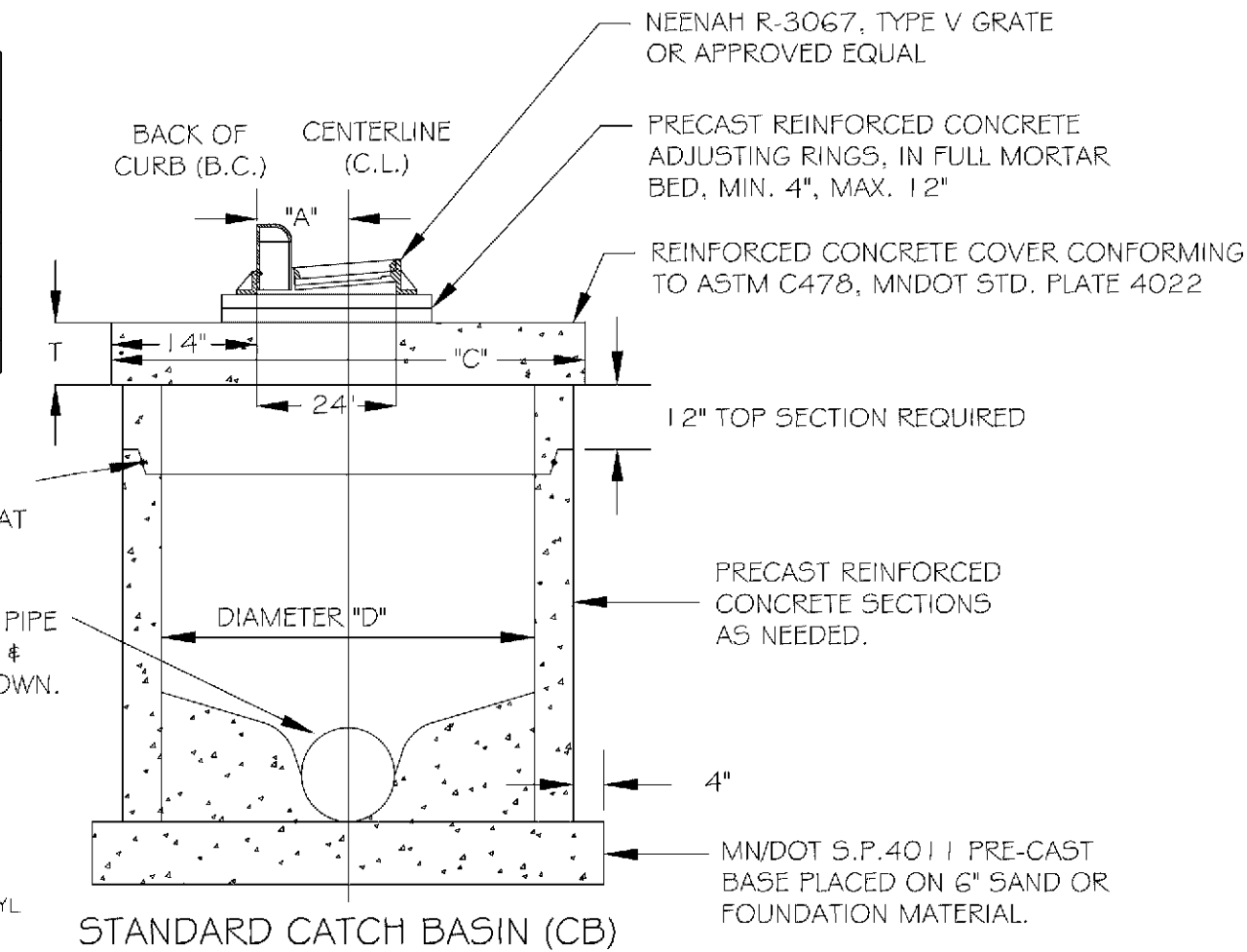


RECTANGULAR CATCH BASIN CASTING ASSEMBLY

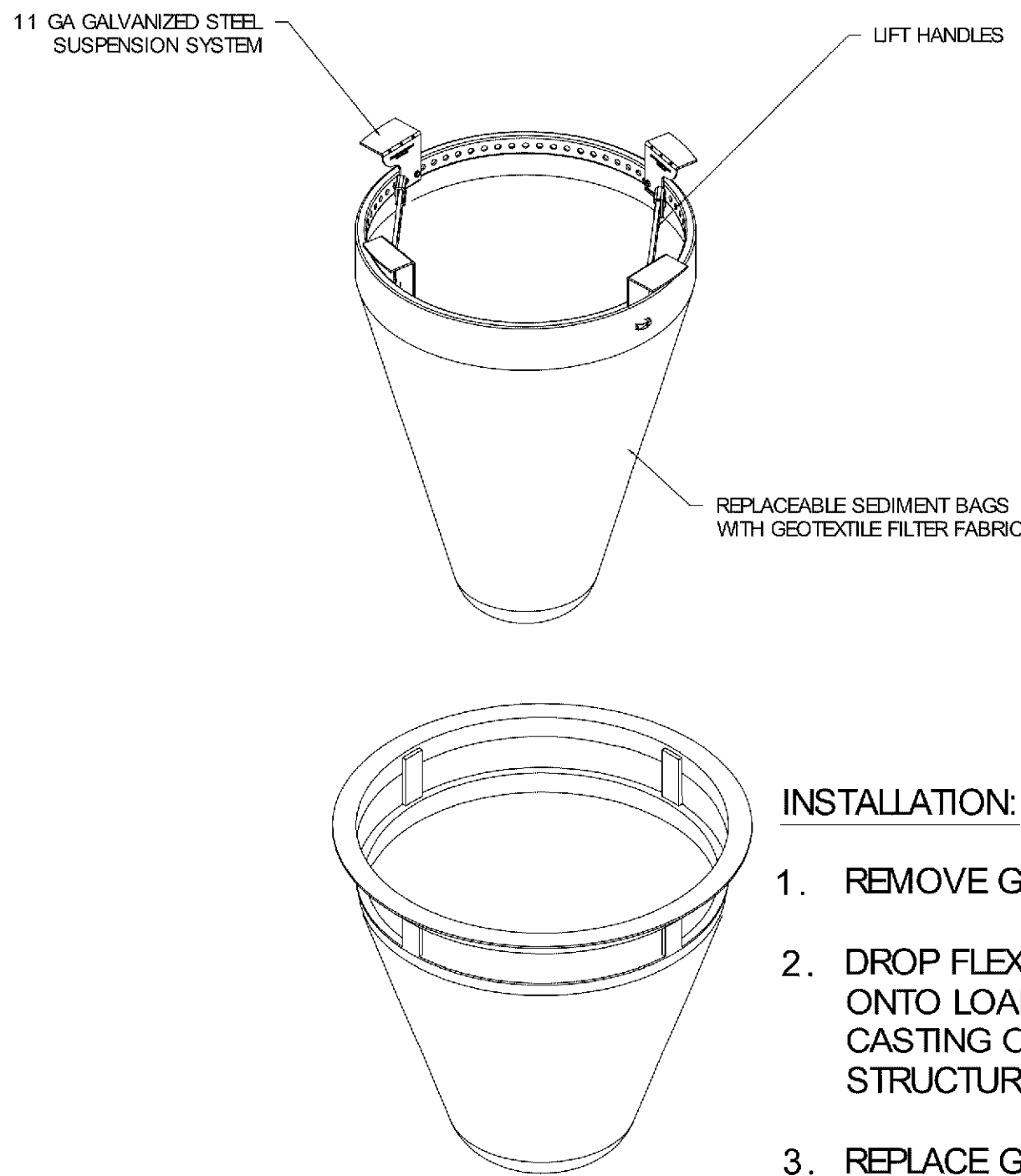
DIA. COVER 'D'	'C'	THICKNESS 'T'	B.C. TO C.L. 'A'
48"	58"	6"	15"
60"	72"	8"	21"
66"	79"	8"	24"
72"	86"	8"	27"
84"	100"	8"	35"
96"	114"	8"	39"
108"	126"	12"	45"
120"	144"	12"	48"

NOTES:

1. STRUCTURE DIMENSIONS:
D=Ø+2X
(Ø=OUTER DIAMETER & X=6")
2. MANHOLES PRODUCED PER ASTM C-478
BARREL JOINT SEALANT: O-RING/BUTYL
RUBBER PIPE CONNECTION: GROUTED,
RUBBER GASKETED.



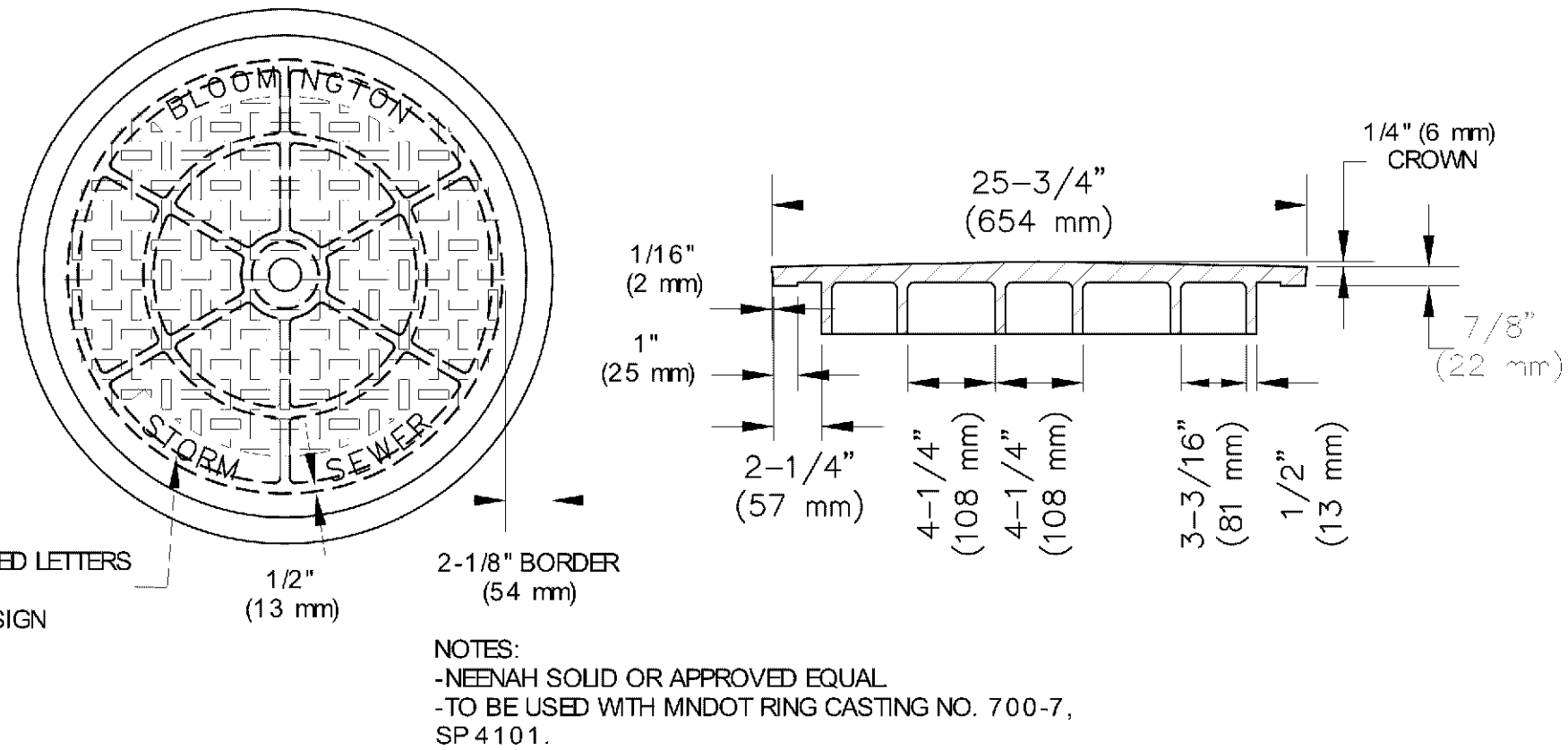
STANDARD CATCH BASIN (CB)



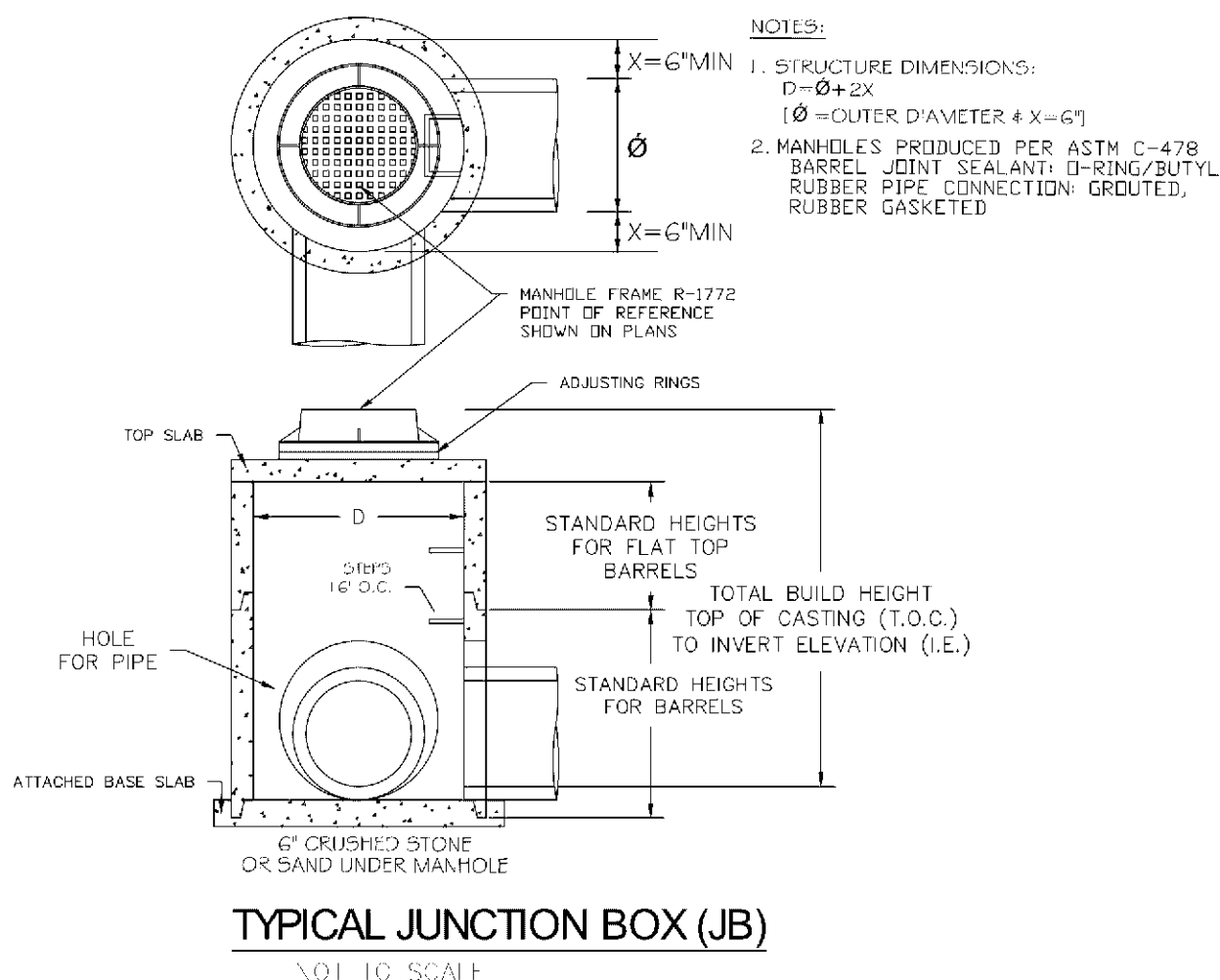
CATCH-ALL INLET PROTECTION (DURING CONSTRUCTION)

INSTALLATION:

1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE



STANDARD STORM SEWER MANHOLE COVER



TYPICAL JUNCTION BOX (JB)

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ARCHITECTS

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Certification & Seal:
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.



Signature: James R. Skowronski Date: 6/06/2017
Type of Printed Name: Registration Number: 42202

MARK DATE DESCRIPTION

DATE ISSUED: 06/07/2017

ISSUE PERMITTING

PROJECT TITLE:

HOLIDAY INN
EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

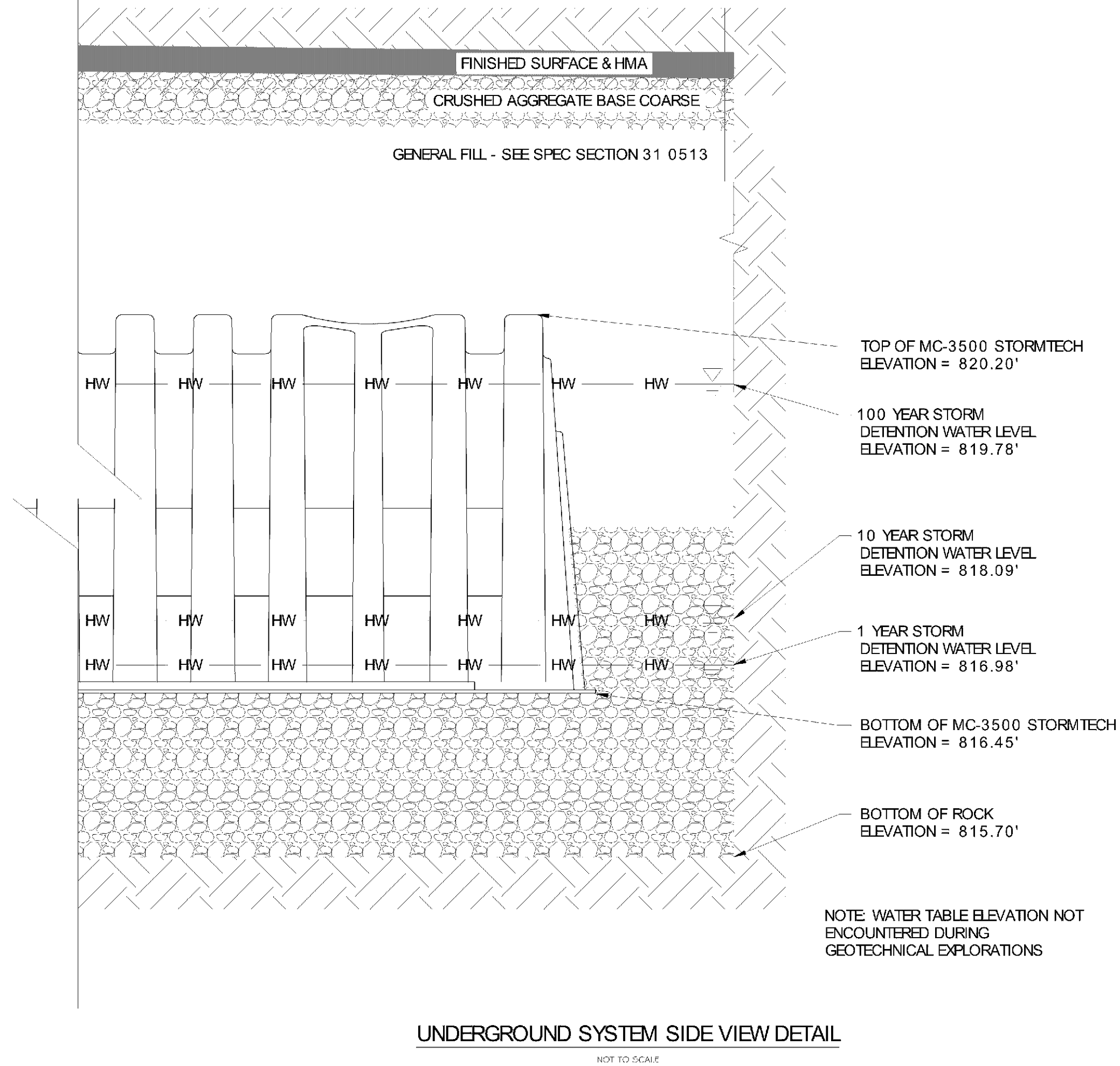
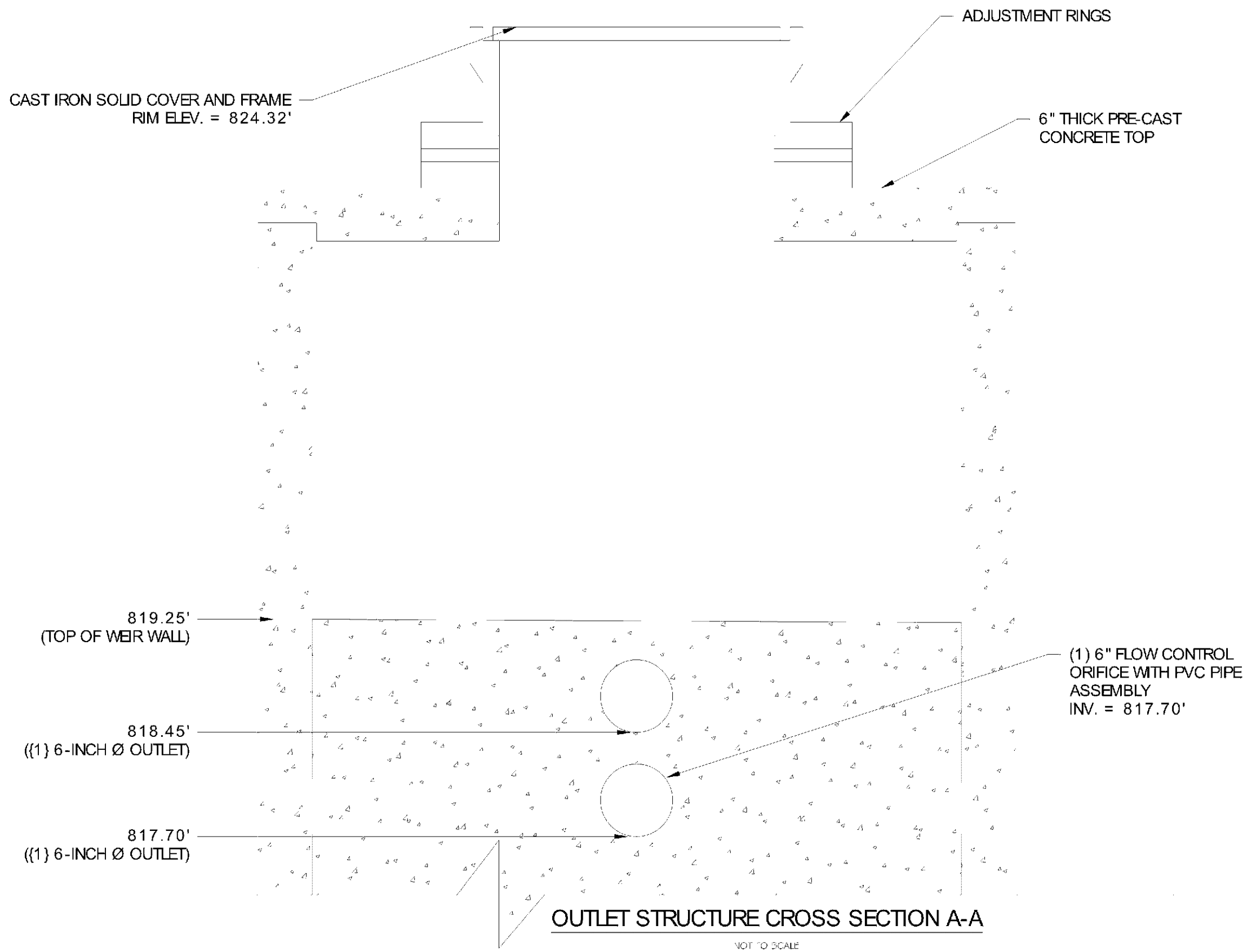
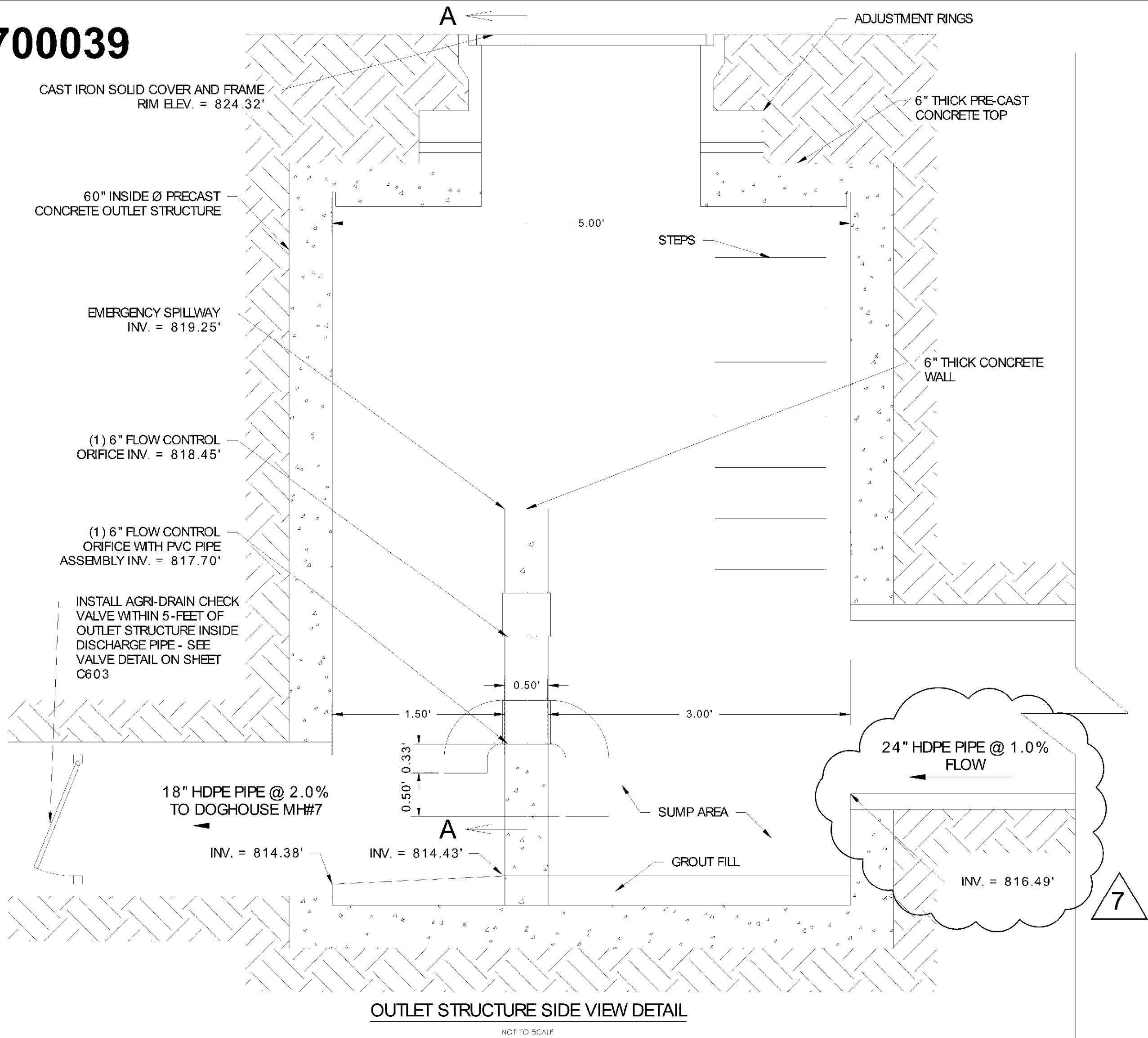
DETAILS

SCALE:
AS NOTED

PROJECT NUMBER 33476

SHEET NUMBER C600

PL201700039



NOTE: AS OF 6/6/2017 - UNDERGROUND DETENTION/RETENTION SYSTEM HAS BEEN CONCEPTUALLY LAID OUT WITH ADS STORMTECH STAFF, AND TYPICAL DETAILS/PLAN SHEETS ARE PROVIDED ON PAGES C605, C606 & C607. FINAL CONSTRUCTION DOCUMENTS SHALL BE OBTAINED FROM ADS BY ALL CONTRACTORS BIDDING ON THE PROJECT.

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Certification & Seal:
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.



Signature: James R. Skowronski
Type of Printed Name: JAMES R. SKOWRONSKI
Date: 12/11/2017
Registration Number: 42202

7	12/11/17	ADDENDUM #09
4	8/23/17	ADDENDUM #04
MARK	DATE	DESCRIPTION

DATE ISSUED: 06/07/2017

ISSUE PHASE: PERMITTING

PROJECT TITLE:

HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

DETAILS

SCALE:
AS NOTED

PROJECT NUMBER: 33476

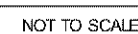
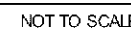
SHEET NUMBER: C601

PL201700039

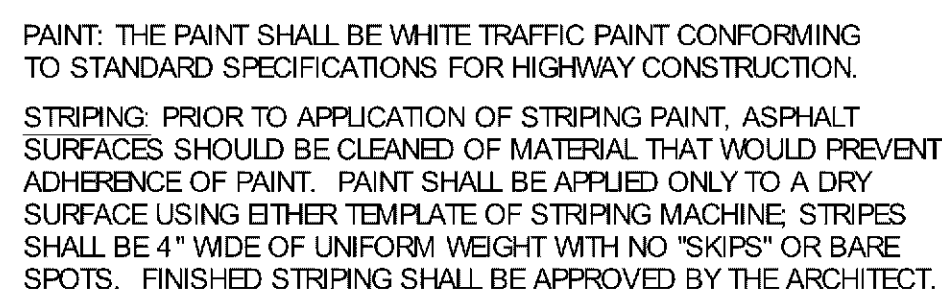
Technical drawing of a wall section. The drawing shows a cross-section of a wall with a base width of 20". The wall has a vertical section of 7" and a sloped section of 13-1/2". The wall is labeled R 1/2" and R 3". The drawing also shows a 6" vertical section and a 3/4" PER FT. slope. The drawing is titled PL201700039.

PROPOSED REJECTING CURB & GUTTER

NOT TO SCALE



- EACH DRIVEWAY PANEL NOT TO EXCEED 100 SF (9.29 m²).
- REINFORCEMENT BARS OR WELDED WIRE FABRIC (STEEL MESH) ARE NOT ALLOWED IN THE RIGHT-OF-WAY
- CLASS 5 AGGREGATE BASE REQUIRED UNDER CURB AND GUTTER
- IF PRESENT, STREET LIGHT, SIGNAL AND INTERCONNECT CONDUIT OR DIRECT BURIED STREET LIGHT WIRING MUST BE EXPOSED FOR INSPECTION PRIOR TO POUR



NOT TO SCALE

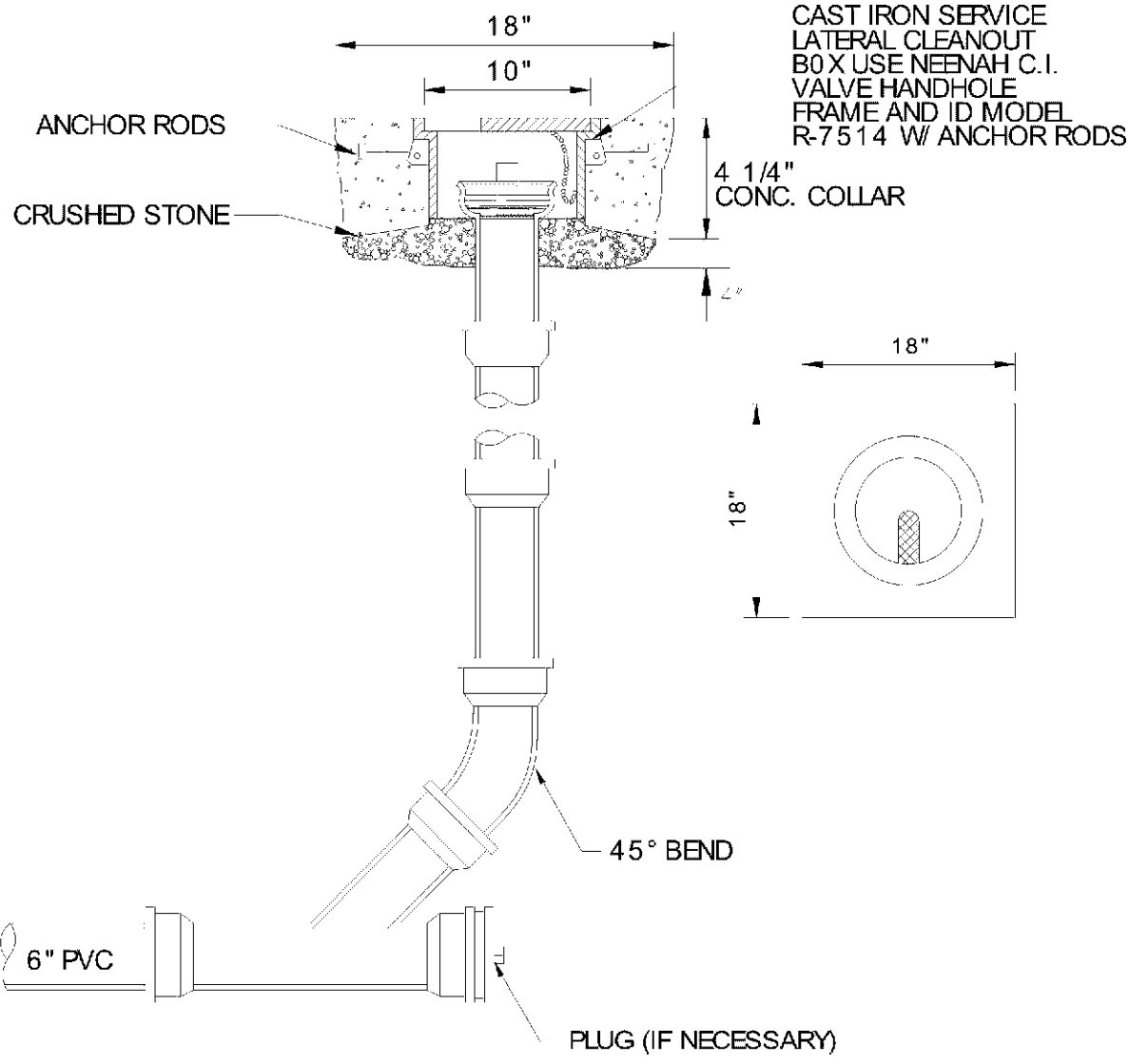


NOT TO SCALE



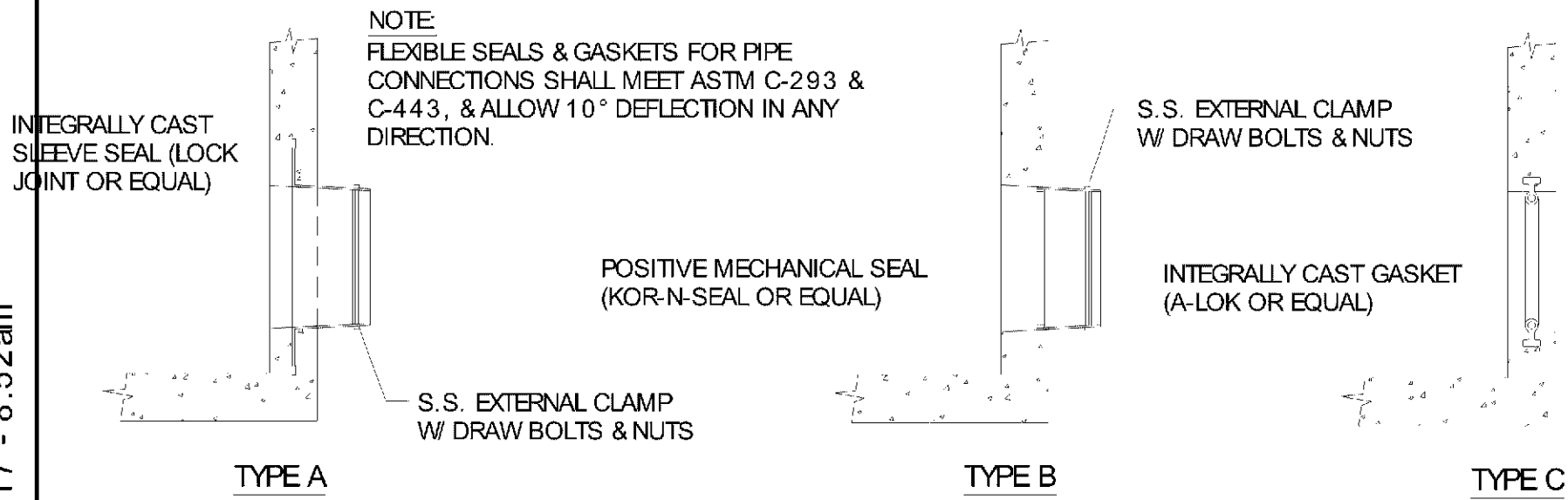
HANDICAP PARKING SIGN DETAILS

PL201700039

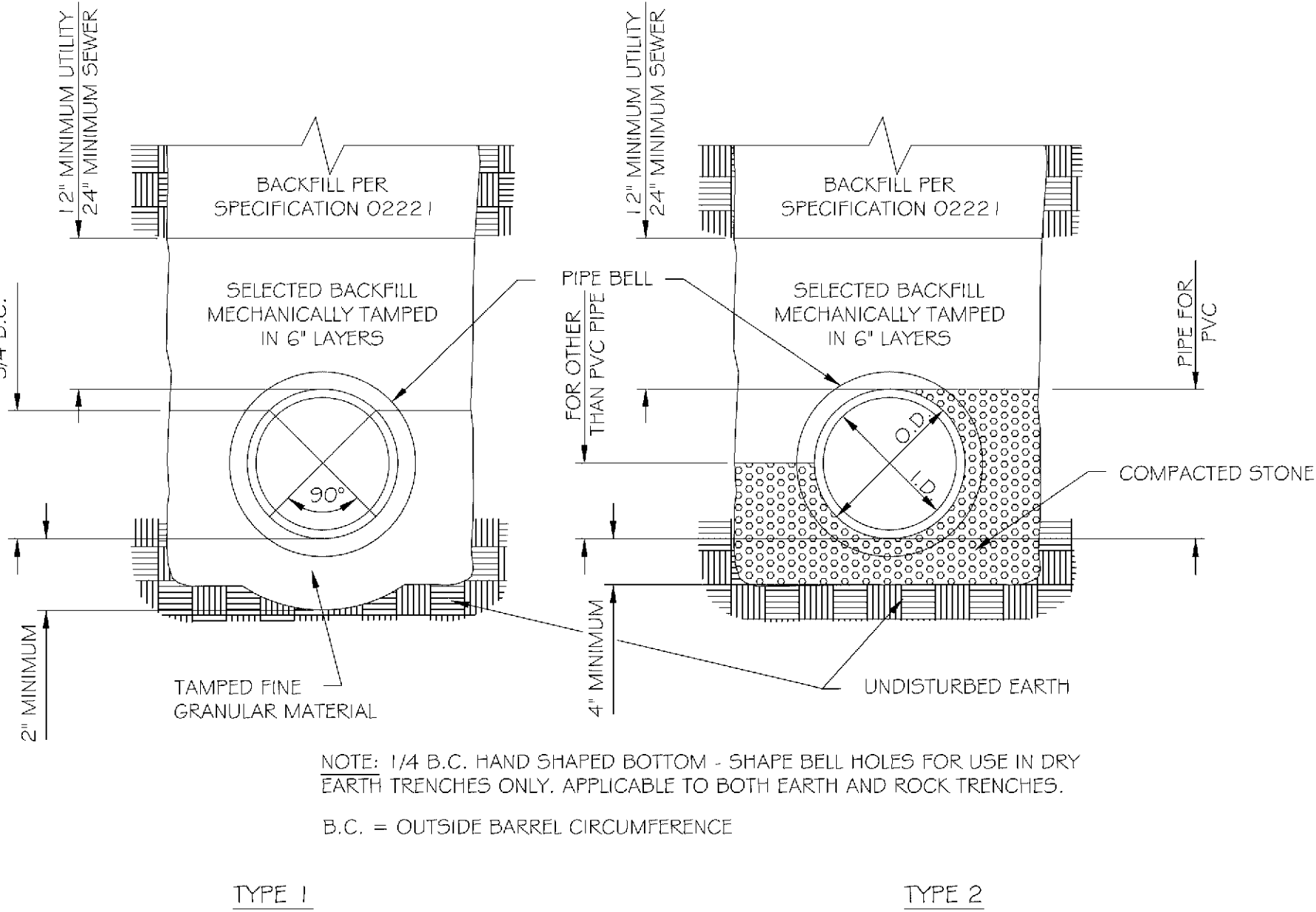


NOTE: REFER TO TYPICAL PAVEMENT SECTIONS FOR THICKNESSES OF ASPHALTIC CONCRETE SURFACE COURSE BASE COURSE

CLEANOUT DETAIL (PAVED AREAS)
NOT TO SCALE

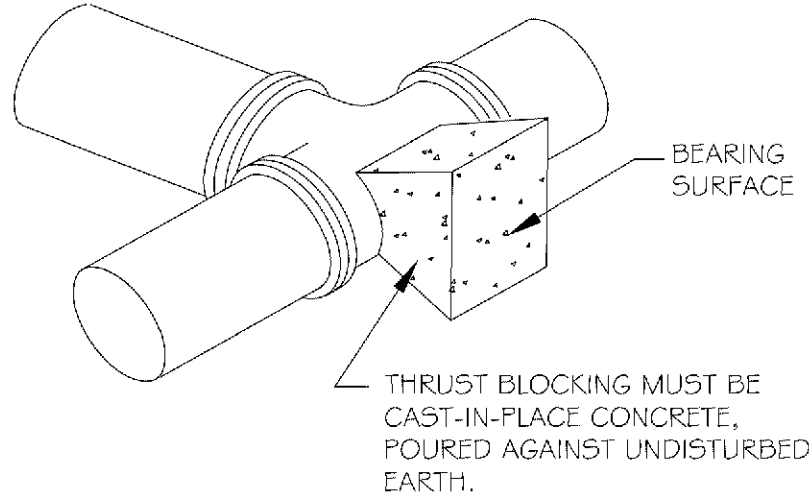


WATER TIGHT PIPE CONNECTIONS
NOT TO SCALE



NOTE: 1/4 B.C. HAND SHAPED BOTTOM - SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY. APPLICABLE TO BOTH EARTH AND ROCK TRENCHES.
B.C. = OUTSIDE BARREL CIRCUMFERENCE

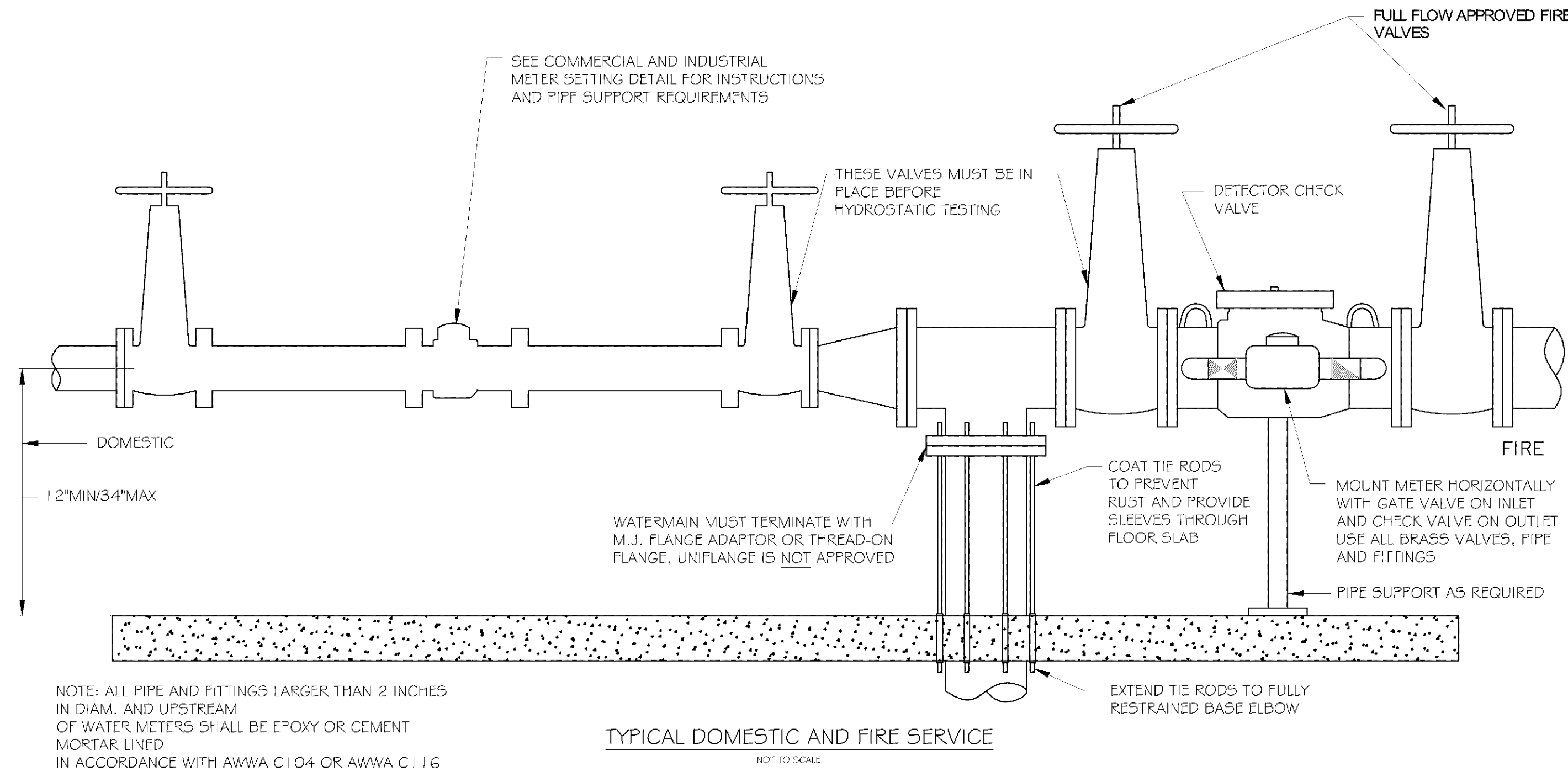
CLASS "B" PIPE BEDDING
NOT TO SCALE



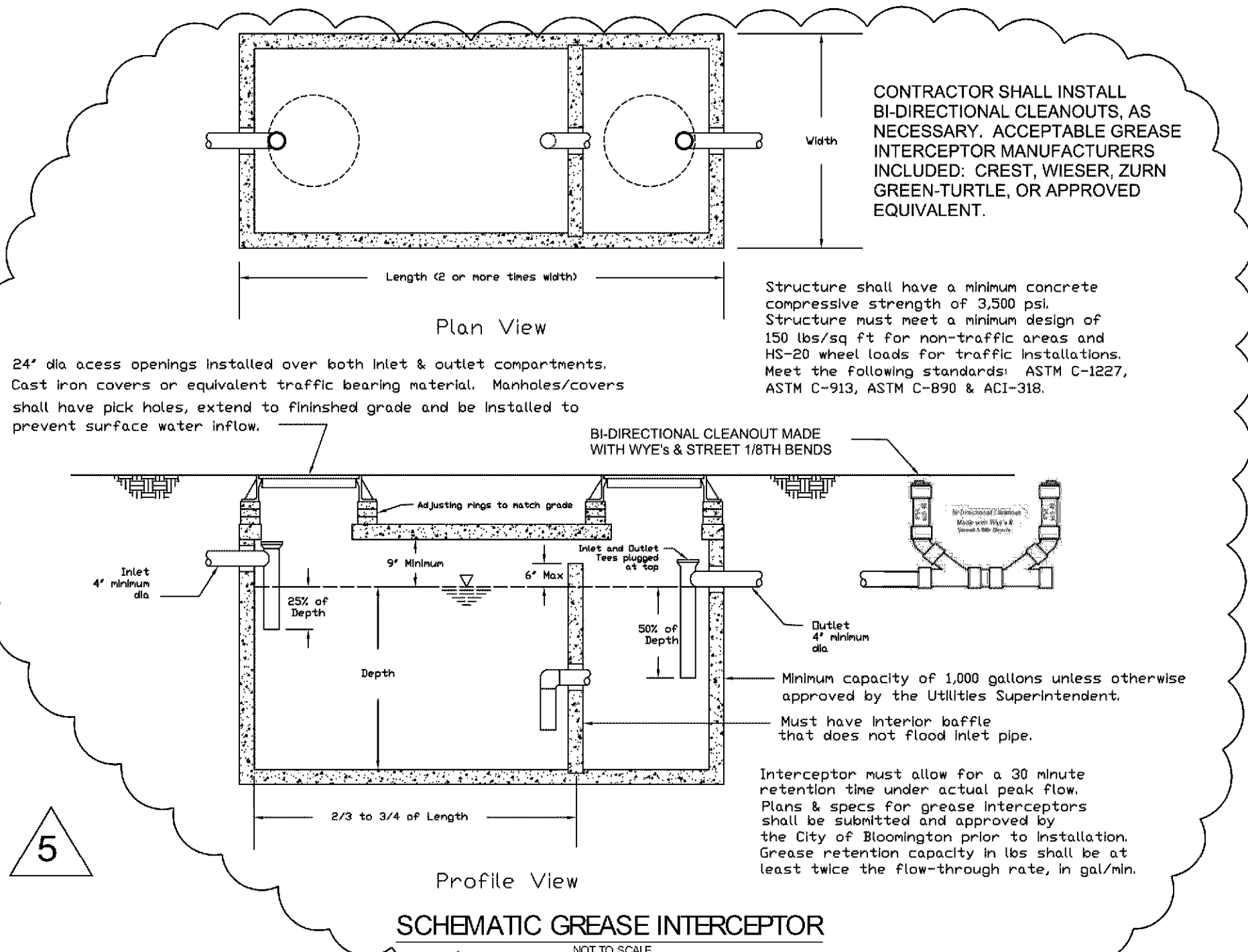
PIPE SIZE	BEARING AREA
6"	2.25 SF
8"	4 SF

NOTES:
THRUST BLOCKS TO BE USED FOR BENDS 22 1/2° AND OVER, INCLUDING HYDRANTS AND HYDRANT TEES.
THRUST BLOCKS ARE REQUIRED REGARDLESS OF ANY OTHER RESTRAINT METHODS USED ON WATERMAIN LESS THAN 12" IN DIA.
RESTRAINT METHODS ON WATERMAIN LARGER THAN 12" SHALL BE MEGALUGS, LOCKING GASKETS OR OTHER APPROVED EQUAL. THE LENGTH OF RESTRAINT SHALL BE AS COMPUTED BY DIPRA.

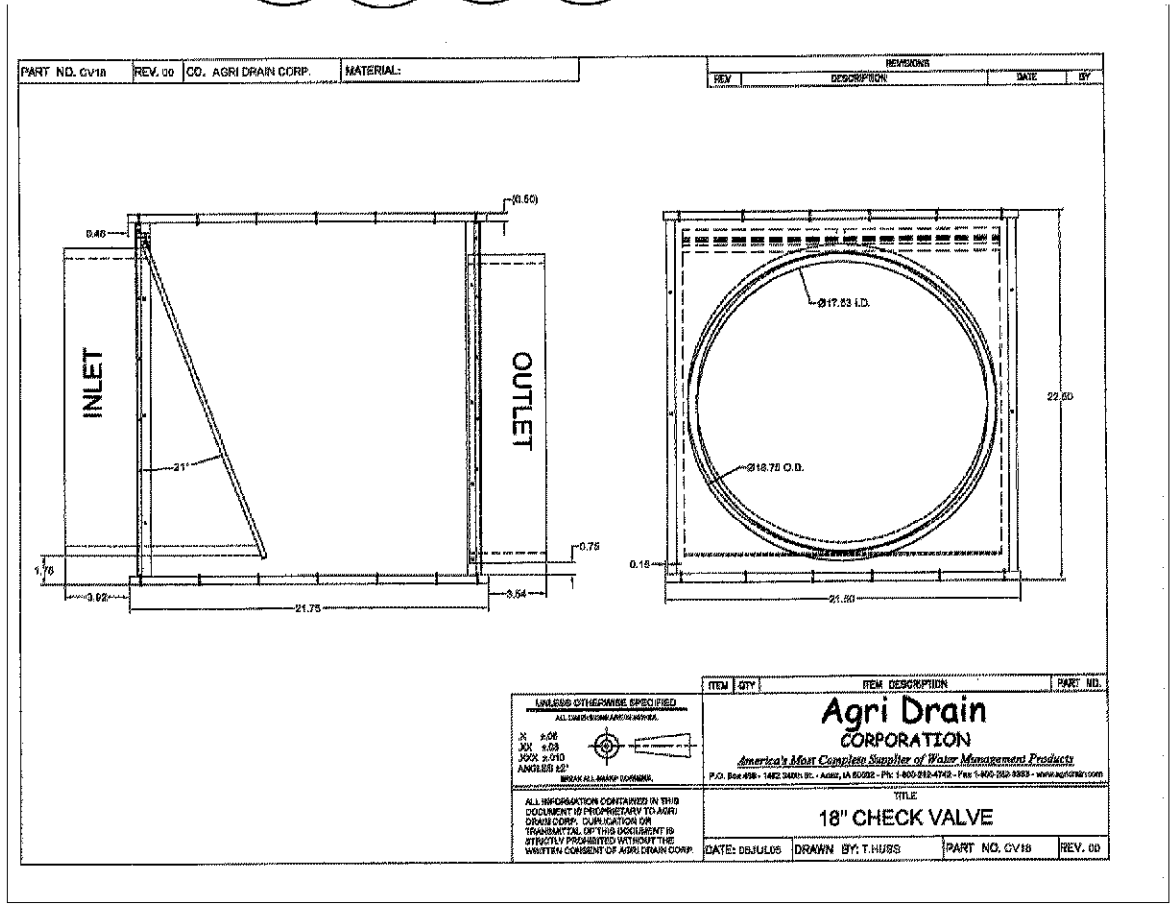
TYPICAL THRUST BLOCK
NOT TO SCALE



TYPICAL DOMESTIC AND FIRE SERVICE
NOT TO SCALE

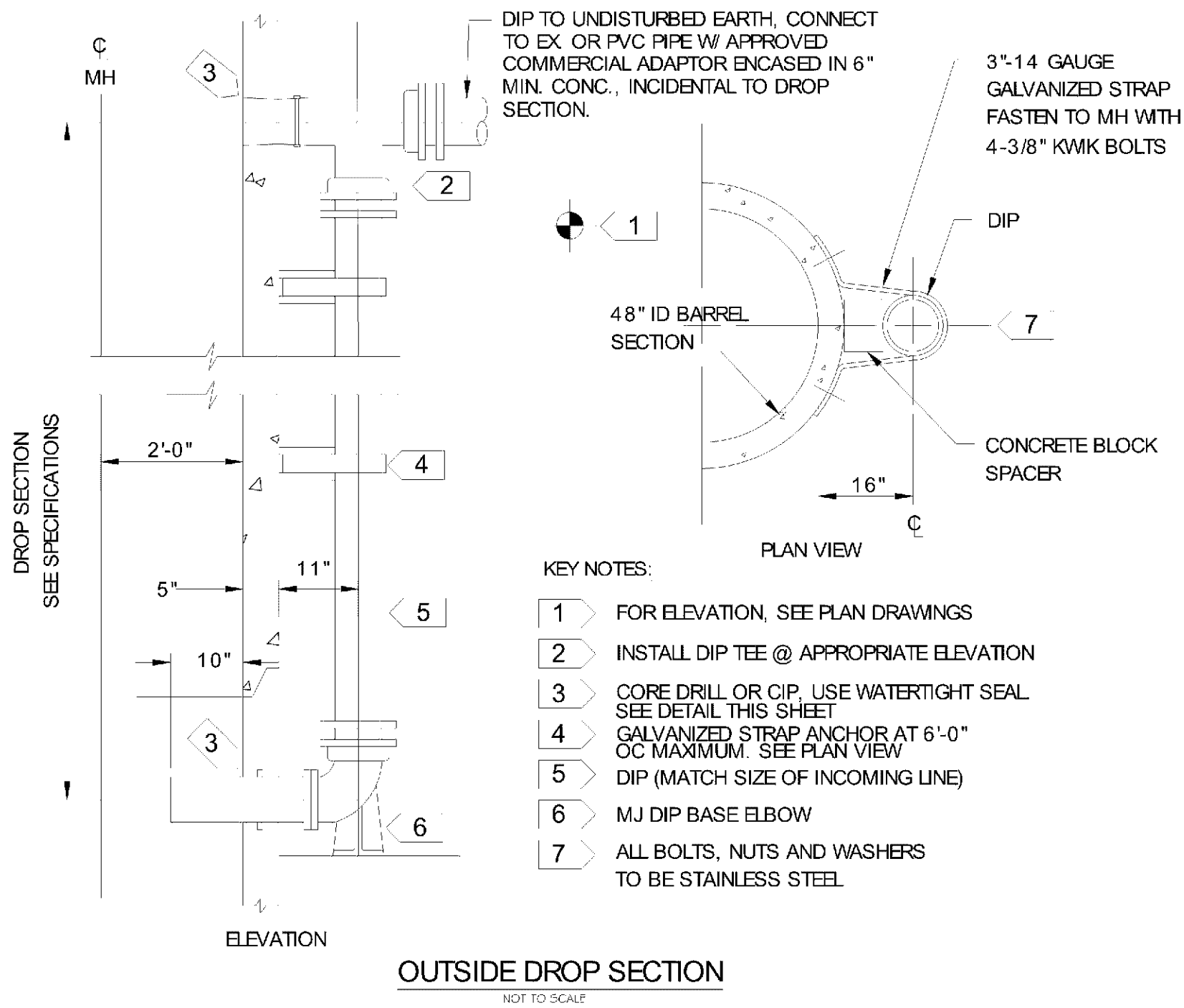


5



NOTE: INSTALL CHECK VALVE WITHIN 5-FEET OF OUTLET STRUCTURE INSIDE DISCHARGE PIPE - SEE DETAIL ON SHEET C601

CHECK VALVE DETAIL
NOT TO SCALE



OUTSIDE DROP SECTION
NOT TO SCALE

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Signature: James R. Skowronski
Date: 11/16/2017
Registration Number: 42202

5 11/17/17 ADDENDUM #07
4 8/23/17 ADDENDUM #04
MARK DATE DESCRIPTION

DATE ISSUED: 06/07/2017
ISSUE PERMITTING
PROJECT TITLE:

HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

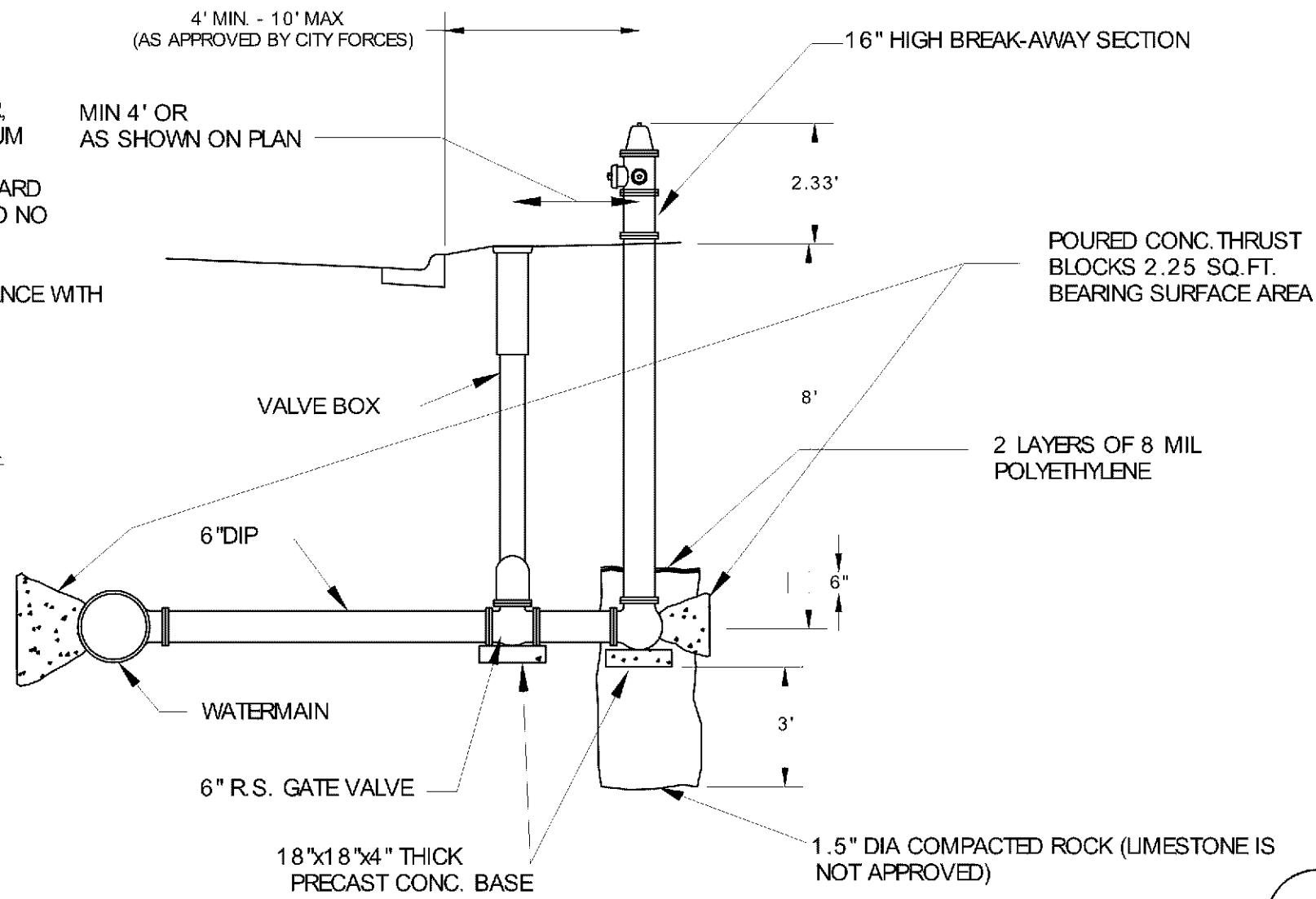
DETAILS

SCALE:
AS NOTED

PROJECT NUMBER 33476
SHEET NUMBER C603

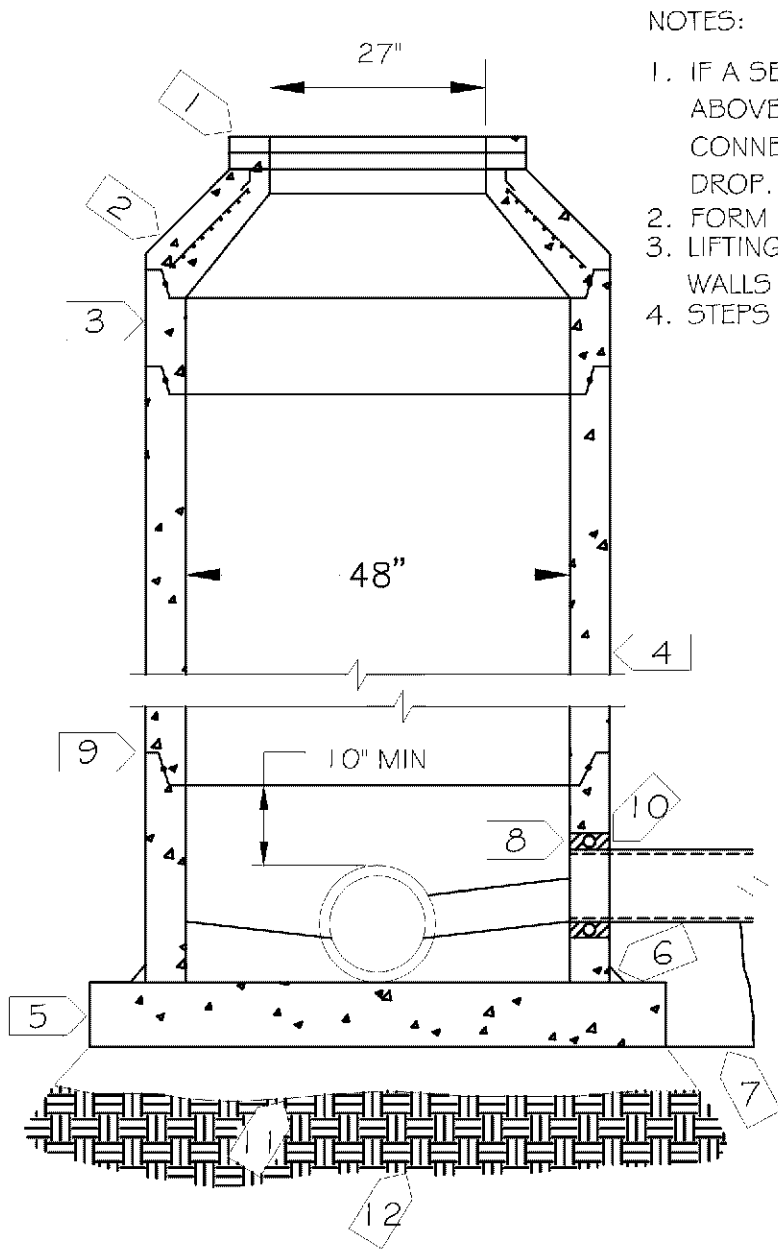
- HYDRANT TO BE:
 - WATEROUS PACER CLASSIC.
 - WATERSERVO VALVE WITH 1.5" NPT.
 - OR 2.5" NPT. VALVE.
- EQUIP WITH THREE HOSE NOZZLES/CONNECTIONS AS FOLLOWS:
 - ONE - FACTORY INSTALLED 5 INCH STORZ PUMPER NOZZLE/CONNECTOR, INCLUDING A MANUFACTURER SUPPLIED AND INSTALLED ANODIZED ALUMINUM NOZZLE CAP WITH 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.

PL 201700039



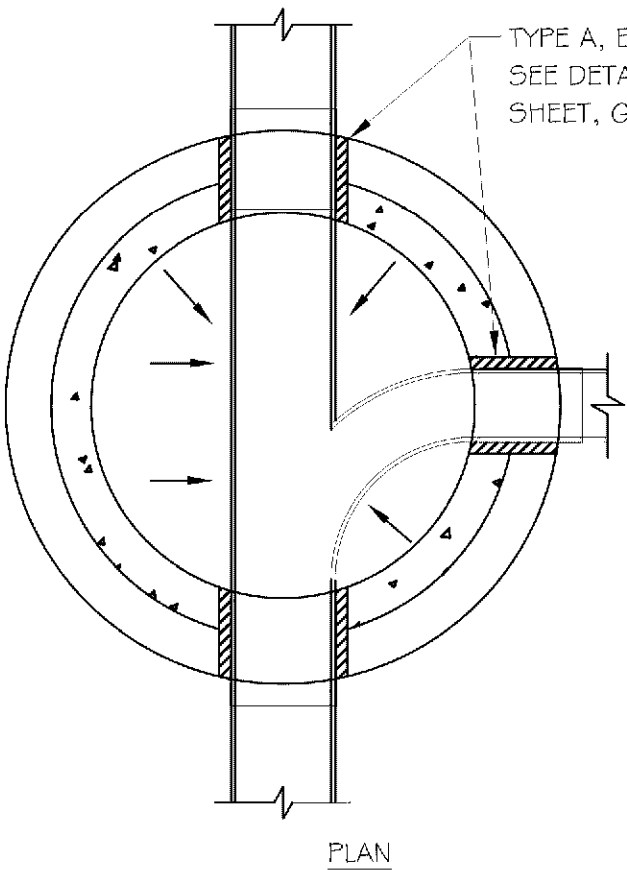
TYPICAL HYDRANT INSTALLATION

NOT TO SCALE



NOTES:

- IF A SEWER MAIN IS CONNECTED MORE THAN 24" ABOVE THE INVERT OF THE OUTGOING SEWER, CONNECTION SHALL BE BY MEANS OF AN OUTSIDE DROP. SEE DETAIL THIS SHEET.
- FORM GROUT TO SLOPE TO CENTER TROUGH.
- LIFTING HOLES WHICH PENETRATE THROUGH SECTION WALLS ARE NOT PERMITTED.
- STEPS ARE NOT PERMITTED IN MANHOLES.

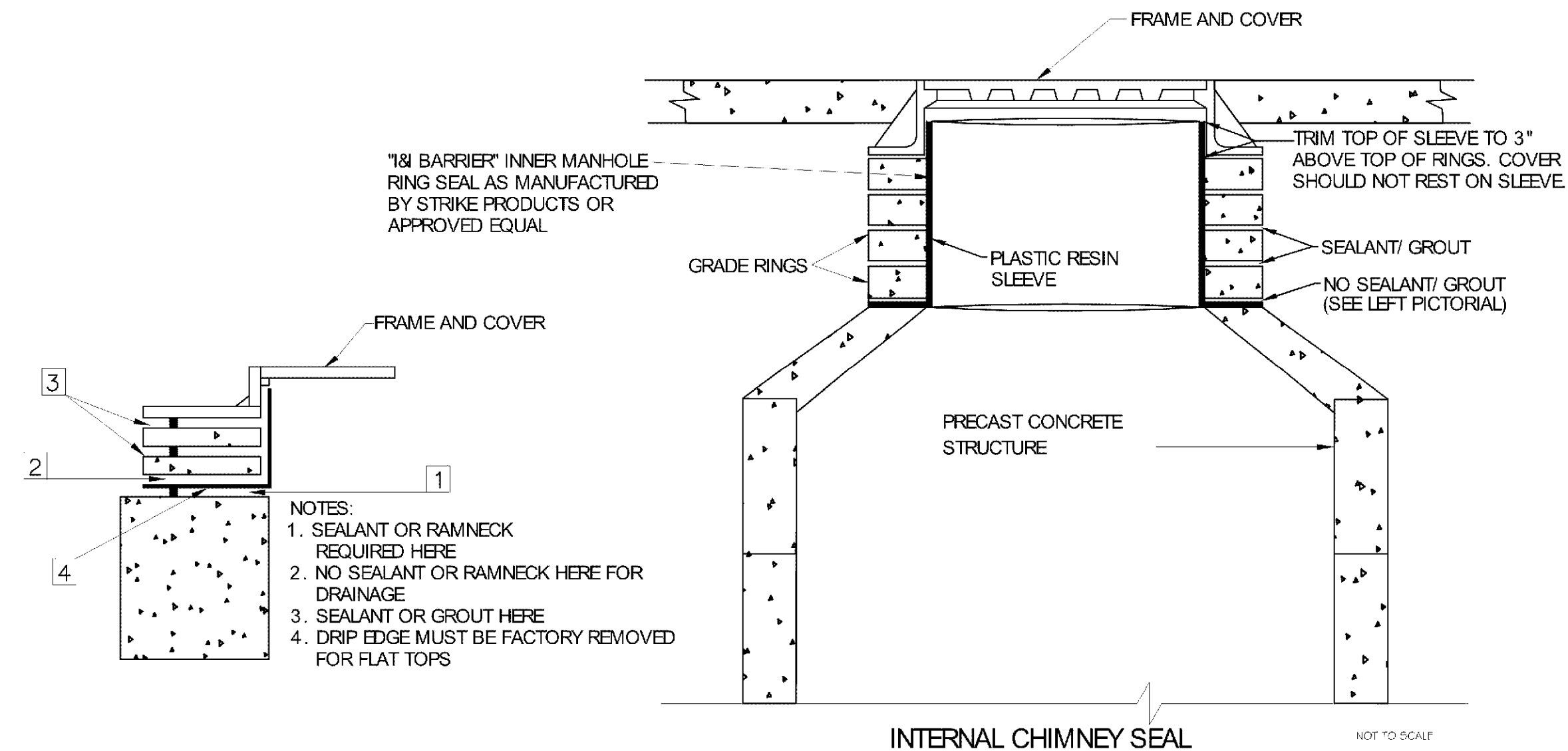


STD. SANITARY SEWER MH

NOT TO SCALE

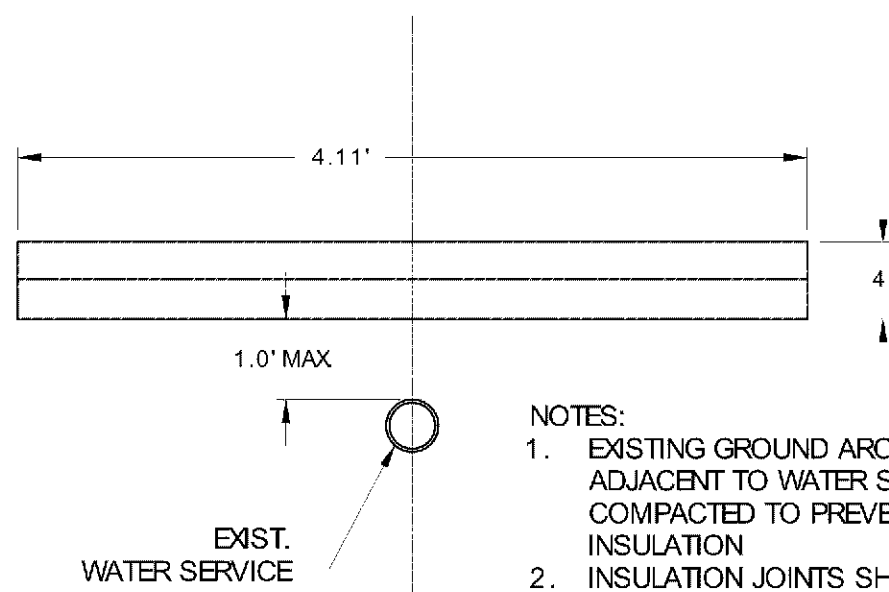
KEY NOTES:

- MN/DOT S.P.4010 2" ADJUSTING RINGS AS NEEDED [6" MIN. TO 12" MAX.]. SET EACH RING IN FULL BED OF MORTAR.
- MN/DOT S.P.4010 STD. SHORT CONE SECTION.
- 12" TOP SECTION REQUIRED.
- USE ONLY PRECAST SECTIONS. NO BRICK OR BLOCK.
- 8" CAST IN-PLACE CONCRETE OR 6" PRECAST REINFORCED CONCRETE (64" MINIMUM OD)
- CEMENT MORTAR ALL AROUND
- LEAN CONCRETE TO BEAR AGAINST FIRM UNDISTURBED SOIL
- PROVIDE WATER TIGHT PIPE CONNECTIONS SEE DETAIL THIS SHEET
- O-RING GASKET
- FOR CONNECTION TO EXISTING MHS, CORE DRILL OPENING AND PROVIDE TYPE B WATER TIGHT CONNECTOR
- 6" SAND OR FOUNDATION MATERIAL
- UNDISTURBED SOIL OR COMPACTED SUBGRADE



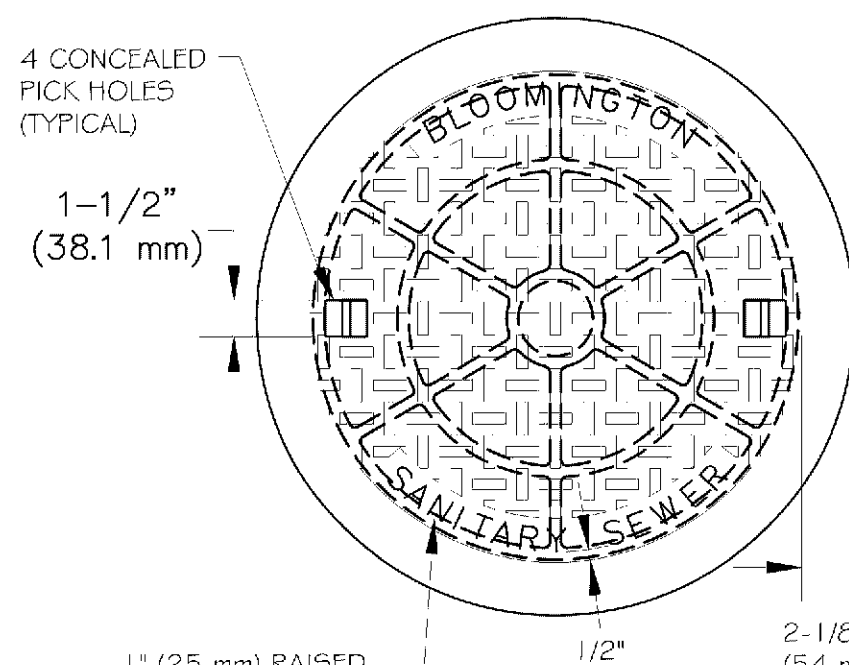
INTERNAL CHIMNEY SEAL

NOT TO SCALE



WATER SERVICE INSULATION

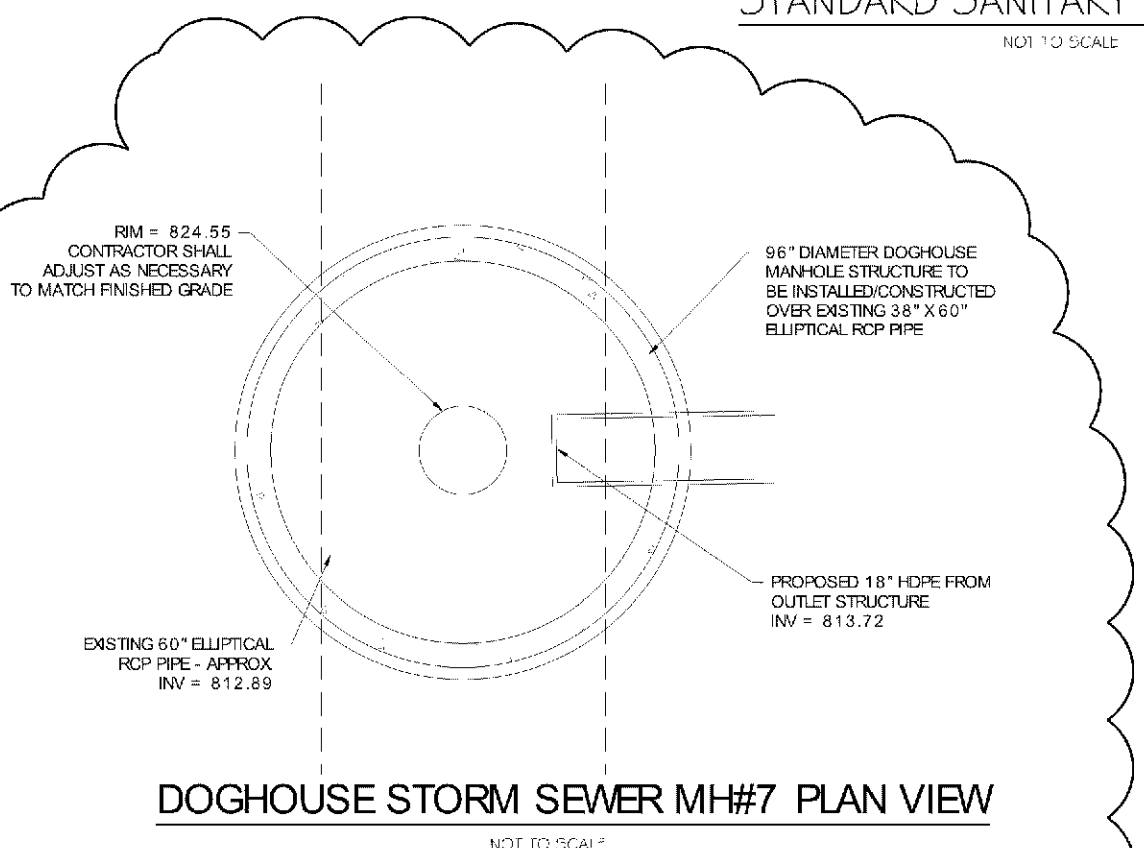
NOT TO SCALE



STANDARD SANITARY MANHOLE COVER

- NOTES:
- NEENAH SOLID TYPE "C" (SELF SEALING) OR APPROVED EQUAL.
 - TO BE USED WITH MN/DOT RING CASTING NO. 700-7, 5P 4101.

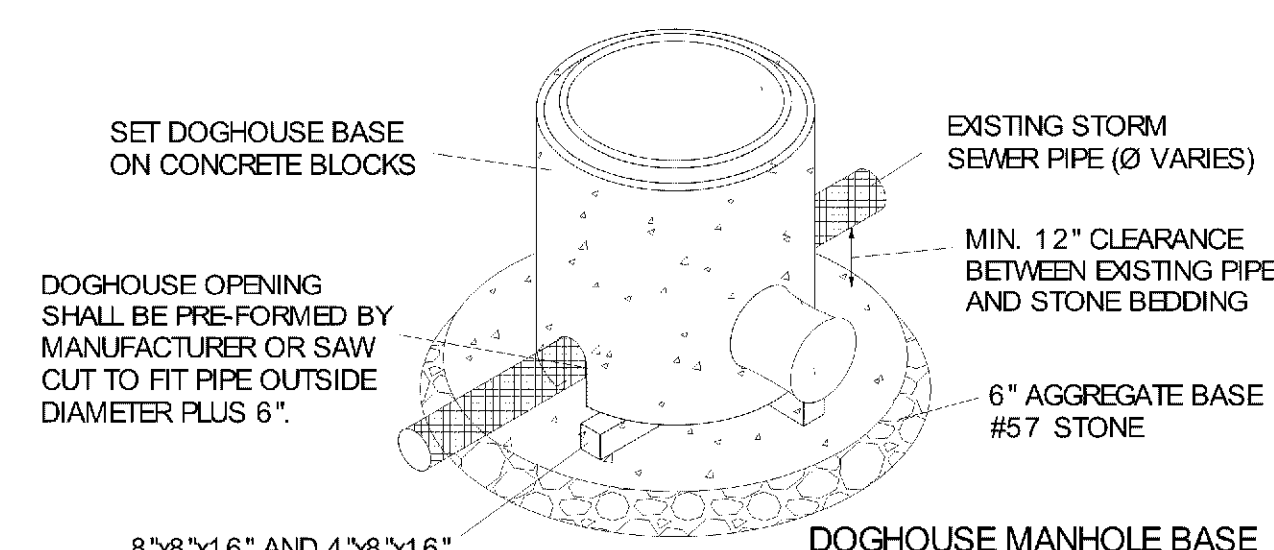
NOT TO SCALE



DOGHOUSE STORM SEWER MH#7 CROSS SECTION

NOT TO SCALE

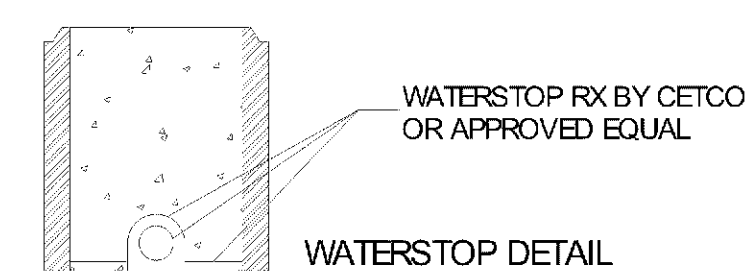
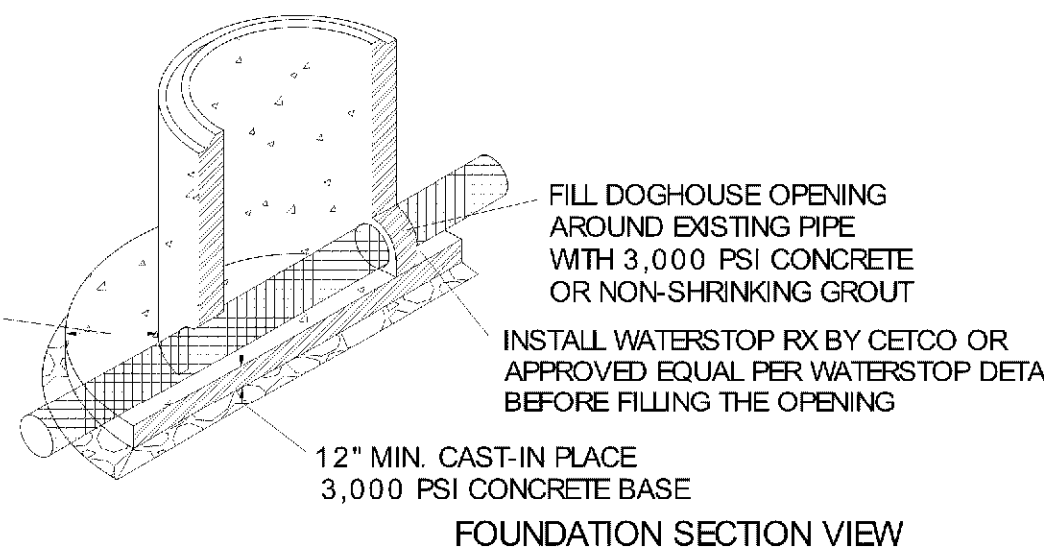
4



MANHOLE ABOVE BASE SHALL BE CONSTRUCTED AS SHOWN ON DETAIL THIS SHEET

ALLOW CONCRETE TO FLOW A MIN 1'-0" BEYOND BASE OF STRUCTURE

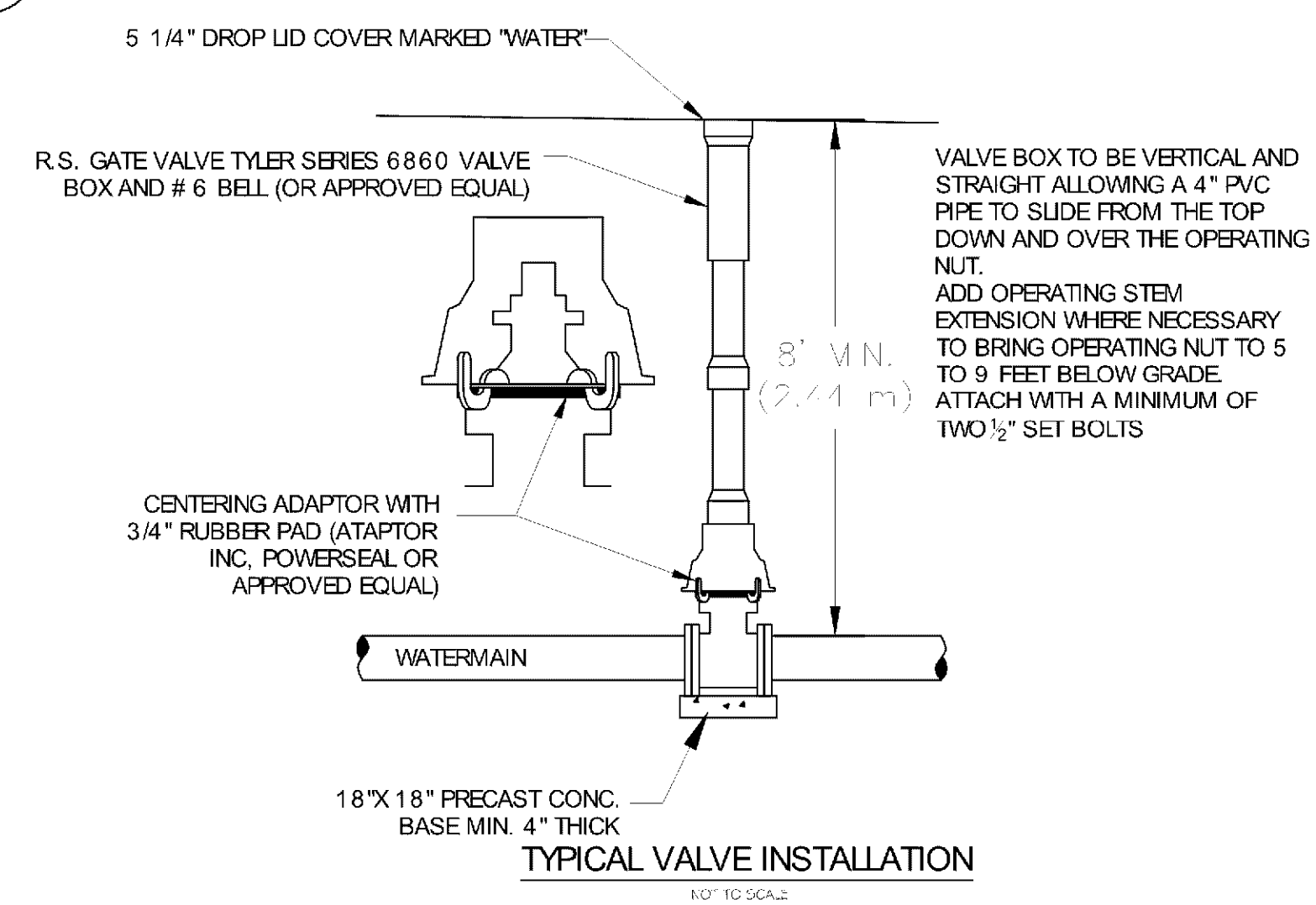
FILL CONCRETE TO ENCASE PIPE WHEN PASSING THROUGH DOGHOUSE OPENING



- NOTES:
- CONSTRUCT A FORMED INVERT FROM NEW SEWER LINE TO ALLOW FLOW TO THE EXISTING PIPE.
 - POUR A BENCH TO THE LOWER HALF OF THE EXISTING PIPE.
 - CUT AND REMOVE THE TOP HALF OF EXISTING PIPE TO WITHIN 6" OF THE MANHOLE WALLS AFTER THE INVERT AND BENCH HAVE BEEN FORMED, AND THE MH HAS BEEN FULLY TESTED IN ACCORDANCE WITH LOCAL JURISDICTION REQUIREMENTS.

TYPICAL DOGHOUSE STORM SEWER MH

NOT TO SCALE



CITIES EDGE ARCHITECTS

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Signature: James R. Skowronski
Date: 8/23/2017
Type of Printed Name: James R. Skowronski
Registration Number: 42202

MARK	DATE	DESCRIPTION
4	8/23/17	ADDENDUM #04

DATE ISSUED: 06/07/2017

ISSUE PERMITTING

PROJECT TITLE:

HOLIDAY INN EXPRESS & SUITES
5 STORIES
171 UNITS

PROJECT OWNER:
HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

DETAILS

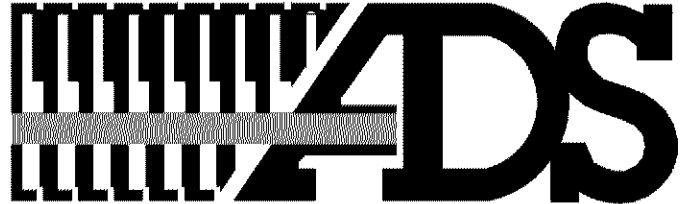
SCALE:
AS NOTED

PROJECT NUMBER: 33476

SHEET NUMBER: C604

PL201700039

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	JIM MERCHLEWITZ 612-387-2413 JIM.MERCHLEWITZ@ADS-PIPE.COM
ADS SALES REP:	TOM ROONEY 612-756-3552 TOM.ROONEY@ADS-PIPE.COM
PROJECT NO:	191669



ADVANCED DRAINAGE SYSTEMS, INC.



HOLIDAY INN & SUITES BLOOMINGTON, MN

STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
 - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
 - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET, THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
 - STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOTTER LOCATED OFF THE CHAMBER BED
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm) MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-862-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT

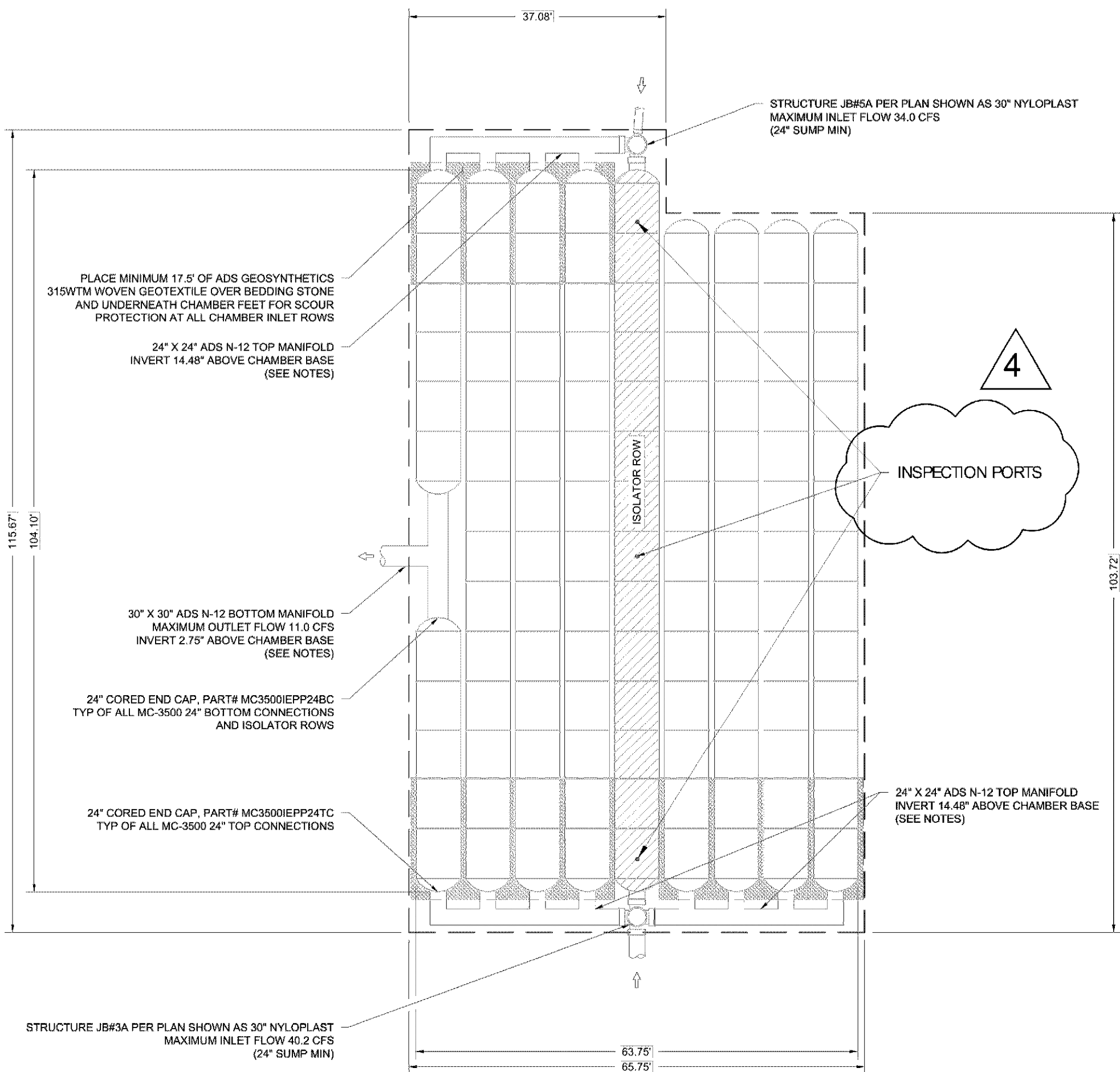
119	STORMTECH MC-3500 CHAMBERS
20	STORMTECH MC-3500 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
24,009	INSTALLED SYSTEM VOLUME (CF)
(PERIMETER STONE INCLUDED)	
7,283	SYSTEM AREA (ft ²)
363	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	828.20
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	822.70
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	822.20
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	822.20
MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):	822.20
TOP OF STONE:	821.20
TOP OF MC-3500 CHAMBER:	820.20
24" TOP MANIFOLD INVERT:	817.66
30" BOTTOM MANIFOLD INVERT:	816.58
24" ISOLATOR ROW INVERT:	816.62
BOTTOM OF MC-3500 CHAMBER:	816.45
BOTTOM OF STONE:	815.70

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



HOLIDAY INN & SUITES BLOOMINGTON, MN	
DATE: 06/07/17	DRAWN: VLV
PROJECT #: 191669	CHECKED: GFI
REV	DESCRIPTION
1	24\"/>
Stormtech 19 WOODBURY BLVD HILLIARD, OH 43026 800-888-8622 WWW.STORMTECH.COM	
ADS 4640 TRUMAN BLVD HILLIARD, OH 43026	
2	6



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Registration Number: 42202

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MARK	DATE	DESCRIPTION

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EXPRESS & SUITES
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171 UNITS

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HAWKEYE HOTELS

PROJECT LOCATION:
BLOOMINGTON, MN

SHEET TITLE:

DETAILS

SCALE: NONE

PROJECT NUMBER 33476

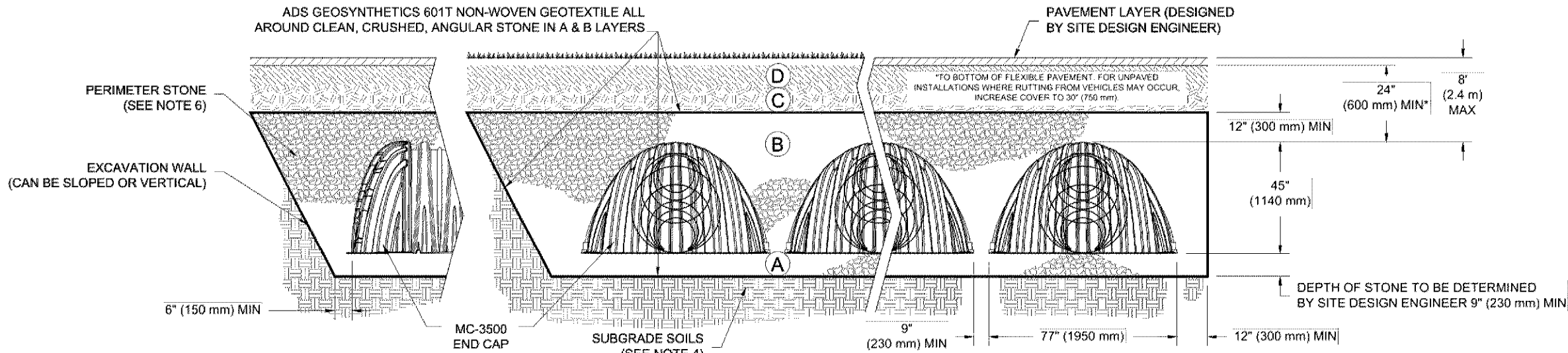
SHEET NUMBER C605

PL201700039

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

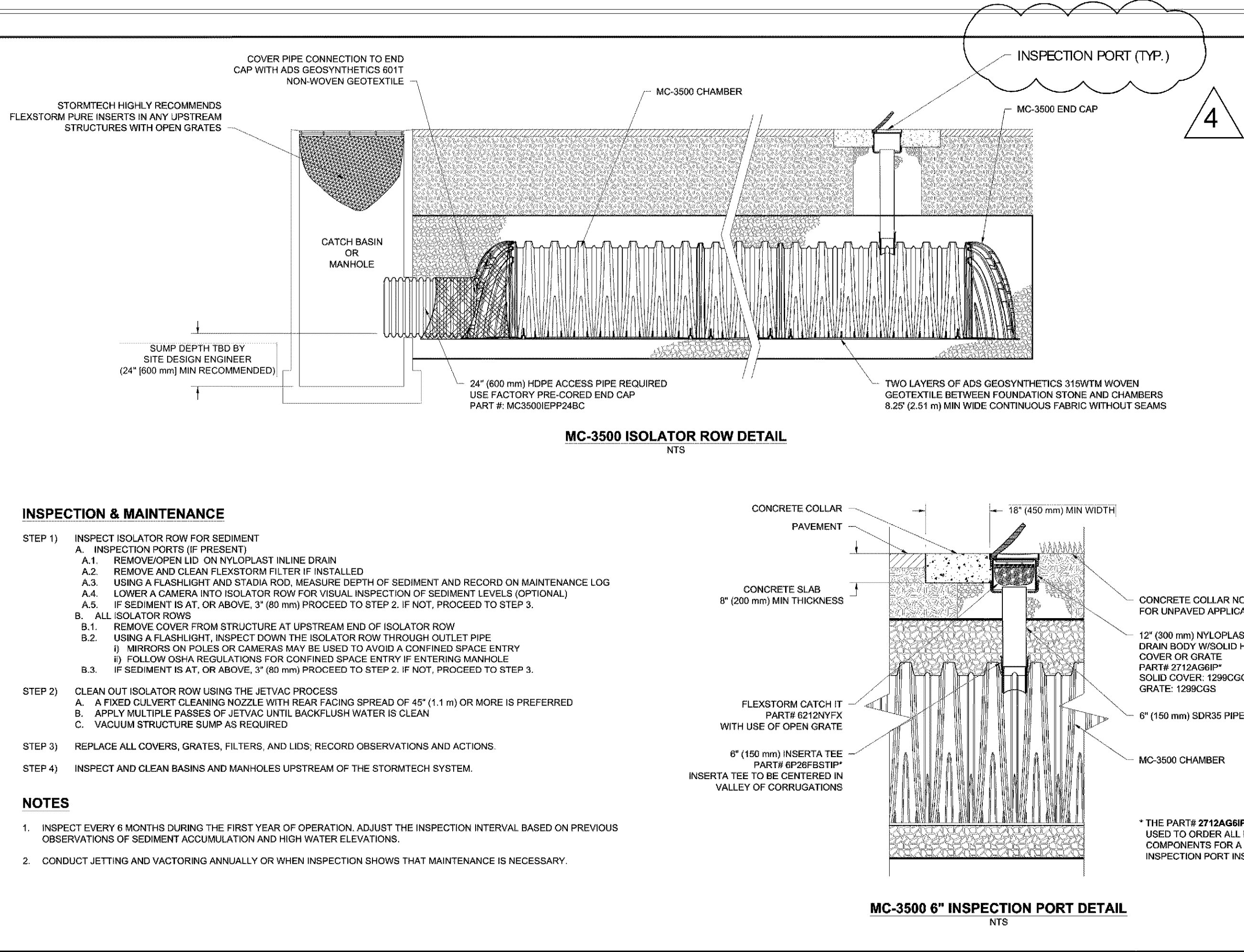
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2, A-3, A-3 OR AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57, 5, 57, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ³ 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ³ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2, 3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE"
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL AROUND CLEAN, CRUSHED, ANGULAR STONE IN A & B LAYERS



NOTES:

- MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

DESCRIPTION	HOLIDAY INN & SUITES BLOOMINGTON, MN
DATE	06/07/17
PROJECT #	19189
CHECKED	GFI
DRAWN	VJW
REV	
4640 TRULEMAN BLVD HILLIARD, OH 43026	Stormtech 16 WOODBURN RD, SUITE 1, ROCKY HILL, CT 06067 800-541-8181, 614-466-2884, 1.800.876.2884 WWW.STORMTECH.COM
3	6

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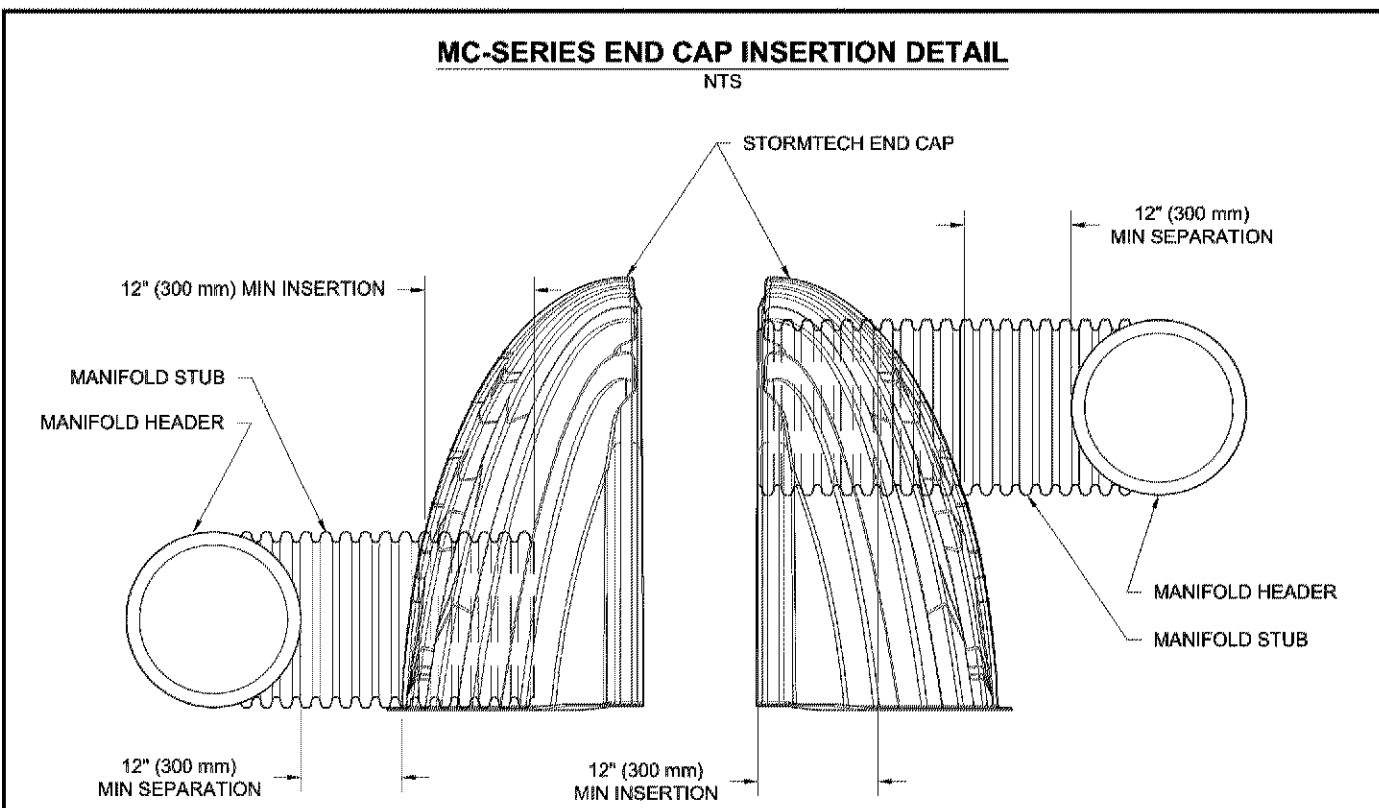
SCALE: NONE

PROJECT NUMBER 33476

SHEET NUMBER C606

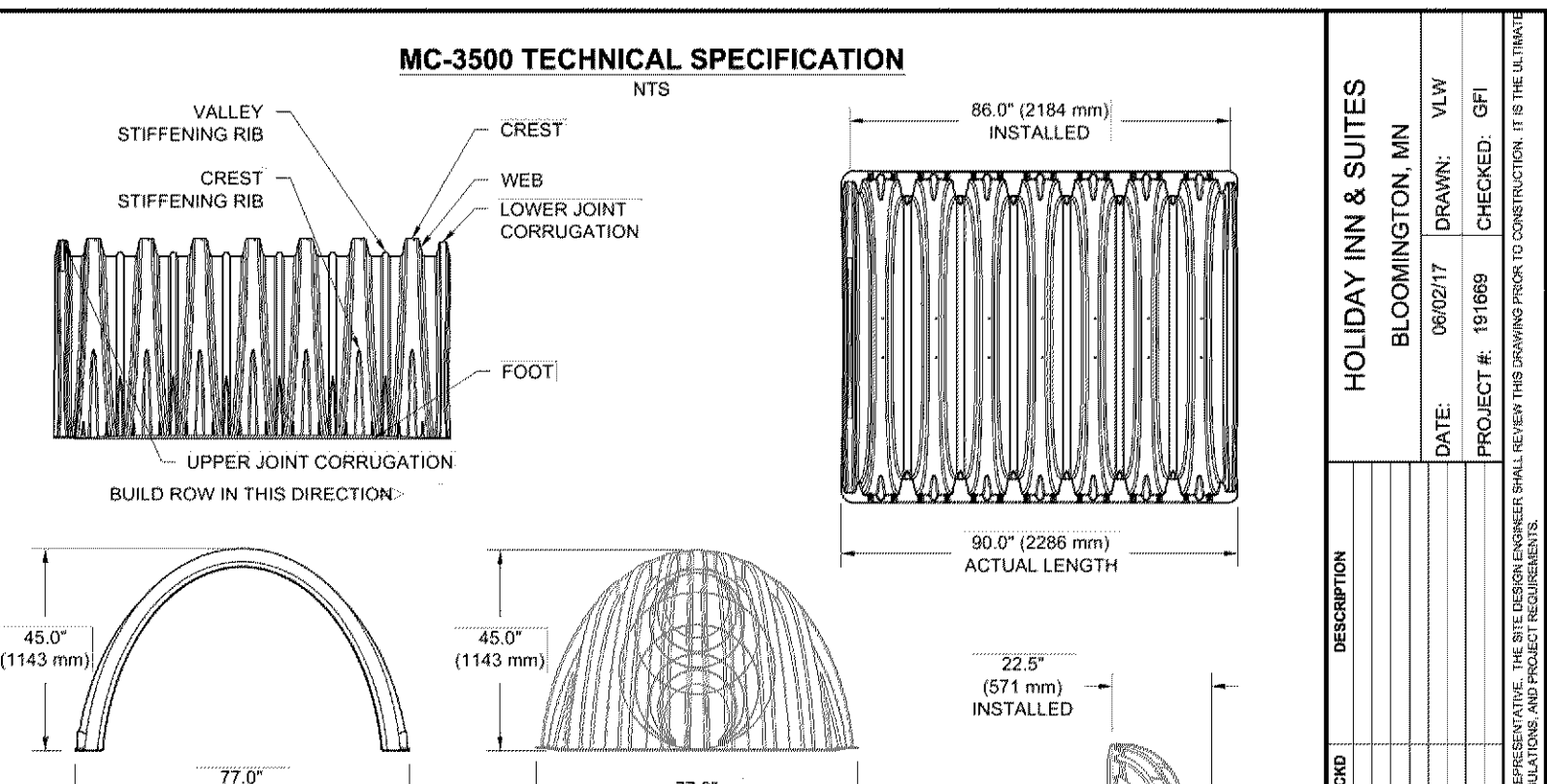
PL201700039

MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-3500 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH)
CHAMBER STORAGE
MINIMUM INSTALLED STORAGE*
WEIGHT

77.0" X 45.0" X 86.0" (1956 mm X 1143 mm X 2184 mm)
109.9 CUBIC FEET (3.11 m³)
178.9 CUBIC FEET (5.06 m³)
135.0 lbs. (61.2 kg)

NOMINAL END CAP SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH)
END CAP STORAGE
MINIMUM INSTALLED STORAGE*
WEIGHT

77.0" X 45.0" X 22.5" (1956 mm X 1143 mm X 571 mm)
14.9 CUBIC FEET (0.42 m³)
46.0 CUBIC FEET (1.30 m³)
50.0 lbs. (22.7 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B	---	---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B	---	---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B	---	---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B	---	---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B	---	---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC	---	---	1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC	---	---	2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

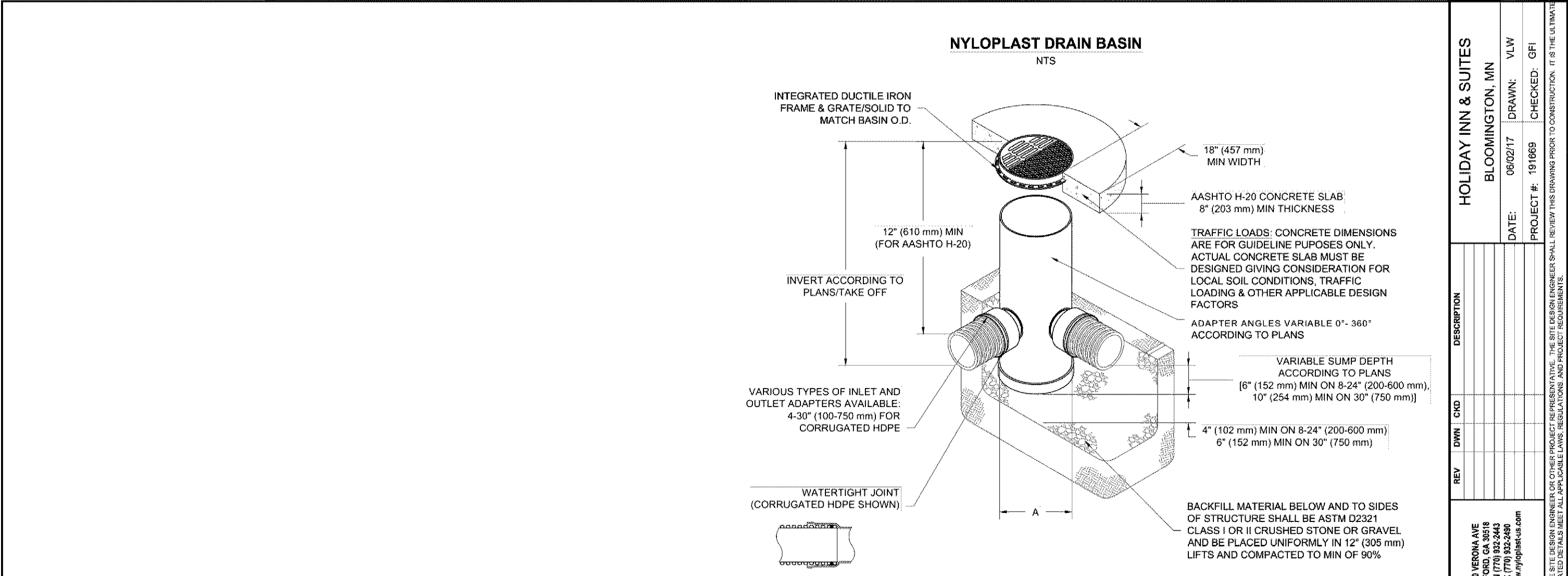
CUSTOM PRECURED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

StormTech
70 HUNTERWOOD BLVD, SUITE 100
BLOOMINGTON, MN 55408
WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026
419.233.2444
WWW.ADS-DESIGN.COM

5 OF 6

NYLOPLAST DRAIN BASIN
NTS



NOTES

- 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A538 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A538 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

100 ARSONA AVE
BURLINGAME, CA 94008
PH: (770) 832-2444
WWW.NYLOPLAST-USA.COM

Nyloplast

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6 OF 6



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JAMES R. SKOWRONSKI 42202
Typed or Printed Name: Registration Number:

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PROJECT LOCATION: BLOOMINGTON, MN		
SHEET TITLE:		
DETAILS		
SCALE: NONE		
PROJECT NUMBER	33476	
SHEET NUMBER	C607	