



PARIC CORPORATION
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St. Louis, MO 63146
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REQUEST FOR INFORMATION	DATE: February 23, 2017	NO.: RFI-459
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To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Devin Gates

Project Name:	15051-Webster University Interdisciplinary Science Building	Project No.: 15051
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Subject: RFI#252 Follow up

Response Required By: March 02, 2017

Drawing / Spec Reference:

Information Requested:

After confirming the extents and depths of utilities with the potholing work completed, we believe that tunneling the electrical manhole as proposed in RFI#252 may not be most viable option for the storm install. This is largely due to the manhole excavation being backfilled entirely with clean rock, not allowing us to safely tunnel under the structure without risk of differential settlement. This, coupled with uncertain subgrade conditions has us concerned about digging that deep of trench along the full south side of the Pearsons building without causing damage to the structure.

After some discussion, we believe there is a route to get the sewer installed, still having to tunnel the duct bank, but that could limit our exposure to settlement damage up against the Pearsons building. See attached plan for proposed routing - Please advise if this is acceptable.

Response:

1. See response by Chris Betts, MSD reviewer.

ARCHITECT'S RESPONSE:

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By: Mark Davis

Date: 2-27-2017

Mark Davis

From: Christopher M. Betts <cbetts@stlmsd.com>
Sent: Friday, February 24, 2017 9:07 AM
To: Mark Davis; Szachnieski, Jason
Subject: RE: Storm Installation Update P-28874-01

Mark,

Listed below are my 9-2-16 responses to the same questions asked of MSD on 8-25-16 and 9-2-16. The only new comment that I have is that the new location of AI4 appears to be relatively close to the new water service. You should probably keep them about 10 feet apart.

8-25-16 email (RFI #252):

The proposed revision to PUMI reach #5 to #6 is acceptable. Maintain a 1% minimum slope as shown on the approved plans. This information shall be shown on the as-built drawings.

The proposed revision to PUMI reach #6 to #7 is acceptable. It should be noted that a portion of this reach will be located directly under Rain Garden #2. You should revise the profile to ensure that rain garden bottom will not be in conflict with the proposed 18" PVC storm sewer. This information shall be shown on the as-built drawings.

The proposed revision to PUMI reach #7 to #8 is acceptable. This information shall be shown on the as-built drawings.

Since reaches #2 to #3, #3 to #4, and #4 to #5 are private, MSD has no objection to the proposed revisions. This information shall be shown on the as-built drawings.

Since reaches W to X, X to E are private, MSD has no objection to the proposed revisions. This information shall be shown on the as-built drawings.

9-2-16 email (Nyloplast structure):

Since structure #2 is private, MSD has no objection to the proposed revisions. This information shall be shown on the as-built drawings.

Thanks,

Christopher M. Betts, PE
Civil Engineer
Engineering / Development Review
Metropolitan St. Louis Sewer District
2350 Market Street
St. Louis, MO 63103
T: 314.768.2718
F: 314.768.6342

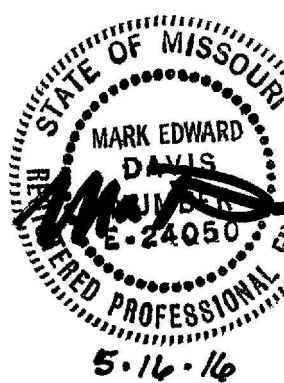
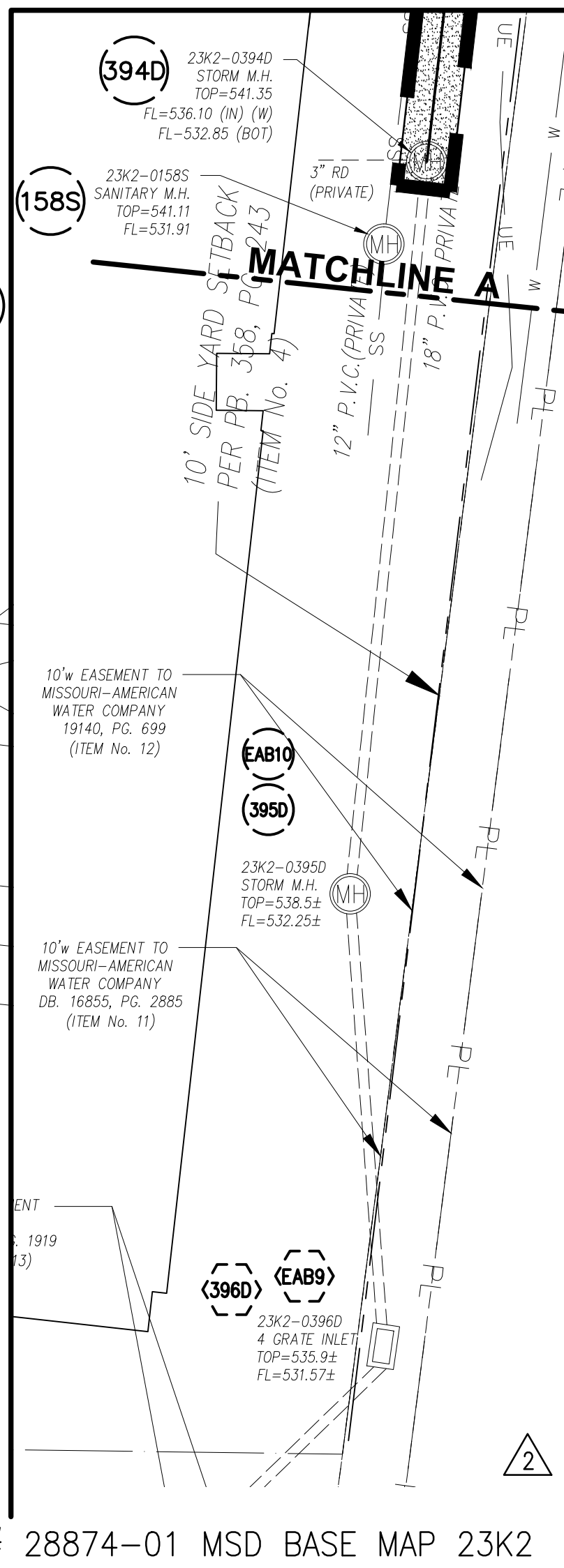
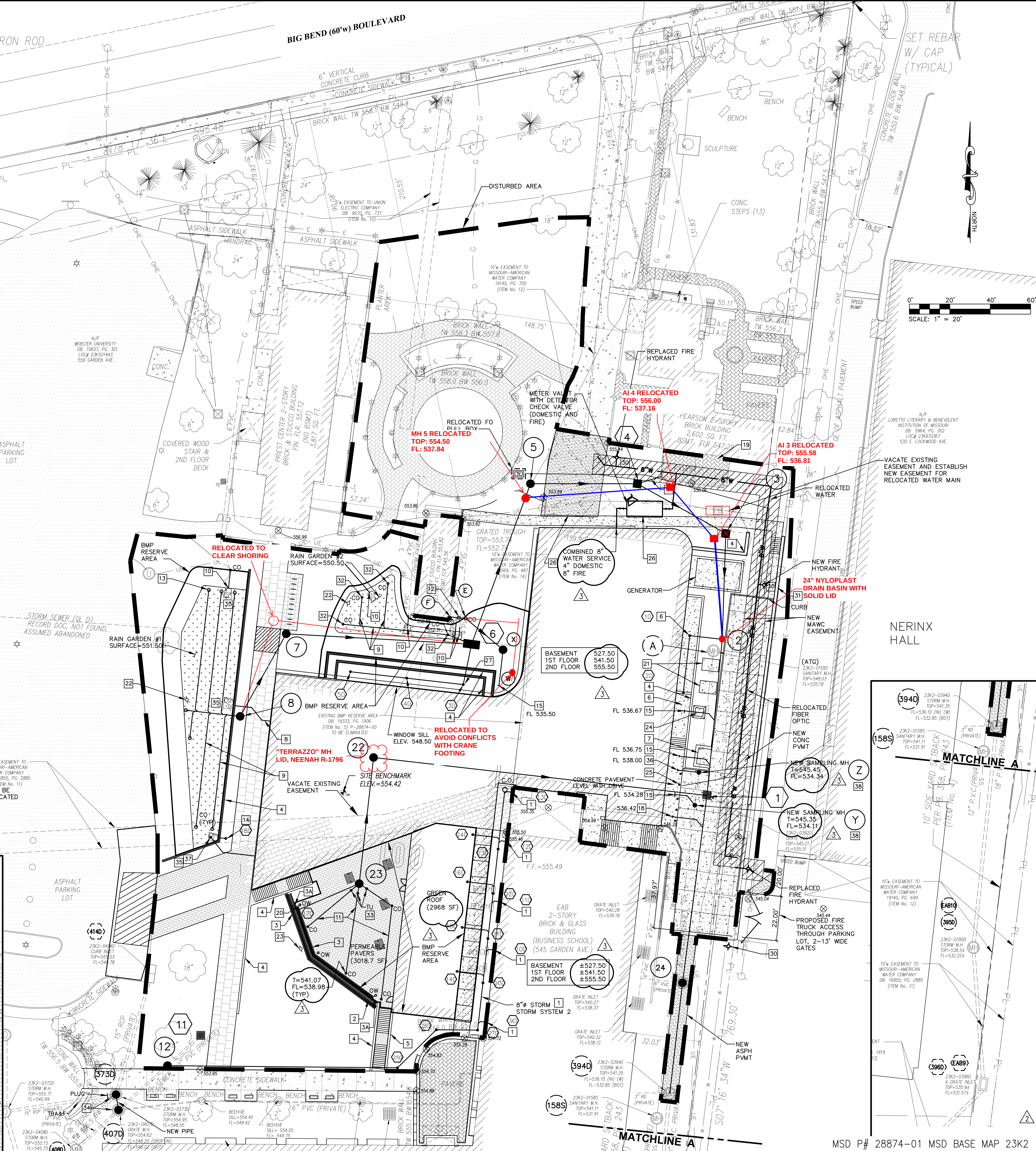
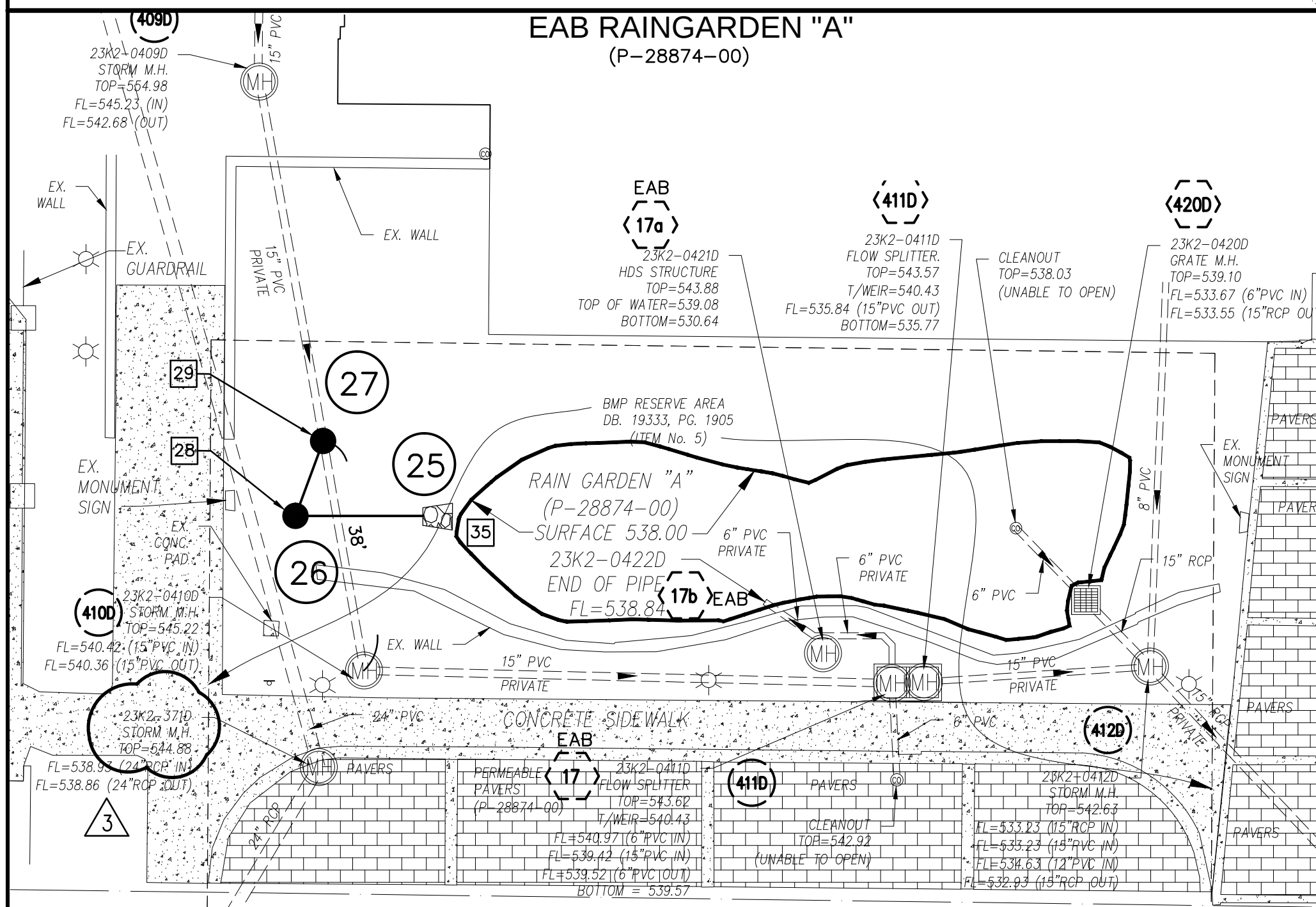
From: Mark Davis [mailto:mdavis@davidmason.com]
Sent: Friday, February 24, 2017 8:01 AM
To: Szachnieski, Jason
Cc: Christopher M. Betts
Subject: RE: Storm Installation Update

SHEET GENERAL NOTES:

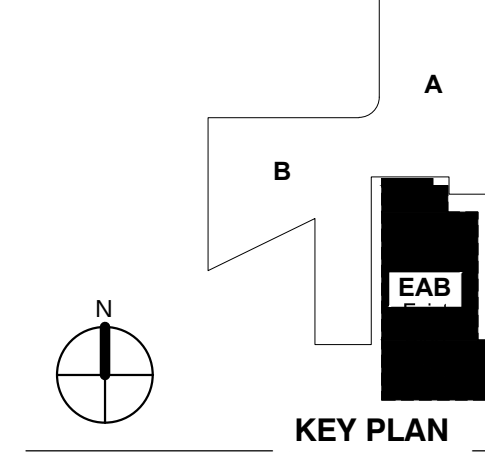
- IF STORM AD SANITARY SEWERS ARE PARALLEL AND IN THE SAME TRENCH, THE UPPER PIPE SHALL BE PLACED ON A SHELF AND THE LOWER PIPE SHALL BE BEDDED IN COMPACTED GRANULAR FILL TO THE FLOW LINE OF THE UPPER PIPE. NOTE - PIPE JOINTS WITH ADAPTERS AND COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 316 STAINLESS STEEL NUT AND BOLT CLAMPS (T-BOLT) CONFIGURATION; AND WITH STAINLESS STEEL SHEAR BANDS, BEING A MINIMUM OF 12 (12) MILS (MSD STD. CONST. SPECS. PT. 2, SUBSECTION H 11). WORM DRIVE HOSE CLAMPS AND CONCRETE BACKFILLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT THOSE JOINTS. GRANULAR BACKFILL SHOULD BE USED. IF FLOWABLE FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TAPE THE ADAPTERS AND COUPLINGS WITH A SIX (6) MIL POLYETHYLENE SHEET.
- LIMITS OF DISTURBANCE: THE CONTRACTOR SHALL STAY WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHENEVER POSSIBLE.
- CONSTRUCTION OF STRAPPED PLUMBING SHALL BE CONSISTENT WITH MSD RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES (FEBRUARY 2006), FIGURES 3-1 & 3-2.
- A BACKWATER VALVE SHALL BE REQUIRED ON ALL SANITARY BUILDING LATERALS PER ST. LOUIS COUNTY PLUMBING CODE.
- THE OWNER ACKNOWLEDGES THE POTENTIAL OF FLOODING DUE TO THE 100-YR OVERLAND FLOW PATH BEING BLOCKED WITH THE PROPOSED IMPROVEMENTS. THE POTENTIAL FLOODING LOCATIONS ARE IDENTIFIED AS THE FOLLOWING AREAS: PROPOSED AREA DRAINS #10 THROUGH #50 AND PROPOSED TRENCH DRAIN #170.
- EXTERNAL GREASE TRAPS AND SAMPLING MANHOLE: AN EXTERNAL GREASE TRAP IS REQUIRED IN AN ACCESSIBLE LOCATION FOR MSD INSPECTION, PROVIDE MEANS FOR VISUAL INSPECTION FROM ABOVE FOR BOTH INFLUENT AND EFFLUENT SIDES. A MSD SAMPLING MANHOLE WILL BE LOCATED ON A PRIVATE LATERAL IN AN ACCESSIBLE LOCATION FOR MSD SAMPLING. THE SAMPLING MANHOLE WILL BE LOCATED DOWNSTREAM OF THE GREASE TRAP AND ALL OTHER COMMERCIAL SANITARY LATERAL CONNECTIONS TO FACILITATE MSD SAMPLING. GREASE TRAPS AND SAMPLING MANHOLES WILL BE SHOWN ON THE PLANS AND NOT BE LOCATED IN DRIVE-THRU LANES OR WITHIN PARKING SPACES.
- THE ENTIRE EXISTING RAIN GARDEN "A" MIGHT HAVE TO BE REPLACED DURING CONSTRUCTION IF THE MSD INSPECTOR BELIEVES THAT THE RAIN GARDEN IS GETTING PLUGGED UP DURING THE CONSTRUCTION OF THE PROPOSED FLOW SPLITTER, DOWNSTREAM DEFENDER AND ASSOCIATED PIPING.
- AN INTERNAL GREASE INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING AS SHOWN ON PLUMBING PLAN SHEET P0011. THIS ITEM SHALL BE CONNECTED TO THE BUILDING SANITARY SEWER.
- A SAND INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING FOUNDATION DRAIN TILES AS SHOWN ON PLUMBING PLAN SHEET P0010. THIS ITEM SHALL BE CONNECTED TO THE BUILDING STORM SEWER.

KEYED SITE PLAN NOTES

- CONTRACTOR TO FIELD LOCATE EXISTING DOWNSPOUT LINE AND RELOCATE WITH 8" PVC TIED INTO PROPOSED STORM SEWER SYSTEM.
- SEE LANDSCAPE PLANS FOR HARDSCAPE DETAILS.
- CONSTRUCT TRENCH DRAIN BEHIND SEAT WALL ON GRASS SIDE AND AT THE BASE OF THE SEAT WALL ON THE PLAZA SIDE. DISCHARGE UPPER TRENCH DRAIN TO PLAZA (3A). DISCHARGE LOWER TRENCH DRAIN TO MANHOLE 23 (PRIVATE).
- CONCRETE RETAINING WALL WITH ARCHITECTURAL FINISH.
- CONCRETE RETAINING WALL WITH FIBER/CEMENT PANEL FINISH.
- PLACE 2 AREA DRAINS IN AREA WELL AND CONNECT WITH 8" PVC TO MANHOLE, SEE PROFILE.
- CONSTRUCT DUMPSTER PAD AND ENCLOSURE.
- 8" DIAMETER PVC TO BUILDING DOWNSPOUT, SEE PLUMBING FOR CONTINUATION. FL AT WALL = 552.00. ROCK BLANKET 5'Lx5'Wx1'D.
- 6" DIAMETER PERFORATED SUB DRAIN, (TYP)
- DISCHARGE EXISTING STORM DRAINS TO BASIN EITHER DIRECTLY IF FLOWLINE ALLOWS WITH END OF PIPE HEADWALL OR VIA BUBBLER. MATCH EXISTING PIPE TYPE, DIAMETER AND SLOPE. ROCK BLANKET 5'Lx5'Wx1'D.
- 4" DIAMETER PERFORATED SUB DRAIN, (TYP) INSTALL CLEANOUT AT END PER DETAIL.
- SAMPLING "T"
- CLEANOUT (CO) TOP = 552.00, FL = 547.25 (TYP)
- INLET 180 IS SIMILAR TO INLET 3D, DRAIN THRU RETAINING WALL WITH 8" PVC. TOP = 554.70, FL = 552.67, FL = 552.00 AT RAIN GARDEN. ROCK BLANKET 5'Lx5'Wx1'D.
- PRIVATE 6" SANITARY SEWER LATERAL AT 2% MIN.
- SAMPLING MANHOLE
- GREASE INTERCEPTOR, SEE PLUMBING.
- BUILDING DOWNSPOUT, SEE PLUMBING
- PAVERS TO BE REMOVED AND REPLACED IN KIND TO FACILITATE CONSTRUCTION OF WATER LINE.
- PLAZA OBSERVATION WELL TOP = 540.85, FL = 538.67 (TYP)
- CONDENSING UNITS, SEE MECHANICAL FOR LOCATION
- RAIN GARDEN INFORMATIONAL SIGN
- PICOP INFORMATION SIGN
- GAS METER, 6"X6" THICK CONCRETE PAD WITH 4 BOLLARDS PAINTED YELLOW, ONE IN EACH CORNER. SEE SHEET C701 FOR DETAIL AND MECHANICAL FOR PIPING.
- 5-12" DIAMETER PRECAST CONCRETE BOLLARDS
- INTEGRAL CURB AND SIDEWALK.
- ADJUST LOCATION OF DRAINS AND PIPING BASED ON DOUBLE WALL CONFIGURATION.
- NEW HYDRO INTERNATIONAL 48" DOWNSTREAM DEFENDER.
- NEW FLOW SPLITTER MANHOLE.
- NEW FIRE HYDRANT
- REMOVE AND REPLACE EXISTING BRICK SCREEN WALL. SEE ARCHITECTURAL AND STRUCTURAL.
- CLEANOUT (CO) TOP = 551.00, FL = 546.25 (TYP)
- TRAPPED UNDERDRAIN (TU) TOP = 541.26, FL = 539.64 (TYP), FL = 538.98 (TYP)
- TRAP AT MSW INSPECTOR'S DISCRETION
- ROCK BLANKET (5'X5'Lx1'D)
- PRIVATE 6" PVC SANITARY SEWER LATERAL @ 2% MIN FOR INTERIOR GREASE INTERCEPTOR.
- 8" PVC BUBBLER, TOP ELEVATION 552.50, CONNECT TO 4" BUILDING DOWNSPOUT PER DETAIL.
- NEW SAMPLING MANHOLE, CONSTRUCT OVER EXISTING SEWER



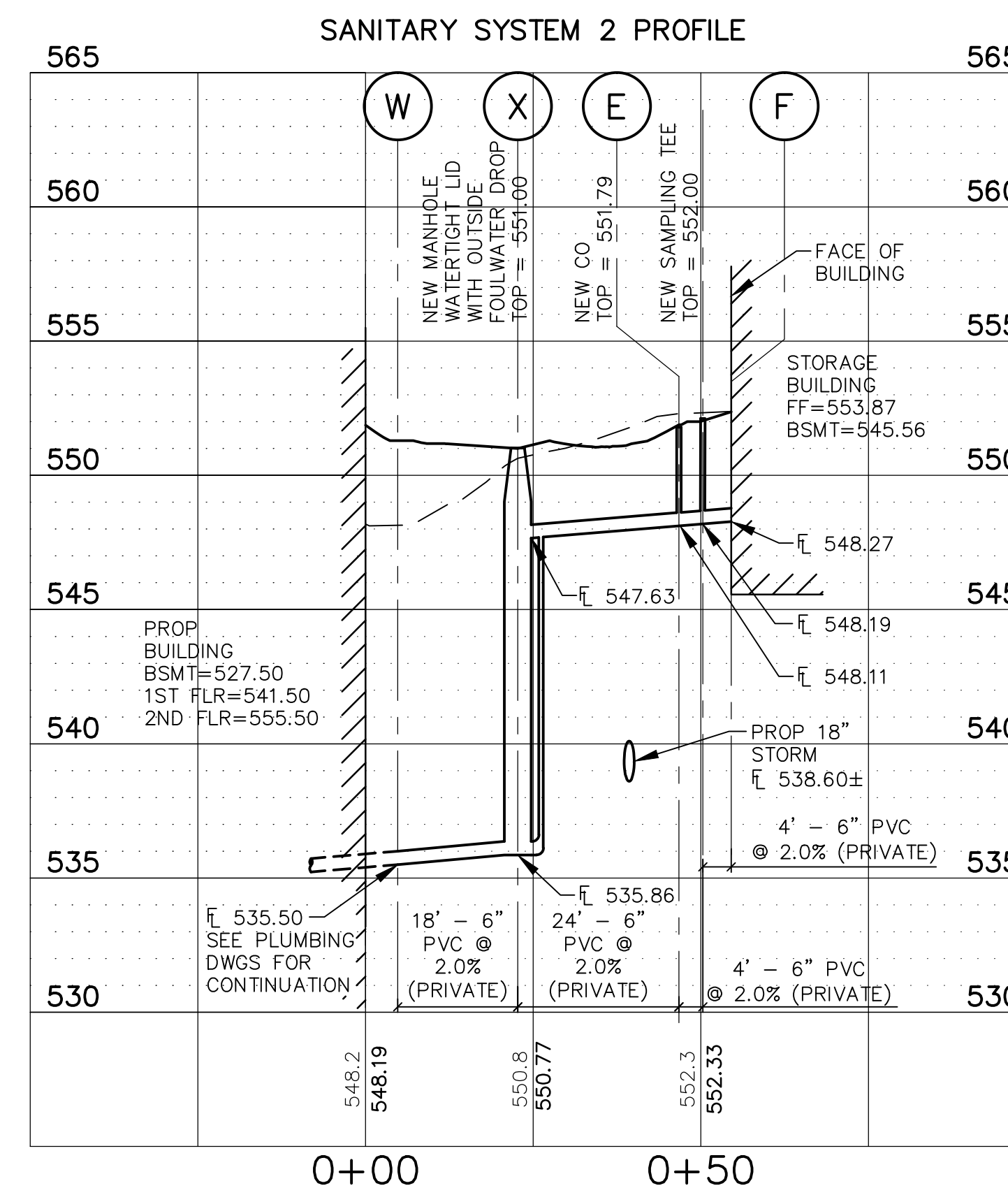
3	ADDENDUM 1-12	15 JUN 2015
2	ADDENDUM 1-10	5 MAY 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BPI)	15 JAN 2016
No.	Description	Date



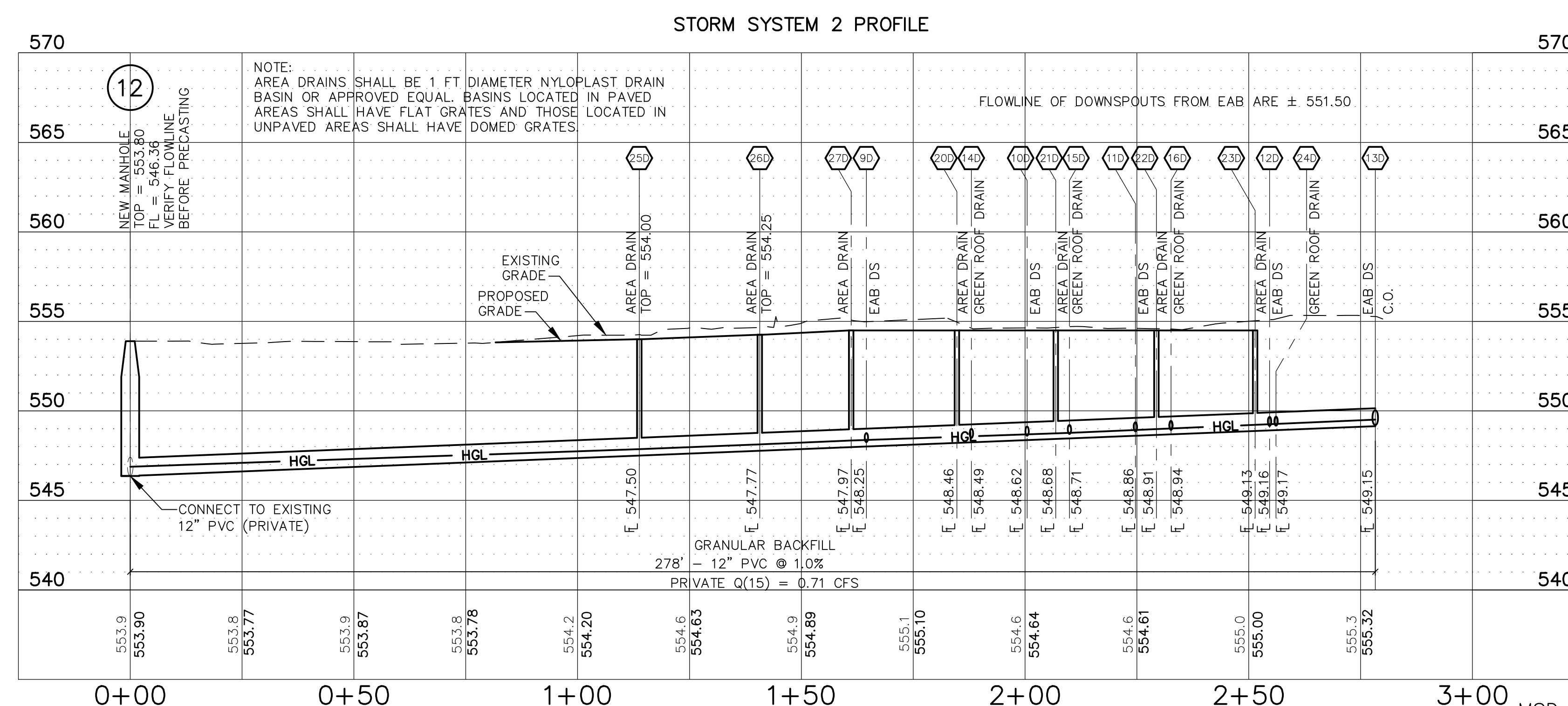
SITE IMPROVEMENT PLAN

Project No.: 04561.00 Checked by:

C400



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Plumbing & Fire Protection
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