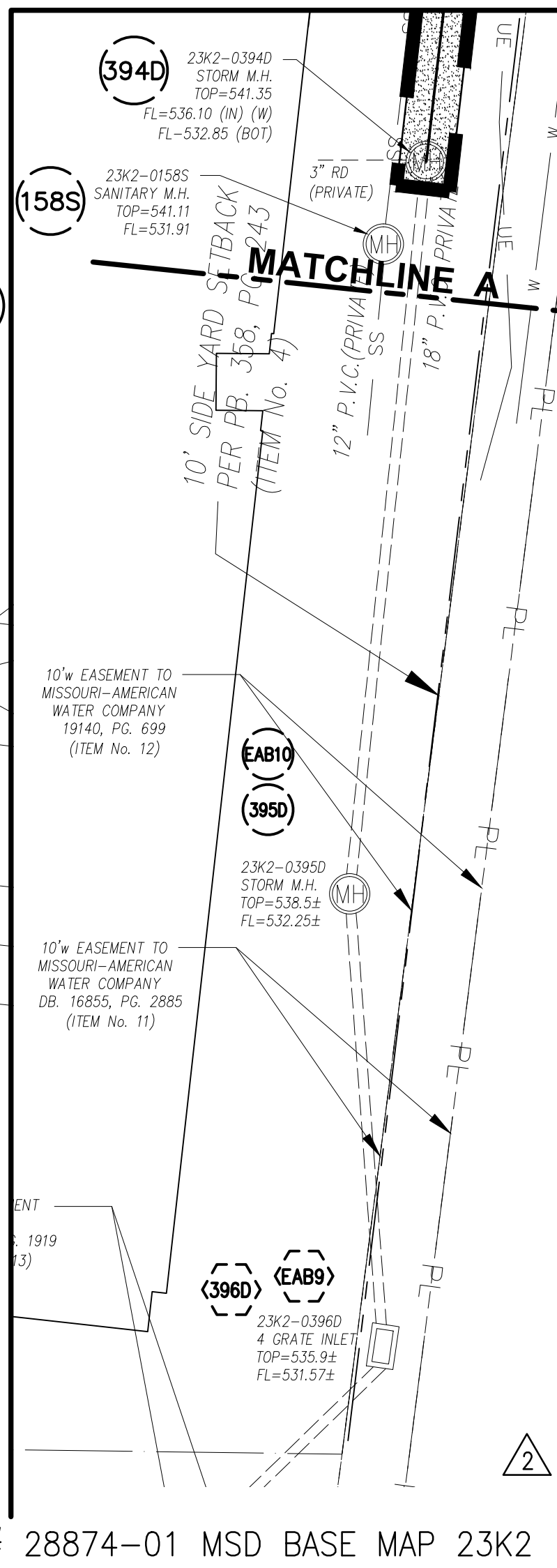
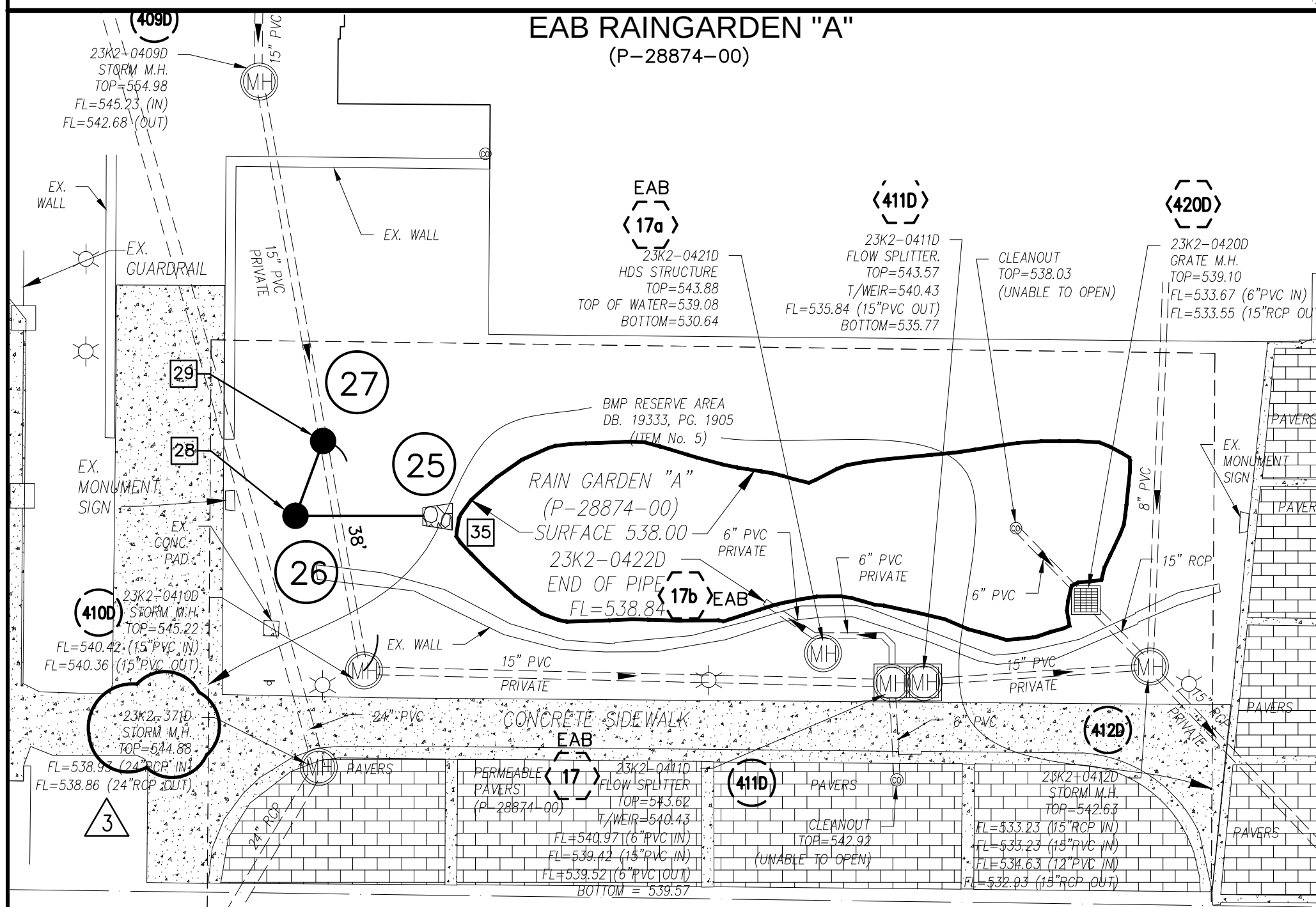


SHEET GENERAL NOTES:

- 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 MSD 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



Webster University
Interdisciplinary Science Building

CANNONDESIGN

1100 Clark Avenue
St. Louis, Missouri 63102
T: 314.241.6250
F: 314.241.2570

William Tao & Associates, Inc.
ME/PE/PP Engineer
7955 Manchester Road, Suite 125
St. Louis, MO 63143
314-884-7600

David Mason & Associates, Inc.
Structural & Civil Engineer
MO Civil Court of Authority # 0031103
800 South Vandeventer Avenue
St. Louis, MO 63110
314-534-1093

Faith Group Technology
3101 S. Hanley Rd, Suite 100
St. Louis, MO 63143
314.991.2228

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave
St. Louis, MO 63130
314.725.6616

KWA Architects
Architecture
9721 Linnemore Road
St. Louis, MO 63124
314.962.2560

Spelman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314.862.9070

SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314.644.3709

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600



CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-12	16 JUN 2016
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