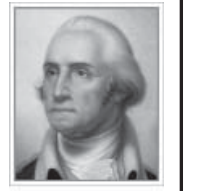
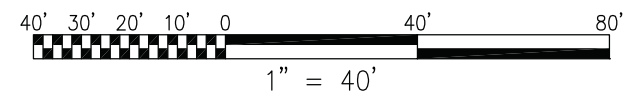


STORM/ COMBINED SEWER TABULATION

SANITARY MANHOLE 28 TOP = 61.35 INVERT IN = 56.77 (SW) INVERT IN = 51.14 (E) INVERT OUT = 51.05 (W)	ELECTRIC MANHOLE 76 TOP = 59.16 BOTTOM = 56.62	ELECTRIC MANHOLE 166 TOP = 58.97 BOTTOM = 56.97	ELECTRIC MANHOLE 281 TOP = 60.33 BOTTOM = 57.98	ELECTRIC MANHOLE 553 TOP = 59.92 BOTTOM = 50.98 (VAULT)	DRAINAGE MANHOLE 918 TOP = 57.80 BOTTOM = 51.46 FULL OF DEBRIS	ELECTRIC MANHOLE 1075 TOP = 57.05 BOTTOM = 51.26 (VAULT)	SANITARY MANHOLE 1137 TOP = 57.21 INVERT IN = 50.06 (SE) INVERT IN = 46.46 (E) INVERT OUT = 46.31 (NW)
ELECTRIC MANHOLE 29 TOP = 60.78 BOTTOM = 55.32	SANITARY MANHOLE 107 TOP = 61.63 INVERT IN = 57.11 (E) INVERT IN = 56.11 (S) INVERT IN = 49.43 (S) INVERT OUT = 49.23 (N)	ELECTRIC MANHOLE 171 TOP = 58.88 BOTTOM = 56.79	SANITARY MANHOLE 440 TOP = 55.87 INACCESSIBLE	ELECTRIC MANHOLE 554 TOP = 60.00 BOTTOM = 57.31	ELECTRIC MANHOLE 919 TOP = 57.61 BOTTOM = 50.04	TELEPHONE MANHOLE 1078 TOP = 57.50 BOTTOM = 40.58	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
WATER MANHOLE 30 TOP = 60.85 BOTTOM = 57.72	WATER MANHOLE 109 TOP = 61.68 BOTTOM = 59.48	ELECTRIC MANHOLE 172 TOP = 59.55 BOTTOM = 56.87	TELEPHONE MANHOLE 456 TOP = 55.85 INACCESSIBLE	STORM GRATE 790 TOP = 59.07 BOTTOM = 53.66 FULL OF WATER	WATER MANHOLE 1023 TOP = 57.82 BOTTOM = 53.57	WATER MANHOLE 1082 TOP = 57.59 BOTTOM = 53.44	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
ELECTRIC MANHOLE 55 TOP = 60.14 BOTTOM = 57.86	SANITARY MANHOLE 117 TOP = 60.70 INVERT = 48.31 (S) INVERT = 48.29 (N)	ELECTRIC MANHOLE 173 TOP = 56.55 BOTTOM = 57.56	ELECTRIC MANHOLE 490 TOP = 56.55 BOTTOM = 53.16	ELECTRIC MANHOLE 905 TOP = 58.49 BOTTOM = 56.38	ELECTRIC MANHOLE 1024 TOP = 57.85 BOTTOM = 51.10	WATER MANHOLE 1083 TOP = 57.58 BOTTOM = 53.58	UTILITY MANHOLE 1164 TOP = 56.27 INACCESSIBLE
SANITARY MANHOLE 56 TOP = 59.93 INVERT IN = 56.31 (SW) INVERT IN = 50.03 (E) INVERT OUT = 49.92 (W)	TELEPHONE MANHOLE 118 TOP = 60.62 BOTTOM = 53.57	ELECTRIC MANHOLE 174 TOP = 60.67 BOTTOM = 58.22	ELECTRIC MANHOLE 544 TOP = 59.36 BOTTOM = 56.59	SANITARY MANHOLE 907 TOP = 57.77 INVERT IN = 52.49 (NW) INVERT IN = 53.44 (NE) INVERT IN = 46.48 (S) INVERT OUT = 46.38 (N)	DRAINAGE MANHOLE 1031 TOP = 57.90 BOTTOM = 52.08 FULL OF WATER	WATER MANHOLE 1084 TOP = 57.56 BOTTOM = 53.06	UTILITY MANHOLE 1170 TOP = 58.23 INACCESSIBLE
ELECTRIC MANHOLE 68 TOP = 59.72 BOTTOM = 57.30	ELECTRIC MANHOLE 150 TOP = 59.51 BOTTOM = 57.19	SANITARY MANHOLE 230 TOP = 60.88 INVERT OUT = 50.77 (W)	ELECTRIC MANHOLE 545 TOP = 59.76 BOTTOM = 57.00	TELEPHONE MANHOLE 913 TOP = 57.66 BOTTOM = 50.94	DRAINAGE MANHOLE 1032 TOP = 57.89 BOTTOM = 51.08 FULL OF WATER	DRAINAGE MANHOLE 1115 TOP = 57.77 INVERT OUT = 54.16 BOTTOM = 51.55 FULL OF WATER	ELECTRIC MANHOLE 1200 TOP = 56.45 BOTTOM = 48.10 (VAULT)
	ELECTRIC MANHOLE 231 TOP = 61.14 BOTTOM = 58.12	SANITARY MANHOLE 552 TOP = 59.76 INVERT IN = 50.65 (E) INVERT IN = 49.47 (E) INVERT OUT = 49.42 (W)	ELECTRIC MANHOLE 552 TOP = 59.76 INVERT IN = 50.65 (E) INVERT IN = 49.47 (E) INVERT OUT = 49.42 (W)	ELECTRIC MANHOLE 917 TOP = 57.46 BOTTOM = 49.46	ELECTRIC MANHOLE 1068 TOP = 57.63 BOTTOM = 52.06	SANITARY MANHOLE 1136 TOP = 57.05 INVERT = 43.86 (W)	UTILITY MANHOLE 1164 TOP = 56.27 INACCESSIBLE
							ELECTRIC MANHOLE 1427 TOP = 58.28 8" INVERT IN = 55.59 BOTTOM = 51.22 FULL OF WATER
							ELECTRIC MANHOLE 3452 TOP = 55.92 BOTTOM = 51.72



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON DC

SCIENCE AND ENGINEERING COMPLEX (SEC)
Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

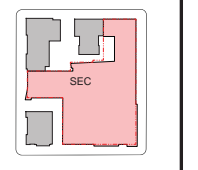
Ballinger

833 Chestnut Street
Suite 1900
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:
N

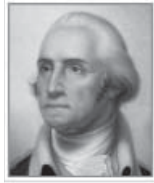


DATE: NOVEMBER 15, 2010

SECOND-STAGE
PUD APPLICATION

TITLE:
**EXISTING
CONDITIONS
PLAN - SOUTH**

NUMBER:
C-01



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

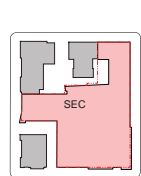
Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:



DATE:
NOVEMBER 15, 2010

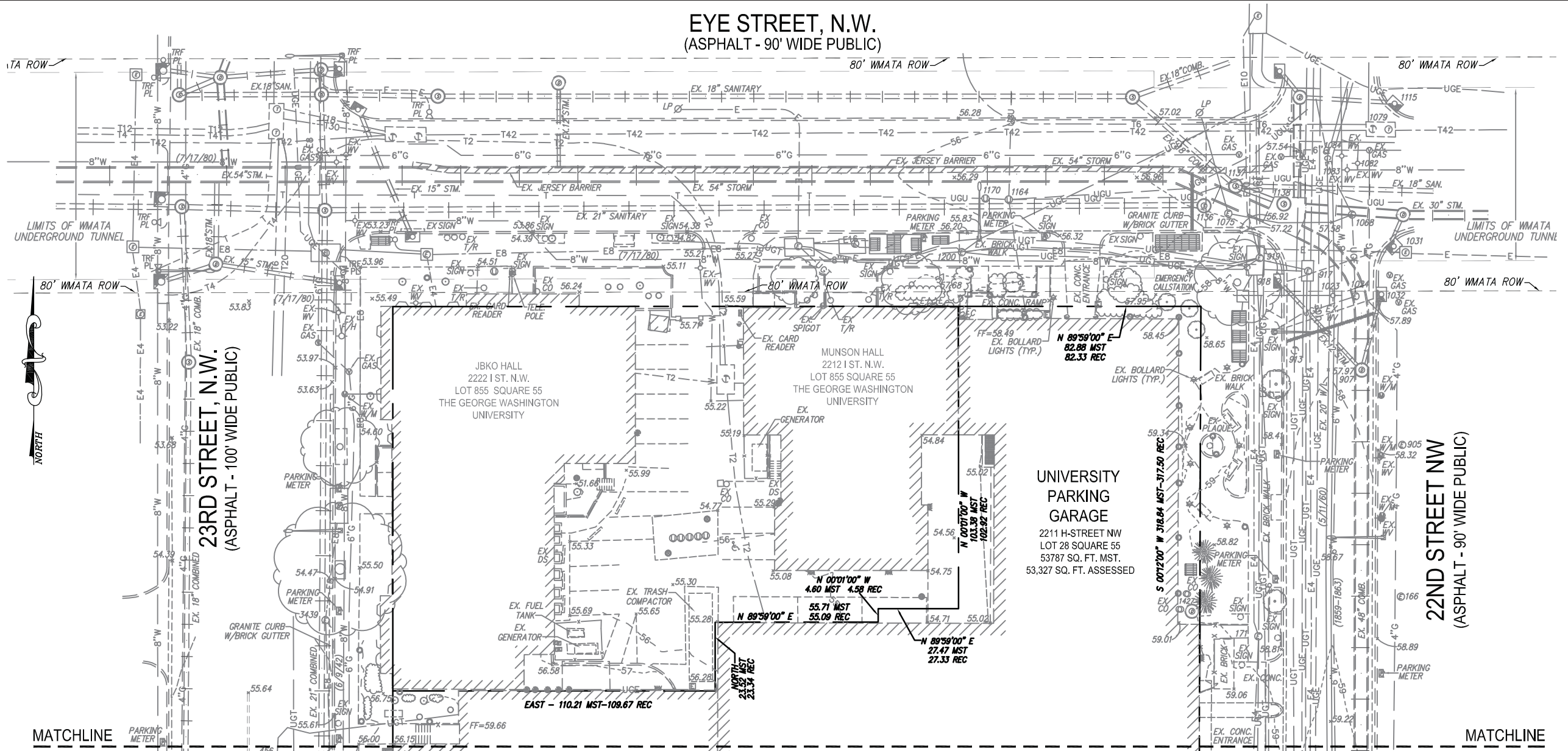
SECOND-STAGE
PUD APPLICATION

TITLE:
EXISTING
CONDITIONS
PLAN - NORTH

NUMBER:

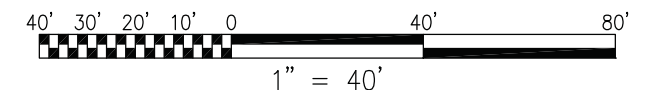
C-02

EYE STREET, N.W. (ASPHALT - 90' WIDE PUBLIC)



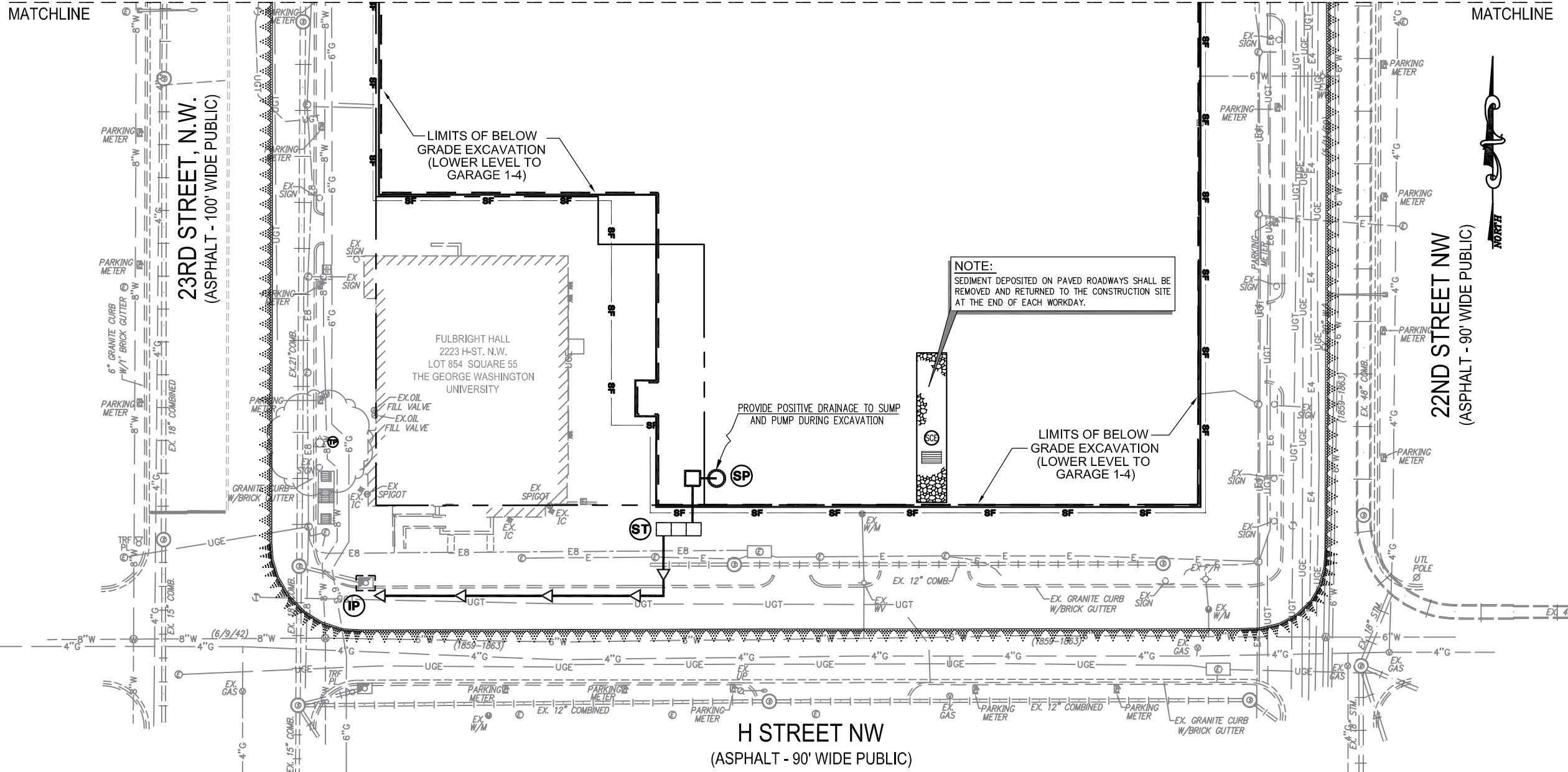
STORM/ COMBINED SEWER TABULATION

SANITARY MANHOLE 28 TOP = 61.35 INVERT IN = 56.77 (SW) INVERT IN = 51.14 (E) INVERT OUT = 51.05 (W)	ELECTRIC MANHOLE 76 TOP = 59.16 BOTTOM = 56.62	ELECTRIC MANHOLE 166 TOP = 58.97 BOTTOM = 56.97	ELECTRIC MANHOLE 281 TOP = 60.33 BOTTOM = 57.98	ELECTRIC MANHOLE 553 TOP = 59.92 BOTTOM = 50.98 (VAULT)	DRAINAGE MANHOLE 918 TOP = 57.80 BOTTOM = 51.46 FULL OF DEBRIS	ELECTRIC MANHOLE 1075 TOP = 57.05 BOTTOM = 51.26 (VAULT)	SANITARY MANHOLE 1137 TOP = 57.21 INVERT IN = 50.06 (SE) INVERT IN = 46.46 (E) INVERT OUT = 46.31 (NW)
ELECTRIC MANHOLE 29 TOP = 60.78 BOTTOM = 55.32	SANITARY MANHOLE 107 TOP = 61.63 INVERT IN = 57.11 (E) INVERT IN = 56.11 (S) INVERT OUT = 49.23 (N)	ELECTRIC MANHOLE 171 TOP = 58.88 BOTTOM = 56.79	SANITARY MANHOLE 440 TOP = 55.87 INACCESSIBLE	ELECTRIC MANHOLE 554 TOP = 60.00 BOTTOM = 57.31	ELECTRIC MANHOLE 919 TOP = 57.61 BOTTOM = 50.04	TELEPHONE MANHOLE 1079 TOP = 57.50 BOTTOM = 40.58	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
WATER MANHOLE 30 TOP = 60.85 BOTTOM = 57.72	WATER MANHOLE 109 TOP = 61.68 BOTTOM = 59.48	ELECTRIC MANHOLE 172 TOP = 59.55 BOTTOM = 56.87	TELEPHONE MANHOLE 456 TOP = 55.85 INACCESSIBLE	STORM GRATE 790 TOP = 59.07 BOTTOM = 53.86 FULL OF WATER	WATER MANHOLE 1023 TOP = 57.82 BOTTOM = 53.57	WATER MANHOLE 1082 TOP = 57.59 BOTTOM = 53.44	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
ELECTRIC MANHOLE 55 TOP = 60.14 BOTTOM = 57.86	SANITARY MANHOLE 117 TOP = 60.70 INVERT = 48.31 (S) INVERT = 48.29 (N)	ELECTRIC MANHOLE 173 TOP = 60.06 BOTTOM = 57.56	ELECTRIC MANHOLE 490 TOP = 56.55 BOTTOM = 53.16	ELECTRIC MANHOLE 905 TOP = 58.49 BOTTOM = 56.38	ELECTRIC MANHOLE 1024 TOP = 57.65 BOTTOM = 51.10	WATER MANHOLE 1083 TOP = 57.59 BOTTOM = 53.58	UTILITY MANHOLE 1164 TOP = 56.27 INACCESSIBLE
SANITARY MANHOLE 56 TOP = 59.93 INVERT IN = 56.31 (SW) INVERT IN = 50.03 (E) INVERT OUT = 49.92 (W)	TELEPHONE MANHOLE 118 TOP = 60.62 BOTTOM = 53.57	SANITARY MANHOLE 230 TOP = 60.88 INVERT OUT = 50.77 (W)	ELECTRIC MANHOLE 545 TOP = 59.76 BOTTOM = 57.00	SANITARY MANHOLE 907 TOP = 57.77 INVERT IN = 52.49 (NW) INVERT IN = 53.44 (NE) INVERT IN = 46.48 (S) INVERT OUT = 46.38 (N)	DRAINAGE MANHOLE 1031 TOP = 57.90 BOTTOM = 52.08 FULL OF WATER	WATER MANHOLE 1084 TOP = 57.56 BOTTOM = 53.06	UTILITY MANHOLE 1170 TOP = 56.23 INACCESSIBLE
ELECTRIC MANHOLE 68 TOP = 59.72 BOTTOM = 57.30	ELECTRIC MANHOLE 150 TOP = 59.51 BOTTOM = 57.19	ELECTRIC MANHOLE 231 TOP = 61.14 BOTTOM = 58.12	SANITARY MANHOLE 552 TOP = 59.76 INVERT IN = 50.65 (E) INVERT IN = 49.47 (E) INVERT OUT = 49.42 (W)	TELEPHONE MANHOLE 913 TOP = 57.66 BOTTOM = 50.94	DRAINAGE MANHOLE 1032 TOP = 57.89 BOTTOM = 51.08 FULL OF WATER	DRAINAGE MANHOLE 1115 TOP = 57.77 INVERT OUT = 54.16 BOTTOM = 51.55 FULL OF WATER	ELECTRIC MANHOLE 1200 TOP = 56.45 BOTTOM = 48.10 (VAULT)
				ELECTRIC MANHOLE 917 TOP = 57.46 BOTTOM = 49.46	ELECTRIC MANHOLE 1068 TOP = 57.63 BOTTOM = 52.06	SANITARY MANHOLE 1136 TOP = 57.05 INVERT = 43.86 (W)	SANITARY MANHOLE 1427 TOP = 59.26 8" INVERT IN = 55.59 BOTTOM = 51.22 FULL OF WATER
							ELECTRIC MANHOLE 3452 TOP = 55.92 BOTTOM = 51.72



MATCHLINE

MATCHLINE



NOTE:
 SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE AT THE END OF EACH WORKDAY.

H STREET NW
 (ASPHALT - 90' WIDE PUBLIC)

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
 - B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
 - C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES;
 - B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
 - C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

CONSTRUCTION AND STABILIZATION SEQUENCE:

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING STABILIZED TREE PROTECTION, AND SILT FENCE AS INDICATED ON SHEET C1.03. SEE SHEET C1.07 FOR SEDIMENTATION AND EROSION CONTROL DETAILS.
2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN.
4. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR THE PROPOSED BUILDING.
5. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

SEDIMENTATION EROSION CONTROL NOTE:

THE APPLICANT MUST NOTIFY THE DEPARTMENT OF HEALTH BY PHONE (202-535-2240) AT LEAST 24 HOURS PRIOR TO THE START OF GRADING ACTIVITY AND WITHIN (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF HEALTH MUST BE NOTIFIED IMMEDIATELY.

SCHEDULE AND HOLD PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY. CALL 202-535-2977 FOR APPOINTMENT.

NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.
2. PROVIDE SILT FENCE AT PERIMETER OF EXCAVATION AREA TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN UNLESS OTHERWISE APPROVED BY THE INSPECTOR.
3. CONTRACTOR TO PROVIDE ON SITE APPROVED STAMPED AND SIGNED SEDIMENTATION AND EROSION CONTROL DRAWINGS BY DEPARTMENT OF HEALTH, WATERSHED PROTECTION DIVISION.

CONSTRUCTION DATES:

- THE PROPOSED DEMOLITION WORK DUE TO COMMENCE IN SUMMER 2011 AND IS ANTICIPATED TO TAKE APPROXIMATELY 24 MONTHS.
- EXACT BEGINNING AND END OF CONSTRUCTION IS TO BE ESTABLISHED BY THE OWNER.

TOTAL AREA OF DISTURBANCE:

TOTAL AREA OF DISTURBANCE: 54,524 SQUARE FEET OR 1.2516 AC

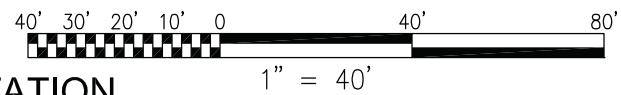
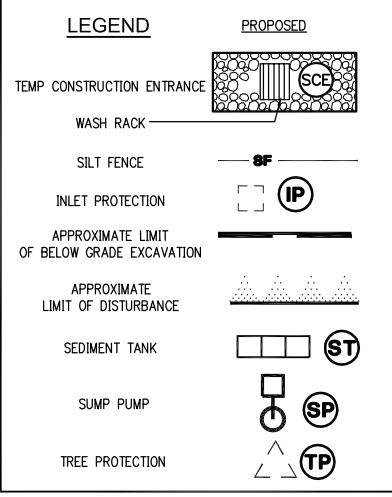
SEDIMENT CONTROL APPROVAL:

PLAN NUMBER:
 THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITTEE/ CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON. HE SHALL NOTIFY THIS OFFICE AT NUMBER LISTED BELOW AT LEAST 24 HOURS BEFORE START OF GRADING ACTIVITY, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

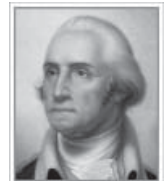
DATE _____ EROSION AND SEDIMENT CONTROL BRANCH

FOR FURTHER INFORMATION, PLEASE CALL:
 GOVERNMENT OF THE DISTRICT OF COLUMBIA
 DEPARTMENT OF HEALTH
 ENVIRONMENTAL HEALTH ADMINISTRATION
 WATERSHED PROTECTION DIVISION

51 N. STREET, N.E., 5TH FLOOR
 WASHINGTON, D.C. 20002
 TEL NO. (202) 535-2240
 FAX NO. (202) 535-1364



THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY !!



THE GEORGE WASHINGTON UNIVERSITY
 WASHINGTON, D.C.

SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

Architecture
 Engineering
 Planning
 Interior Design

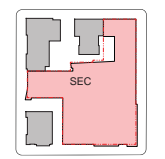
Ballinger

833 Chestnut Street
 Suite 1300
 Philadelphia, PA 19107
 V 215.446.0900
 F 215.446.0901
 ballinger.com

Hickok Cole



KEY PLAN:



DATE: NOVEMBER 15, 2010

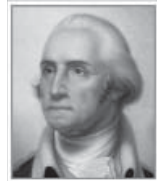
SECOND-STAGE PUD APPLICATION

TITLE:

SEDIMENTATION AND EROSION CONTROL PLAN - SOUTH

NUMBER:

C-03



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

SCIENCE AND ENGINEERING COMPLEX (SEC)

3300 Reservoir Road, N.W. Washington, DC 20057

Architecture
Engineering
Planning
Interior Design

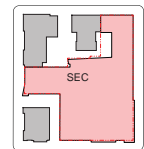
Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:



DATE:
NOVEMBER 15, 2010

SECOND-STAGE
PUD APPLICATION

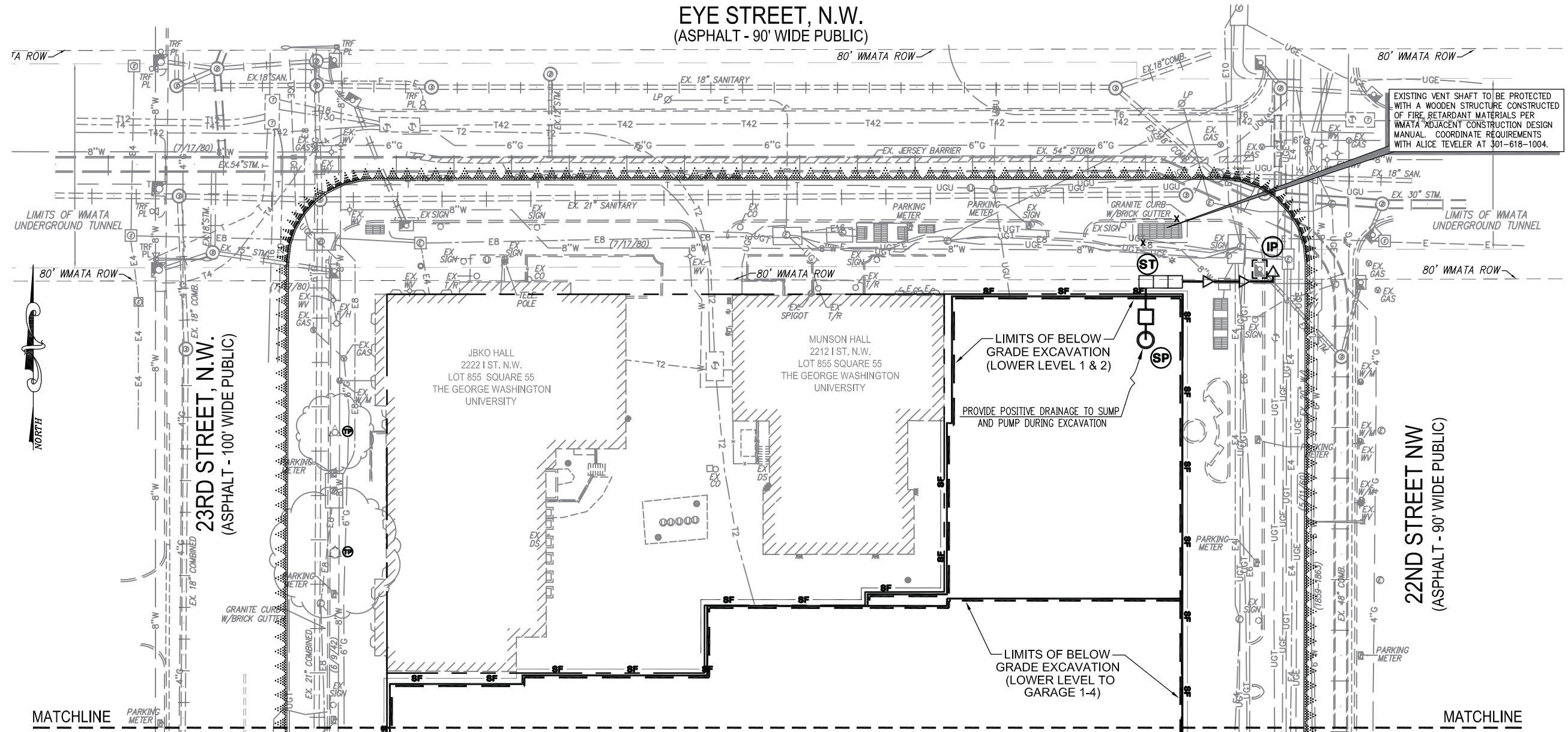
TITLE:

SEDIMENTATION AND
EROSION CONTROL
PLAN - NORTH

NUMBER:

C-04

EYE STREET, N.W. (ASPHALT - 90' WIDE PUBLIC)



DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
 - B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
 - C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES;
 - B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
 - C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

CONSTRUCTION AND STABILIZATION SEQUENCE:

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING STABILIZED TREE PROTECTION, AND SILT FENCE AS INDICATED ON SHEET C1.03. SEE SHEET C1.07 FOR SEDIMENTATION AND EROSION CONTROL DETAILS.
2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN.
4. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR THE PROPOSED BUILDING.
5. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

SEDIMENTATION EROSION CONTROL NOTE:

THE APPLICANT MUST NOTIFY THE DEPARTMENT OF HEALTH BY PHONE (202-535-2240) AT LEAST 24 HOURS PRIOR TO THE START OF GRADING ACTIVITY AND WITHIN (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF HEALTH MUST BE NOTIFIED IMMEDIATELY.

SCHEDULE AND HOLD PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY. CALL 202-535-2977 FOR APPOINTMENT.

NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.
2. PROVIDE SILT FENCE AT PERIMETER OF EXCAVATION AREA TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN UNLESS OTHERWISE APPROVED BY THE INSPECTOR.
3. CONTRACTOR TO PROVIDE ON SITE APPROVED STAMPED AND SIGNED SEDIMENTATION AND EROSION CONTROL DRAWINGS BY DEPARTMENT OF HEALTH, WATERSHED PROTECTION DIVISION.

CONSTRUCTION DATES:

- THE PROPOSED DEMOLITION WORK DUE TO COMMENCE IN SUMMER 2011 AND IS ANTICIPATED TO TAKE APPROXIMATELY 24 MONTHS.
- EXACT BEGINNING AND END OF CONSTRUCTION IS TO BE ESTABLISHED BY THE OWNER.

TOTAL AREA OF DISTURBANCE:

TOTAL AREA OF DISTURBANCE: 54,524 SQUARE FEET OR 1.2516 AC

SEDIMENT CONTROL APPROVAL:

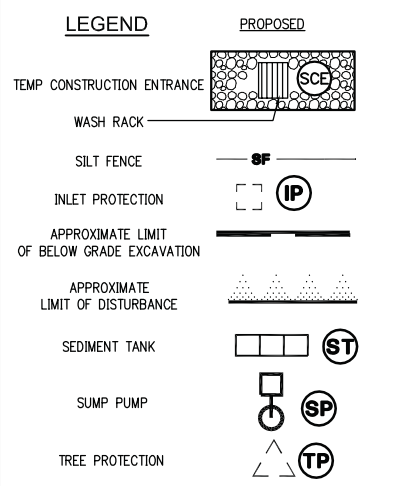
PLAN NUMBER:
THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITTEE/ CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON. HE SHALL NOTIFY THIS OFFICE AT NUMBER LISTED BELOW AT LEAST 24 HOURS BEFORE START OF GRADING ACTIVITY, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

DATE _____

EROSION AND SEDIMENT CONTROL BRANCH

FOR FURTHER INFORMATION, PLEASE CALL:
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH ADMINISTRATION
WATERSHED PROTECTION DIVISION

51 N. STREET, N.E., 5TH FLOOR
WASHINGTON, D.C. 20002
TEL NO. (202) 535-2240
FAX NO. (202) 535-1364



THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY !!



THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON, DC

SCIENCE AND
ENGINEERING
COMPLEX
(SEC)

Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

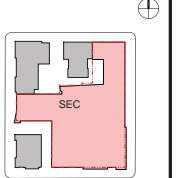
Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:



DATE:
NOVEMBER 15, 2010

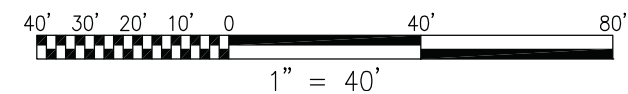
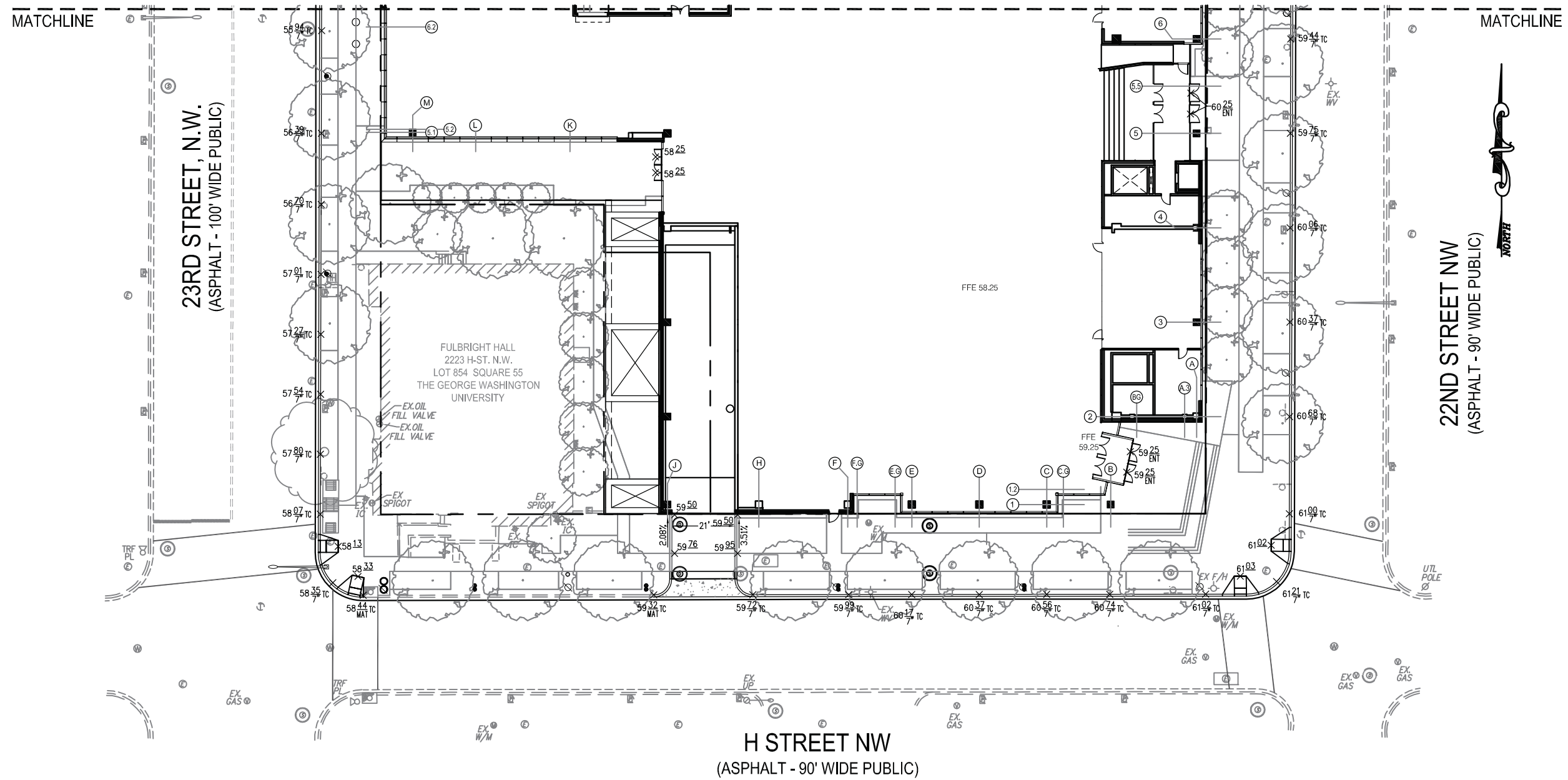
SECOND-STAGE
PUD APPLICATION

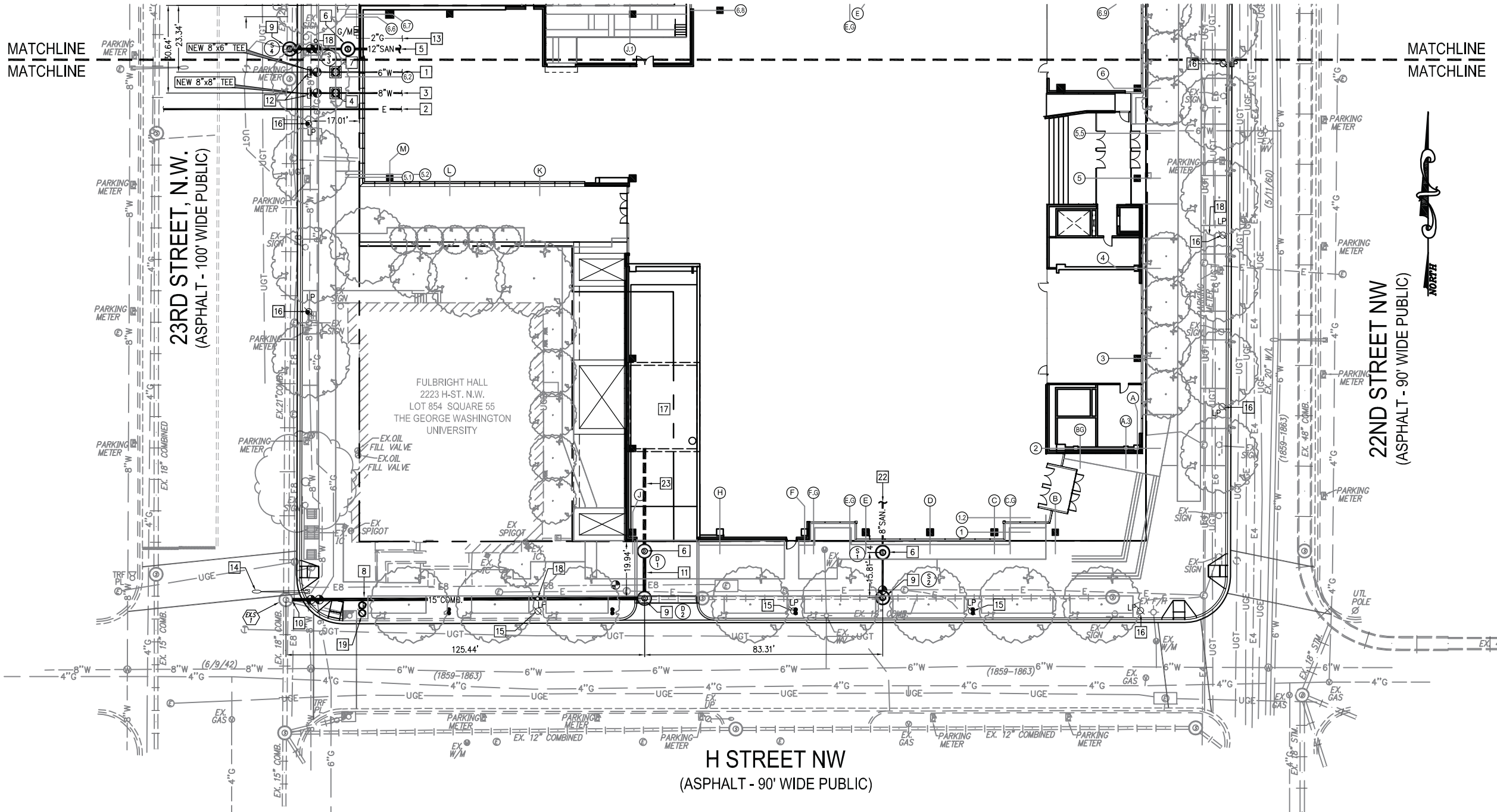
TITLE:

GRADING PLAN -
SOUTH

NUMBER:

C-05





MATCHLINE
MATCHLINE

MATCHLINE
MATCHLINE

23RD STREET, N.W.
(ASPHALT - 100' WIDE PUBLIC)

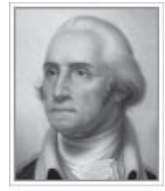
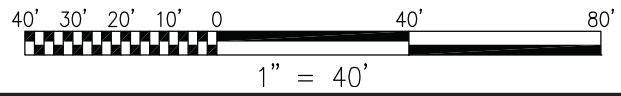
22ND STREET NW
(ASPHALT - 90' WIDE PUBLIC)

H STREET NW
(ASPHALT - 90' WIDE PUBLIC)

FULBRIGHT HALL
2223 H-ST. N.W.
LOT 854 SQUARE 55
THE GEORGE WASHINGTON
UNIVERSITY

UTILITY KEYNOTES:

- | | |
|--|---|
| <p>1 NEW 6" DIP CLASS 52 DOMESTIC WATER SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1015. WATER METER TO BE LOCATED INSIDE THE BUILDING.</p> <p>2 NEW ELECTRIC DUCTBANK FROM ROSS HALL'S DISTRIBUTION SWITCHGEAR. SEE ELECTRICAL DRAWINGS FOR DETAILS.</p> <p>3 NEW 8" DIP CLASS 52 FIRE SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1048.</p> <p>4 NEW 8" WATER VALVE WITH 4.0' CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-20.01.</p> <p>5 NEW 12" PVC SCH-40 SANITARY SEWER LATERAL.</p> <p>6 NEW 4.0' DIAMETER CLEANOUT MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.01.</p> <p>7 NEW 6" WATER VALVE WITH 4.0' CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-20.01.</p> <p>8 NEW 15" SDR-35 COMBINED SEWER LATERAL.</p> <p>9 NEW 4.0' DIAMETER MANHOLE WITH DOGHOUSE BASE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.11.</p> <p>10 NEW CONNECTION TO EXISTING MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS.</p> <p>11 NEW 15" SDR-35 STORM SEWER LATERAL.</p> <p>12 NEW CONCRETE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.01.</p> | <p>13 NEW 2" GAS SERVICE AND METER. SEE MEP DRAWING FOR DETAILS.</p> <p>14 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.</p> <p>15 NEW TWIN-20 GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.</p> <p>16 NEW NO.16 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.</p> <p>17 NEW 23'-4" x 29'-2" CISTERN STRUCTURE. REFER TO MEP DRAWING FOR DETAILS.</p> <p>18 NEW EMERGENCY SIGNAL POLE. REFER TO WELLS AND ASSOCIATES FOR DETAILS.</p> <p>19 NEW NO.18 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.</p> <p>20 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS.</p> <p>21 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS AND EXISTING PEDESTRIAN SIGNAL.</p> <p>22 NEW 8" PVC SCH-40 SANITARY SEWER LATERAL.</p> <p>23 NEW 12" PVC SCH-40 OVERFLOW PIPE. REFER TO PLUMBING DRAWING FOR DETAILS.</p> |
|--|---|



THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON, DC

SCIENCE AND
ENGINEERING
COMPLEX
(SEC)
Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

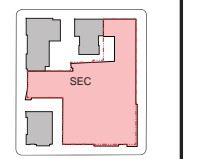
Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:
N

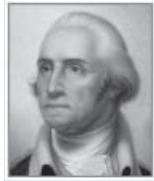


DATE:
NOVEMBER 15, 2010

SECOND-STAGE
PUD APPLICATION

TITLE:
UTILITY PLAN -
SOUTH

NUMBER:
C-07



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



KEY PLAN:



DATE:
NOVEMBER 15, 2010

SECOND-STAGE
PUD APPLICATION

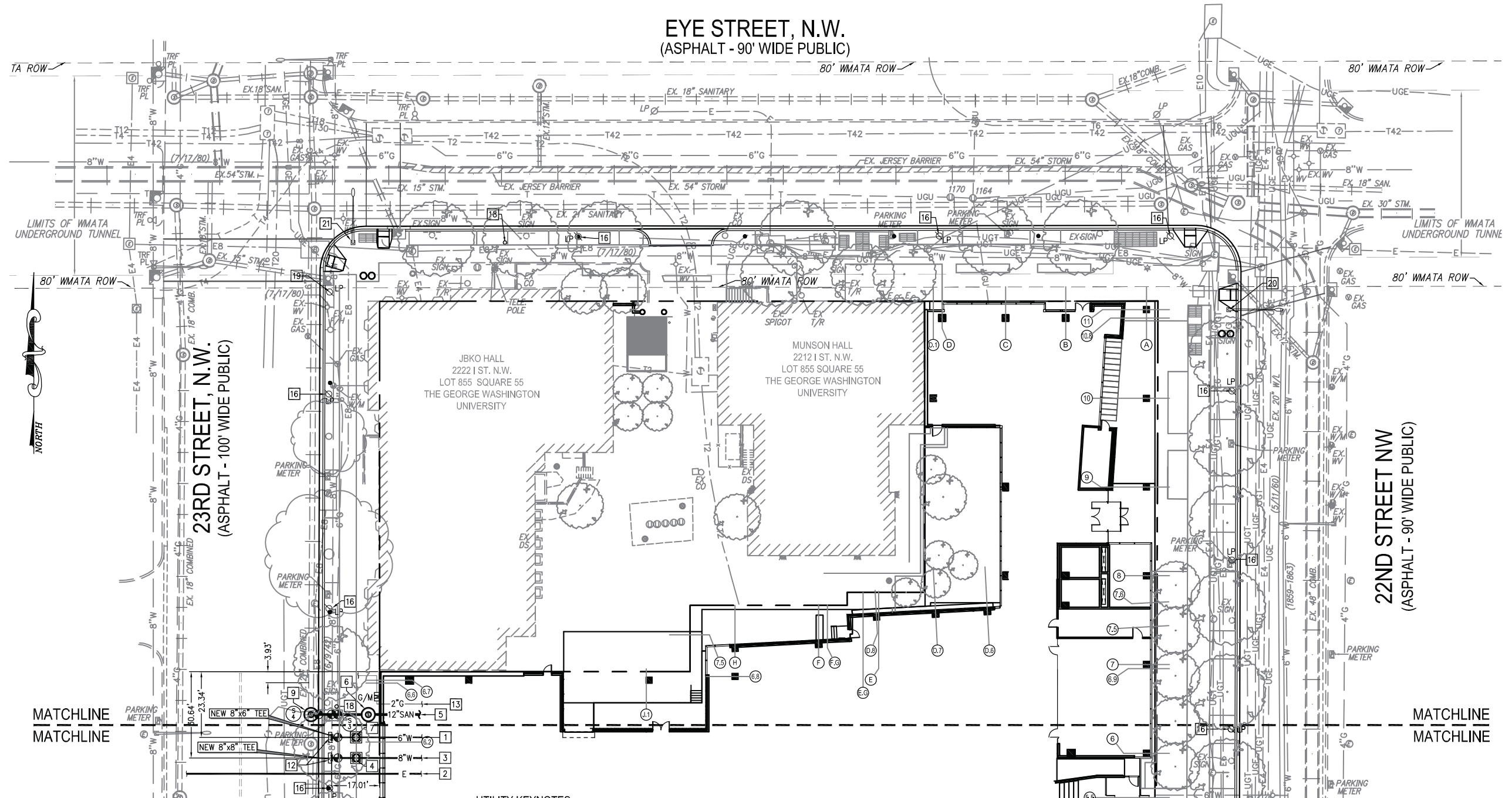
TITLE:

UTILITY PLAN -
NORTH

NUMBER:

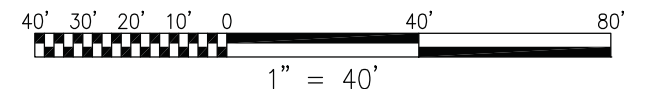
C-08

EYE STREET, N.W.
(ASPHALT - 90' WIDE PUBLIC)



UTILITY KEYNOTES:

- 1 NEW 6" DIP CLASS 52 DOMESTIC WATER SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1015. WATER METER TO BE LOCATED INSIDE THE BUILDING.
- 2 NEW ELECTRIC DUCTBANK FROM ROSS HALL'S DISTRIBUTION SWITCHGEAR. SEE ELECTRICAL DRAWINGS FOR DETAILS.
- 3 NEW 8" DIP CLASS 52 FIRE SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1048.
- 4 NEW 8" WATER VALVE WITH 4.0' CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.01.
- 5 NEW 12" PVC SCH-40 SANITARY SEWER LATERAL.
- 6 NEW 4.0' DIAMETER CLEANOUT MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.01.
- 7 NEW 6" WATER VALVE WITH 4.0' CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-20.01.
- 8 NEW 15" SDR-35 COMBINED SEWER LATERAL.
- 9 NEW 4.0' DIAMETER MANHOLE WITH DOGHOUSE BASE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.11.
- 10 NEW CONNECTION TO EXISTING MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS.
- 11 NEW 15" SDR-35 STORM SEWER LATERAL.
- 12 NEW CONCRETE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.01.
- 13 NEW 2" GAS SERVICE AND METER. SEE MEP DRAWING FOR DETAILS.
- 14 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL. PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 15 NEW TWIN-20 GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 16 NEW NO.16 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 17 NEW 23'-4" x 29'-2" CISTERN STRUCTURE. REFER TO MEP DRAWING FOR DETAILS.
- 18 NEW EMERGENCY SIGNAL POLE. REFER TO WELLS AND ASSOCIATES FOR DETAILS.
- 19 NEW NO.18 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL. PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 20 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS.
- 21 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS AND EXISTING PEDESTRIAN SIGNAL.
- 22 NEW 8" PVC SCH-40 SANITARY SEWER LATERAL.
- 23 NEW 12" PVC SCH-40 OVERFLOW PIPE. REFER TO PLUMBING DRAWING FOR DETAILS.



STORMWATER MANAGEMENT CALCULATIONS

TOTAL IMPERVIOUS AREA (Ia) = 56,882 sf or 1.30 ac

SEWER DATA:

Type of sewer: Combined Sewer
 Size of sewer: Existing 15"

(QUANTITY CONTROL REQUIREMENTS):

$Q = C * I * A$

where: Q = peak flow
 C = runoff coefficient
 I = intensity (in/hr)
 A = drainage area (Ia)

2-YEAR CONTROL (Qpre)

$Q_{pre} = (0.35 * 5.28 \text{ in./hr.} * 1.30 \text{ ac})$

$Q_{pre} = 2.40 \text{ cfs}$

15-YEAR CONTROL (Qpost)

$Q_{post} = (0.90 * 7.56 \text{ in./hr.} * 1.30 \text{ ac})$

$Q_{post} = 8.84 \text{ cfs}$

(SHORT-CUT ROUTING):

where: Tc = time of concentration (5 min)

$V_{sc} = 1.25 (Q_{post} - Q_{pre}) T_c$
 $= 1.25 [(8.84 - 2.40) (5 \text{ min} * 60 \text{ sec/min})]$

$V_{sc} = 2,415 \text{ cf}$ or 18,064.20 gallons

(DETERMINE WATER QUALITY VOLUME):

where: Vqv = water quality volume to be treated

R (runoff depth) = 0.5 inches (rooftops, sidewalks, pedestrian plaza areas)

Ia = 0.83 ac (impervious area)

$V_{qv} = \frac{R * I_a}{12}$
 $= \frac{0.5 \text{ in.} * 56,882 \text{ sf}}{12}$

$V_{qv} = 2,370.08 \text{ cf}$ or 17,728.20 gallons

NOTE: Per DDOE standards, whichever of the two volume computations is larger, use the larger one for both quantity and quality requirements.

(VOLUME OF CISTERN PROVIDED):

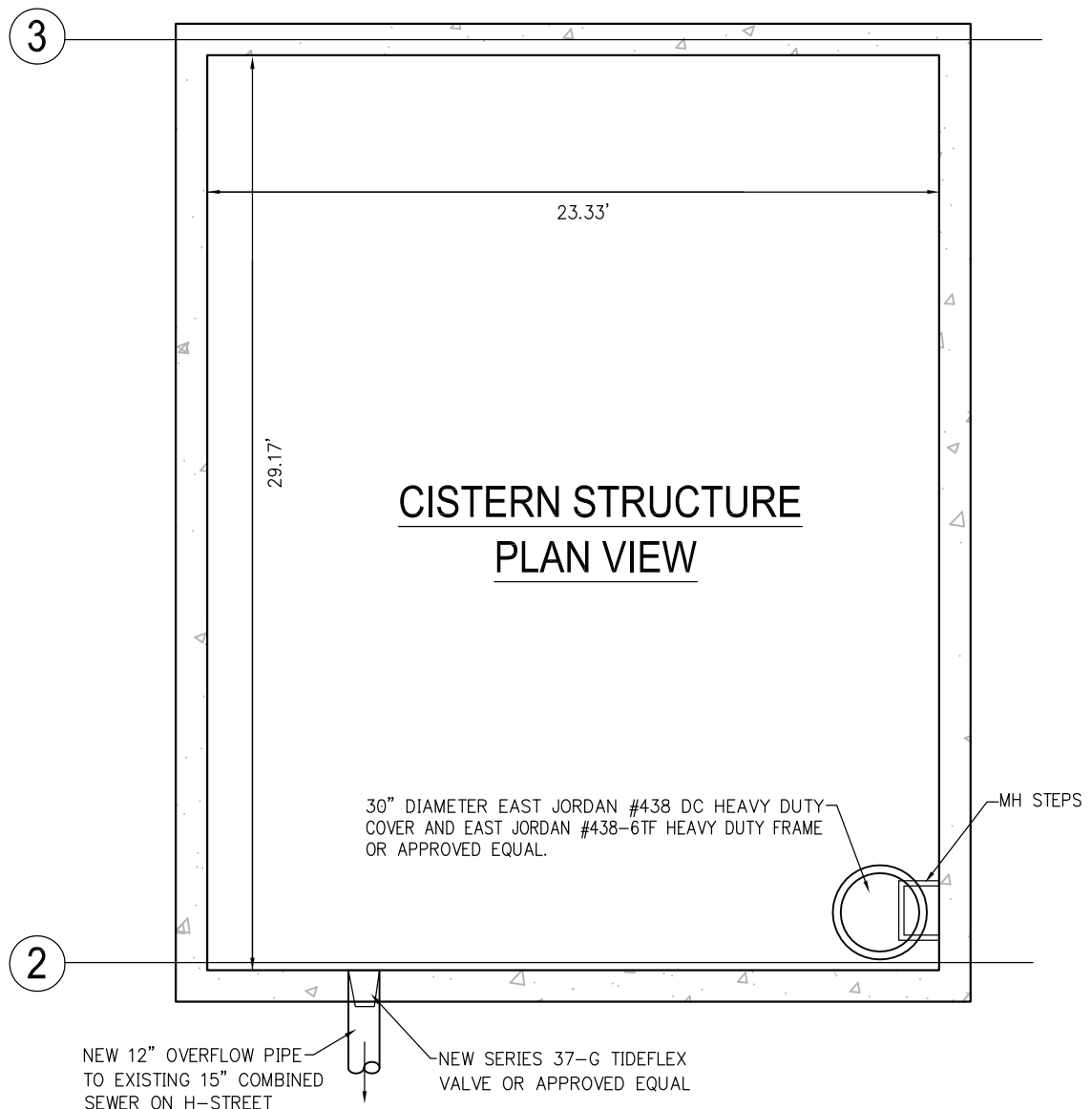
Vcistern = Length x Width x Height
 $= 29.17' * 23.33' * 8.42'$

Vcistern = 5,730.11 cf or 42,861.22 gallons

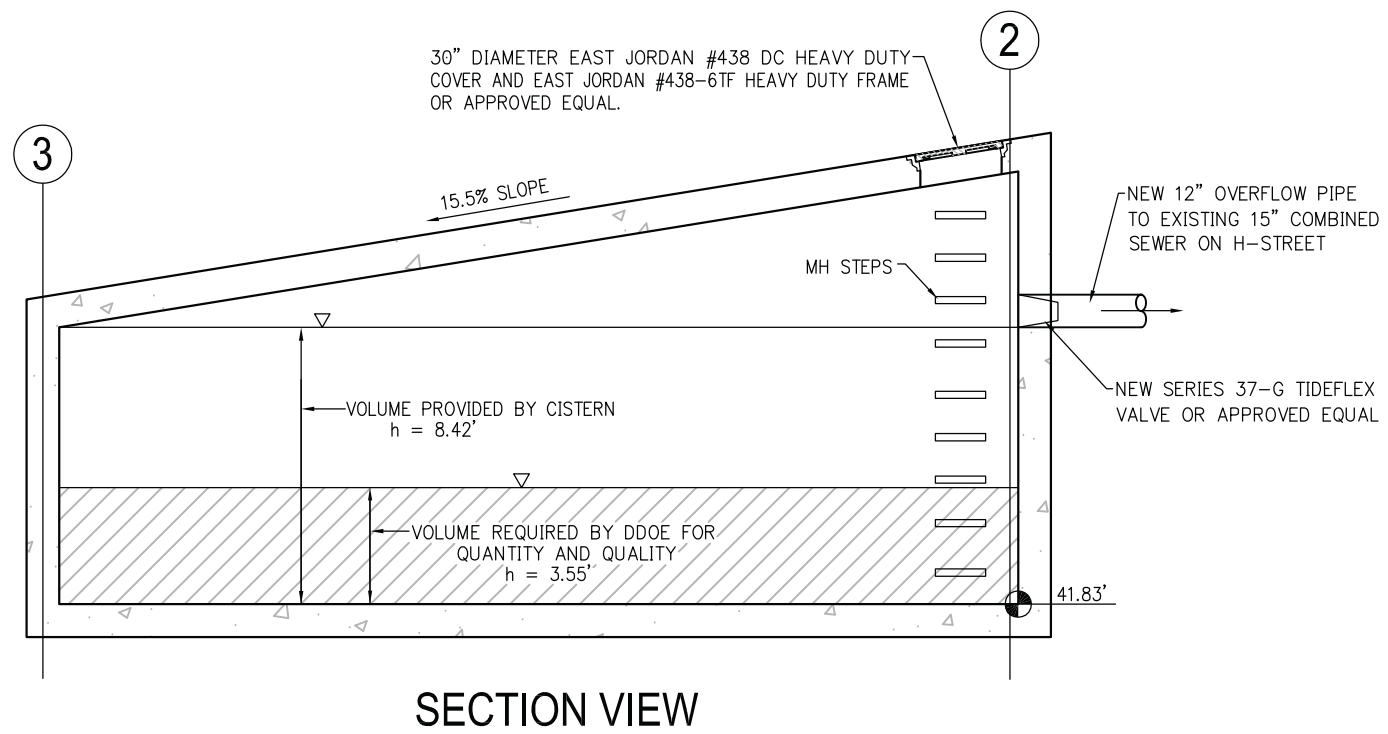
VOLUME PROVIDED >= VOLUME REQUIRED

VOLUME PROVIDED: 5,730.11 cf >= VOLUME REQUIRED: 2,415 cf

VOLUME OF CISTERN IS GREATER THAN VOLUME REQUIRED THEREFORE THE STRUCTURE SATISFIED THE DDOE REQUIREMENTS.



AWAITING DRAWING



SECTION VIEW



THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC

SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

Architecture, Engineering, Planning, Interior Design

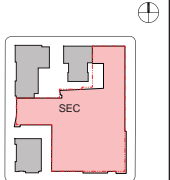
Ballinger

833 Chestnut Street, Suite 1400, Philadelphia, PA 19107
 V 215.446.0900, F 215.446.0901, ballinger.com

Hickok Cole



KEY PLAN:



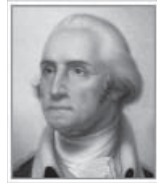
DATE: NOVEMBER 15, 2010

SECOND-STAGE PUD APPLICATION

TITLE: STORM WATER MANAGEMENT PLAN

NUMBER:

C-09



THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, D.C.

SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

Architecture Engineering Planning Interior Design

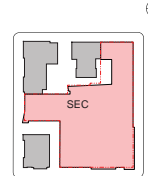
Ballinger

833 Chestnut Street Suite 1400 Philadelphia, PA 19107
V 215 446 0900 F 215 446 0901 ballinger.com

Hickok Cole



KEY PLAN:



DATE: NOVEMBER 15, 2010

SECOND-STAGE PUD APPLICATION

TITLE: SEDIMENTATION AND EROSION CONTROL DETAILS

NUMBER:

C-10

