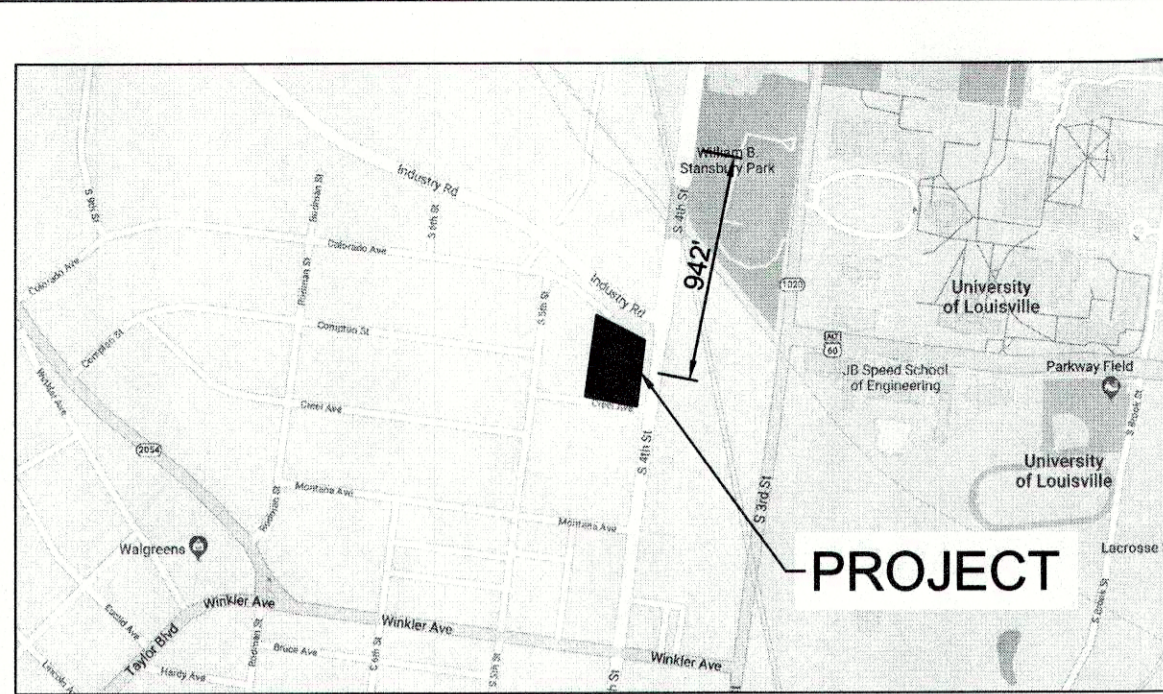
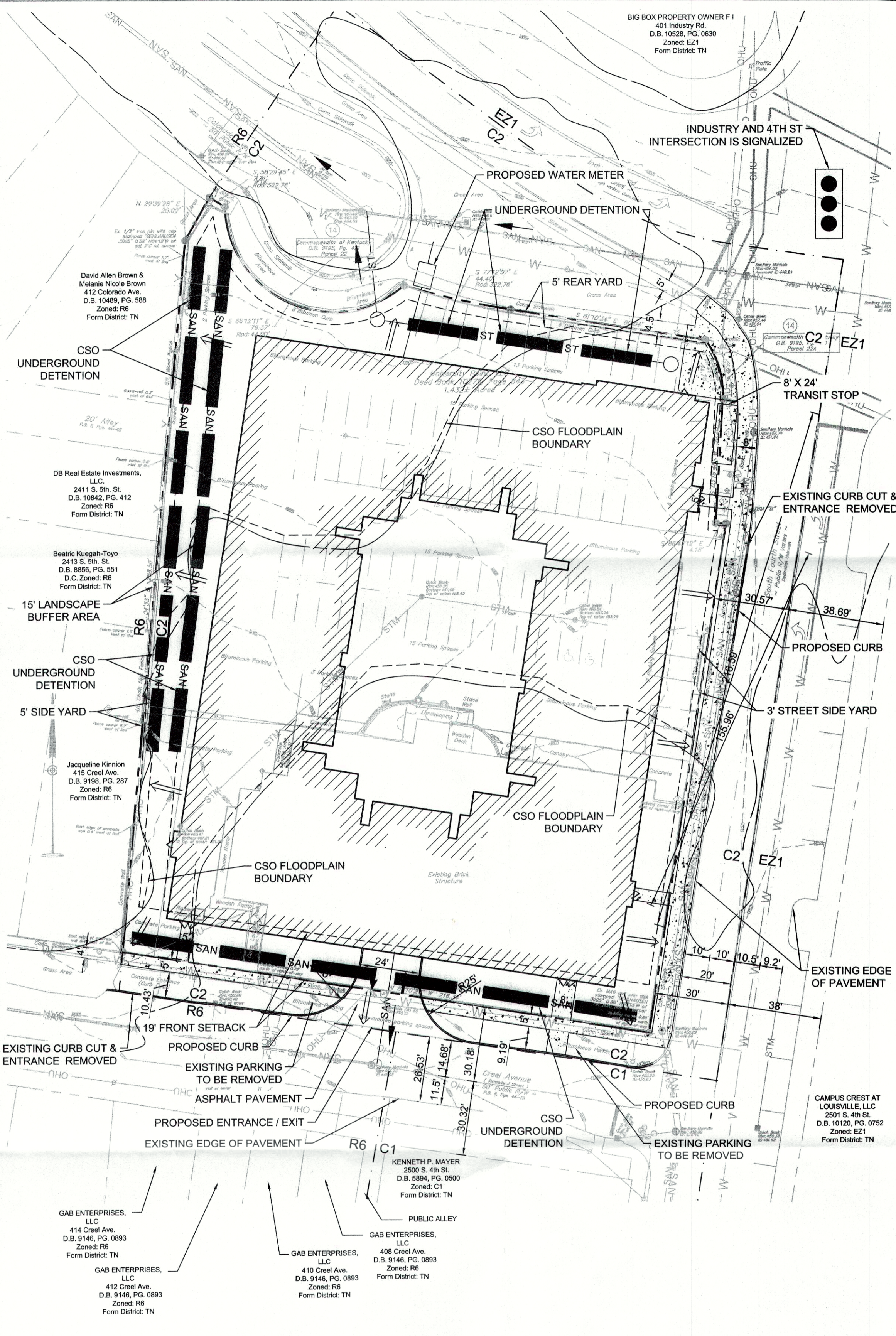


Drawn By: RJK
 Checked By: MAM
 Approved By: XXX



PRELIMINARY DETENTION AND WQ CALCULATIONS:

DETENTION

EXISTING IMPERVIOUS: 1.38 AC
 EXISTING PERVIOUS: 0.04 AC
 PROPOSED IMPERVIOUS: 1.01 AC
 PROPOSED PERVIOUS: 0.41 AC
 PERCENT IMPERVIOUS= 71%

$Q_{10}(PRE)=7.57$ CFS
 $Q_{100}(POST)=9.91$ CFS
 $VOL_{100}(POST)=27,392$ CF

$Q_{10}/Q_{100}=7.57/9.91=0.76$
 REQ. STORAGE VOL.:
 $0.2 \times 27,392 = 5,479$ CF REQ.

WATER QUALITY CALCULATIONS

$WQ = 0.5 \text{ IN/HR} \times 1.42 \text{ AC} \times 0.92 = 0.65$ CFS

USE UNDERGROUND DETENTION PIPING SUPPLEMENTED WITH PLANTERS OR A PROPRIETARY SYSTEM.

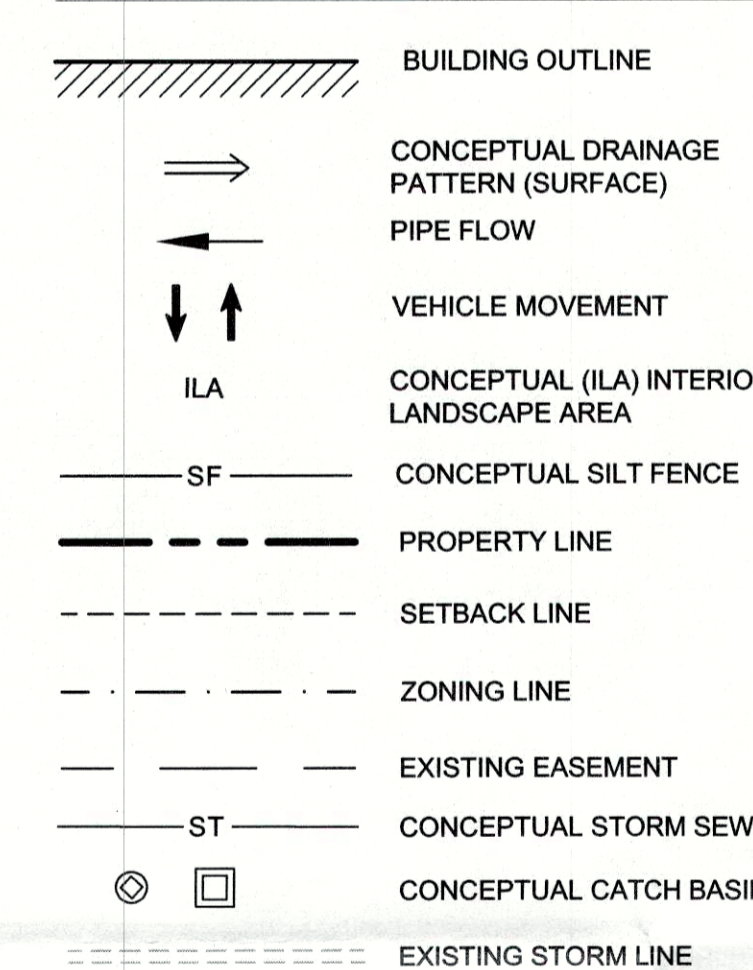
EXISTING IMPERVIOUS AREA = 61,655 S.F.
 PROPOSED IMPERVIOUS AREA = 53,655 S.F.
 NET IMPERVIOUS AREA = - 8,000 S.F.

NOTE: ALL RADII ARE 3' UNLESS OTHERWISE NOTED

DEVELOPER:
 APTITUDE 4TH STREET, LLC.
 669 RIVER DRIVE, SUITE 402
 ELMWOOD PARK, NEW JERSEY 07407

OWNER:
 TAX BLOCK 0508, LOT 0046
 UNIVERSITY POINT, LLC.
 2400 SOUTH FOURTH STREET
 LOUISVILLE, KY 40208
 DB 10279, PG 0843

LEGEND



Unit Mix

	Units
Studio	34
1 BR	5
2 BR	108
3 BR	2
4 BR	83
TOTAL:	232

Density

	# Units	% site	DU/AC
Studio	34	0.078	435
1 BR	5	0.025	200
2 BR +	193	1.327	145
TOTAL:	232	1.430	

FAR:

	sf/Floor	Total sf
Levels 3-9	35,468	248,276
Level 10	34,460	34,460
TOTAL:		282,736 1.43 ac = 4.5

MSD FLOODPLAIN FOR CSO 457.50
 LOWEST FFE = 458.50
 LOWEST MECHANICAL EQUIPMENT = 459.50

APPROXIMATE AREA OF FLOODPLAIN TO BE FILLED BY DEVELOPMENT WILL BE 27,471 S.F. PER CONVERSATIONS WITH MSD, ASSUMED A 6" DEPTH OF OVERFLOW ACROSS THE SITE AND A MITIGATION RATE OF 1.5:1. VOLUME TO BE STORED ON SITE FOR MITIGATION WILL BE APPROXIMATELY 20,803.25 CF. STORAGE WILL BE ACCOMPLISHED WITH BOTH SURFACE AND UNDERGROUND STORAGE, APPROXIMATELY 5,603.25 CF OF SURFACE STORAGE AND 15,000 CF OF UNDERGROUND STORAGE.

Data Table

Existing Use:	COMMERCIAL RESTAURANT
Proposed Use:	STUDENT HOUSING
Zoning:	C2
Form District:	TRADITIONAL NEIGHBORHOOD
FEMA FIRM Panel:	21111C0057E

Building Information

Proposed Building	Units (apt/floor)	Open Space (sf)	Parking Spaces
Gar. 1st Floor			113
Gar. 2nd Floor			124
Res. 1st Floor	30	9,000	
Res 2nd - 7th Floors	30		
Res. 8th Floor	22	1,065	
Sub-Totals:			
Totals:	232	10,065	237

Building S.F.

8 Levels of Residential	284,040 s.f.
2 Levels of Parking	87,768 s.f.
Total	371,808 s.f.

Max. Allowed Building Ht 45'
 Proposed Building Ht 116'-6"

Lot Area 62,108 s.f. (1.43 Ac.)
 Max. Allowed FAR 5.0
 Proposed FAR 4.6

Chapter 9, Bicycle and Parking Summary

MIN PARKING REQUIRED (RESIDENTIAL)	1.5 SPACES/DU	348 SPACES
MAX PARKING ALLOWED (RESIDENTIAL)	2.5 SPACES/DU	580 SPACES
TOTAL MIN. PARKING W/ REDUCTIONS	-10% TARC CREDIT -20% GREEN DESIGN CREDIT * -10% RESIDENTIAL USE	209 SPACES

* Green development site design criteria met: 1. (previously developed site), 2. (route #4), and 7. (100% parking under cover)

TOTAL PARKING PROVIDED 237 (INC. 7 HANDICAP SPACES)

Bicycle Parking Rqd: 0 long term
 Bicycle Parking Prov: See Arch Below

Tree Canopy

Existing Tree Canopy	0%	0 sf
Percentage of Tree Canopy Preserved	0%	0 sf
Percentage of Tree Canopy Required	10%	6,210.78 sf
Percentage of Tree Canopy Provided	10%	6,210.78 s.f. (MIN.)

Article 12

Total VUA:	401 sf
ILA Required: 5 sf/100 sf VUA =	20.05 sf
ILA Provided:	8,453 (150 sf min. area allowed)

Open Space

Required: 5% net lot area	3,105 sf (MF open space standard)
(NOTE: Project is within 1,000' of public park, none on site required)	
Provided:	8,453 sf

VARIANCE / WAIVER REQUEST

- A variance from Section 5.1.12.A.2.a to allow the proposed structure to encroach up to 4' into the 19' front yard, as established by the range of the front yard setbacks of the two nearest lots containing principal structures with the same block face.
- A variance from Section 5.1.12.A.2.d to exceed the maximum building height of 25', as established by the range of building heights of existing structures within same block face (20' average) plus 25% (5'), to allow the proposed structure to be constructed at a height of 116'-6".
- A waiver of Section 5.4.1 of the Land Development Code requiring residential development in the Traditional Neighborhood Form District to provide the four components of Public Realm Area, Principal Structure Area, Private Yard Area, and Accessory Structure Area.
- Waiver requested to not provide a connection to the unnamed, unbulld alley running from the subject property to S. 5th Street.

GENERAL NOTES

- CONSTRUCTION PLANS AND DOCUMENTS SHALL COMPLY WITH LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT'S DESIGN MANUAL AND STANDARD SPECIFICATIONS AND OTHER LOCAL, STATE AND FEDERAL ORDINANCES.
- NO PORTION OF THE SITE IS WITHIN THE 100 YEAR FLOOD PLAIN PER FIRM MAP NO. 21111 C 0057 E.
- DOCUMENTATION WILL BE REQUIRED PRIOR TO CONSTRUCTION APPROVAL, SHOWING THAT THE DEVELOPMENT COMPLIES WITH ALL THE LIGHTING REGULATIONS FROM CHAPTER 4, PART 1, SECTION 3.
- TRANSPORTATION PLANNING APPROVAL REQUIRED PRIOR TO CONSTRUCTION APPROVAL.
- ALL SIGNAGE WILL COMPLY WITH THE REQUIREMENTS OF LDC CHAPTER 8. NO SIGNS WILL BE PERMITTED WITHIN THE RIGHT OF WAY.
- CONSTRUCTION PLANS, BOND AND PERMIT ARE REQUIRED BY METRO PUBLIC WORKS PRIOR TO CONSTRUCTION APPROVAL.
- ALL CONSTRUCTION AND SALES TRAILERS MUST BE PERMITTED BY THE DEPARTMENT OF PUBLIC HEALTH AND WELLNESS IN ACCORDANCE WITH CHAPTER 115 OF LOUISVILLE/JEFFERSON COUNTY METRO ORDINANCES.
- MOSQUITO CONTROL IN ACCORDANCE WITH CHAPTER 95 OF LOUISVILLE JEFFERSON COUNTY METRO ORDINANCES.
- MITIGATION MEASURES FOR DUST CONTROL SHALL BE IN PLACE DURING CONSTRUCTION TO PREVENT FUGITIVE PARTICULATE EMISSIONS FROM REACHING EXISTING ROADS AND NEIGHBORING PROPERTIES.
- AN MSD DRAINAGE BOND WILL BE REQUIRED.
- THERE SHALL BE NO LANDSCAPING IN THE RIGHT OF WAY WITHOUT AN ENCROACHMENT PERMIT.
- ALL NEW SIDEWALKS SHALL BE BUILT TO ADA CURRENT STANDARDS.
- AN ENCROACHMENT PERMIT AND BOND WILL BE REQUIRED FOR ALL WORK DONE IN THE RIGHT OF WAY.
- OFF-STREET LOADING AND REFUSE COLLECTION AREAS SHALL BE LOCATED AND SCREENED PER CHAPTER 10.
- COMPATIBLE UTILITIES SHALL BE PLACED IN A COMMON TRENCH UNLESS OTHERWISE REQUIRED BY APPROPRIATE AGENCIES.
- THE FINAL DESIGN OF THIS PROJECT MUST MEET ALL MSA WATER QUALITY REGULATIONS ESTABLISHED BY MSD. SITE LAYOUT MAY CHANGE AT THE DESIGN PHASE DUE TO PROPER SIZING OF GREEN BEST MANAGEMENT PRACTICES.
- LOCATION OF UNDERGROUND DETENTION ACCESS TO BE DETERMINED DURING DESIGN DEVELOPMENT AND CD'S.
- UNDERGROUND ACCESS LOCATION AND DESIGN TO BE COORDINATED WITH MSD.
- IF SITE HAS THRU DRAINAGE AN EASEMENT PLAT WILL BE REQUIRED PRIOR TO MSD GRANTING CONSTRUCTION PLAN APPROVAL.
- ANY REQUIRED FILL IN THE COMBINED SEWER OVERFLOW FLOODPLAIN SHALL BE COMPENSATED ON SITE AT A RATIO OF 1.5:1.
- UNDERGROUND DETENTION BASINS MUST MEET THE REQUIREMENTS OF SECTION 10.3.8.4 OF MSD'S DESIGN MANUAL.
- SITE DISCHARGES INTO THE COMBINED SANITARY SEWER SYSTEM AND SHALL LIMIT THE 100 YEAR POST DEVELOPED DISCHARGE TO THE 10 YEAR PRE-DEVELOPED DISCHARGE PER SECTION 10.3.1.2 OF THE MSD DESIGN MANUAL.
- A PORTION OF THIS SITE IS LOCATED WITHIN THE COMBINED SEWER OVERFLOW FLOODPLAIN. LOWEST FINISHED FLOOR TO BE AT OR ABOVE 458.50 AND LOWEST MACHINERY TO BE AT OR ABOVE 459.50
- STORM WATER OUTFALL LOCATION TO BE REVIEWED AND APPROVED PRIOR TO MSD CONSTRUCTION PLAN APPROVAL.

EPSC NOTES

THE APPROVED EROSION PREVENTION AND SETTLEMENT CONTROL (EPSC) PLAN SHALL BE IMPLEMENTED PRIOR TO ANY LAND DISTURBING ACTIVITY ON THE CONSTRUCTION SITE. ANY MODIFICATIONS TO THE APPROVED EPSC PLAN MUST BE REVIEWED AND APPROVED BY MSD'S PRIVATE DEVELOPMENT REVIEW OFFICE. EPSC BMPs SHALL BE INSTALLED PER THE PLAN AND MSD STANDARDS.

DETENTION BASINS, IF APPLICABLE, SHALL BE CONSTRUCTED FIRST AND SHALL PERFORM AS SEDIMENT BASINS DURING CONSTRUCTION UNTIL THE CONTRIBUTING DRAINAGE AREAS ARE SEEDDED AND STABILIZED.

ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOILS TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY.

SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS, SWALES, AND CATCH BASINS. STOCKPILES SHALL BE SEEDDED, MULCHED, AND ADEQUATELY CONTAINED THROUGH THE USE OF SILT FENCING.

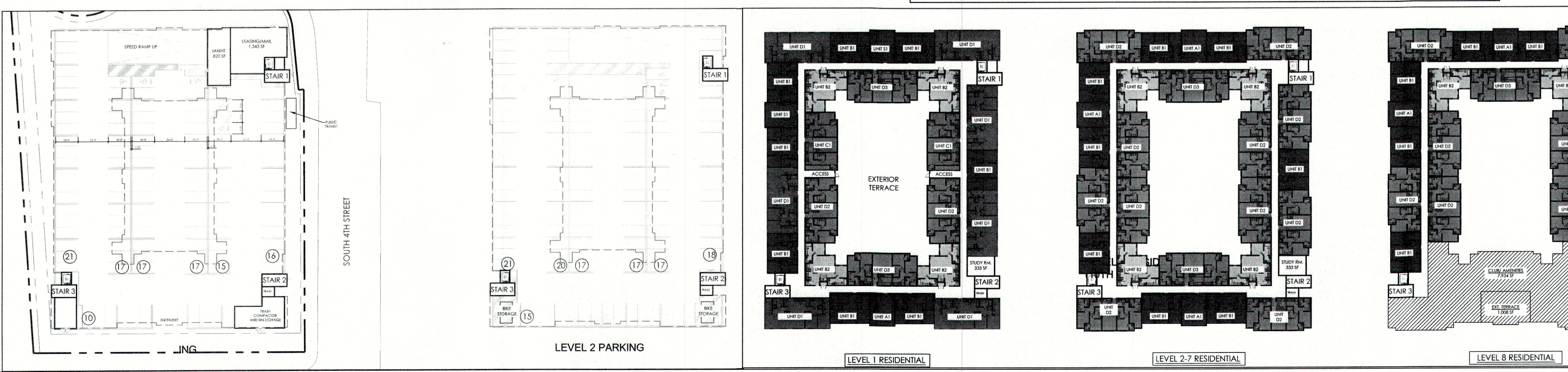
ALL STREAM CROSSINGS MUST UTILIZE LOW-WATER CROSSING STRUCTURES PER MSD STANDARD DRAWING ER-02.

WHERE CONSTRUCTION OR LAND DISTURBANCE ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE REQUIRED AS SOON AS PRACTICABLE, BUT NOT LATER THAN 14 CALENDAR DAYS AFTER THE ACTIVITY HAS CEASED.

SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING, OR OTHER EXCAVATION ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE, OR CATCH BASIN.

NORTH

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REVISED DETAILED
 DISTRICT
 DEVELOPMENT PLAN

The Marshall Louisville
 Student Housing
 2400 South Fourth Street

NOT FOR
 CONSTRUCTION

Revision

No.	Date	Description
1	04/02/2018	AGENCY COMMENTS
2	04/16/2018	AGENCY COMMENTS
3	04/23/2018	AGENCY COMMENTS

REVISED DETAILED DISTRICT
 DEVELOPMENT PLAN
 18 DEVPLAN 1036
 18 VARIANCE 1021

C-EX1

PROJECT: 43119.00
 DATE: MARCH 12, 2018

WMM 11759
 LINE IS 3 INCHES WHEN PRINTED FULL SIZE
 FULL SHEET SIZE = 24"x36"

P:\43119001\c\ISHEETS\43119_C Development Plan-19Saback.dwg - McLaren, Matt - 4/23/2018 1:17:05 PM