

NEW MULTI FAMILY 4-UNIT BUILDING

2205 16TH STREET, SE
WASHINGTON, D.C.

SPRINKLER IN ACCORDANCE
WITH NFPA 13R

SCOPE OF WORK

- DEMOLITION
- EXCAVATE SPECIFIED PORTIONS OF EARTH FROM SITE.
 - EXECUTE REQUIRED PRECAUTIONS ALONG PUBLIC SPACES..
 - REMOVE EXISTING FIREPLACE WITH MANTLE.....
 - REMOVE DAMAGED MECHANICAL, PLUMBING and ELECTRICAL FIXTURES

- NEW FLOOR PLANS
- PROVIDE NEW DRYWALL ON ALL FLOORS.
 - PROVIDE NEW FIXTURES AND APPLIANCES WHERE NECESSARY.
 - PROVIDE NEW FRAMING MEMBERS THROUGHOUT STRUCTURE.
 - PROVIDE NEW WINDOWS AND DOORS WHERE NECESSARY.
 - SEE ALL OTHER PROVISIONS AS PER PLANS.

- MECHANICAL
- PROVIDE NEW DUCTWORK ON ALL FLOORS
 - PROVIDE EXHAUST FANS IN ALL BATHROOMS
 - PROVIDE NEW FURNACE UNIT AND WATER HEATER AS PER PLANS.

- PLUMBING
- PROVIDE NEW PLUMBING FIXTURES, PIPES AND ACCESSORIES AS PER PLANS.

- ELECTRICAL
- PROVIDE NEW OUTLETS WHERE NECESSARY.
 - PROVIDE NEW LIGHTING FIXTURES, SMOKE DETECTORS WHERE NECESSARY.
 - PROVIDE NEW WIRING LINES AS PER NEC 2006 CODE.

GENERAL DEMOLITION NOTES

1. THE INTENTION IS TO HAVE ALL DEMOLITION PERFORMED AS REQUIRED FOR THE COMPLETE PROJECT, ALTHOUGH, ALL DEMOLITION REQUIRED MAY NOT BE SPECIFICALLY SHOWN OR NOTED.
2. THE ARCHITECT AND HIS AGENTS SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES OR POLLUTION, ETC, WHICH MAY BE CAUSED BY DISTURBANCE OF ANY UNKNOWN EXISTING MANMADE OR NATURAL CONDITIONS, MATERIAL, STRUCTURE, ETC, INCLUDING BUT NOT LIMITED TO UTILITIES.

GENERAL NOTES

1. THE PURPOSE OF THESE DRAWINGS ARE TO SHOW THE ARCHITECTURAL FLOOR PLANS AND MISC. DETAILS ONLY. MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE AS DESIGNED AND SPECIFIED BY OTHERS.
2. THESE DRAWINGS ARE NOT INTENDED TO SHOW EVERY SPECIFIC DETAIL REQUIRED FOR PROPER CONSTRUCTION. SPECIFIC IMPLEMENTATION OF THESE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR WHO REPRESENTS. HE HAS THE SKILL AND EXPERT KNOWLEDGE TO EXECUTE THE WORK REQUIRED.
3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL BUILDING CODE AND ALL LOCAL ORDINANCES, ETC., INCLUDING BUT NOT LIMITED TO THE IBC BUILDING CODE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS SHOWN ACCORDING TO ACTUAL EXISTING CONSTRUCTION.
5. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO VERIFY ANY EQUIPMENT OR MATERIALS, ETC., REQUIRED BY THE OWNER, BUT NOT NECESSARILY SHOWN ON THE DRAWINGS.

ZONING ANALYSIS

ZONE: R5A

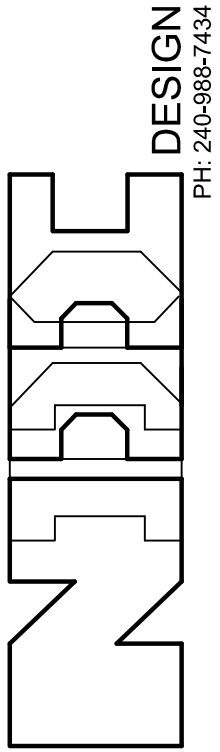
LOT AREA: 2,598 SF
LOT COVERAGE: 40% (1,039.2 SF)
FLOOR AREA RATIO (F.A.R.): 0.9
Total gross floor area: 0.9(2,598)= 2,338.2 SF
Proposed total gross floor area: 2,195 SF

Proposed bldg coverage: 1,022 SF (36'-6"x 28')
Percentage of Bldg Coverage: 1,022/ 2,598= 0.393 (equals 0.39.....39%)

MAX. BLDG HGT: 40 FEET (3 STORIES)
PROPOSED BLDG HGT- 28 feet- 2 STORIES

MIN. SIDEYARD SETBACK: not less than 8 FEET
Proposed sideyard setback- 0 feet

MIN. REAR YARD SETBACK: 20 FEET
Proposed rearyard setback- 23' feet



NEW RESIDENTIAL BLDG

SITE PLAN, NOTES & DETAILS.

2205-16TH STREET, SE
WASHINGTON, D.C.

SQUARE: 5795 LOT:27

CS

DATE: _____

BUILDING DATA

USE GROUP	
OCCUPANCY TYPE	R-2
# OF UNITS	4 UNITS
CONSTRUCTION TYPE	V-B
BUILDING HEIGHT -PROPOSED	28 FEET
NUMBER OF STORIES- PROPOSED	2
FIRE SUPPRESSION	N/A
SPRINKLER SYSTEM	YES
FIRE ALARM SYSTEM	NO

BUILDING LIVELOAD:		
MINIMUM UNIFORMLY DISTRIBUTED AND CONCERNTRATED LIVE LOADS		
	uniform (live)load	concentrated (dead)load
ROOFS		
-flat, pitched	30 psf	15 psf
FLOOR SPACES		
-uninhabitable attics (no storage)	10 psf	10 psf
-uninhabitable attics (storage)	20 psf	10 psf
-all other areas except stairs and balconies	40 psf	15 psf
FIRE ESCAPE		
-single family dwelling	40 psf	10 psf

NOTE:

GOVERNING CODES:
(IBC 2006, DCMR 12B-2006, DCMR123-2008, IBC2006)
Usegroup: R-2 (4 UNITS)
Construction Type: V-B (non-combustible, unprotected.)
Exterior bearing and party walls: 2hrs.
Exterior non-bearing, interior bearing and non-bearing wall: 0hrs.
Floor and Roof construction: 2hrs.
Number of stories above grade- 3
Number of stories below grade- 1 (new basement)
1,500 psf maximum concrete footing bearing capacity.
3,000 psi soil bearing capacity.
2,500 psi concrete compressive strength (footings).
3,000 psi concrete compressive strength (foundation wall)
Sprinkler system- YES
Fire Alarm system- NO
Accessibility- NO
Verify live load requirements with local applicable building codes.

CONSTRUCTION MATERIAL SPECIFICATIONS

CONCRETE: All concrete to be 3,000 PSI, normal weight.
W/C =0.55 for footings
W/C =0.45 for walls

CONCRETE REINFORCEMENT:
Deformed Bars: ASTM A615, Grade 60
Welded Wire Fabric (WWF): ASTM A185

WATERSTOP: Bentonite Vulcanizate (BV)
Specific gravity-ASTM D 792 test method, 0.96 required result.
Shore A Hardness(5 sec.): ASTM D 2240
Tensile Strength- 2,300 PSI
Tear Strength- 278 PLI @ 77 degrees

DRYPACK: Non shrinkable grout @ 4,000 PSI filled in 2 inch minimum space.

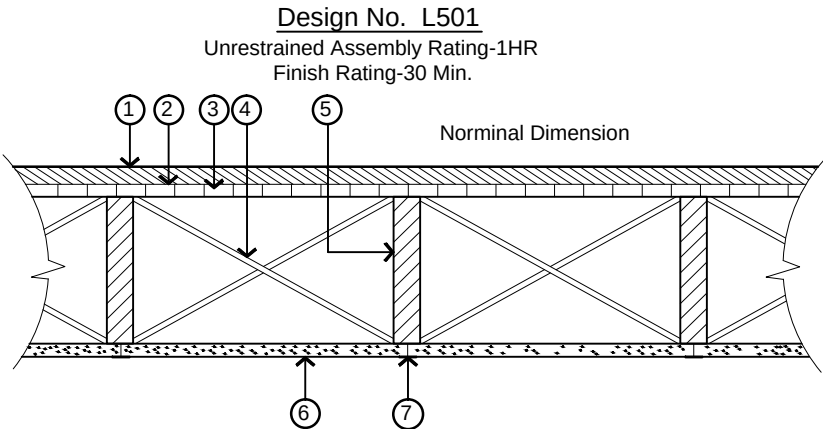
STEEL PIPE: ASTM A53, grade B, Fy= 35 ksi

STEEL PLATE: ASTM A36

ANCHOR BOLTS: ASTM A325

ANCHOR RODS: ASTM F1554, Fy=36 ksi

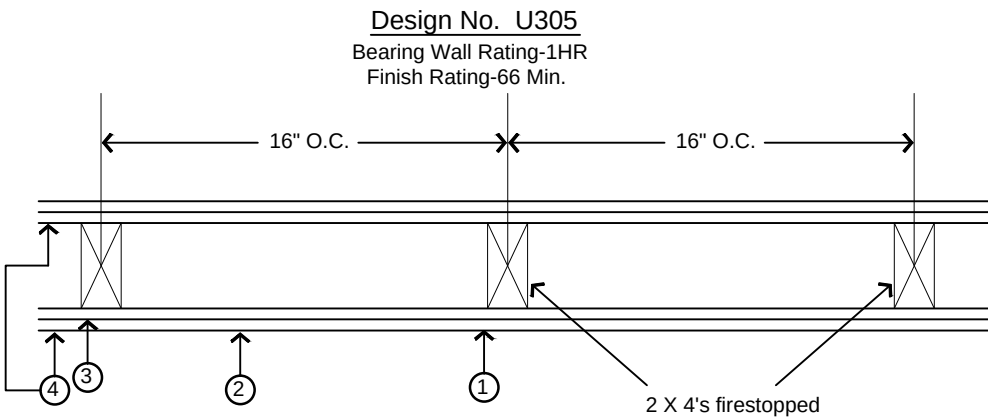
PROPOSED
FLOOR SEPERATION SYSTEM
between all FLOORS.



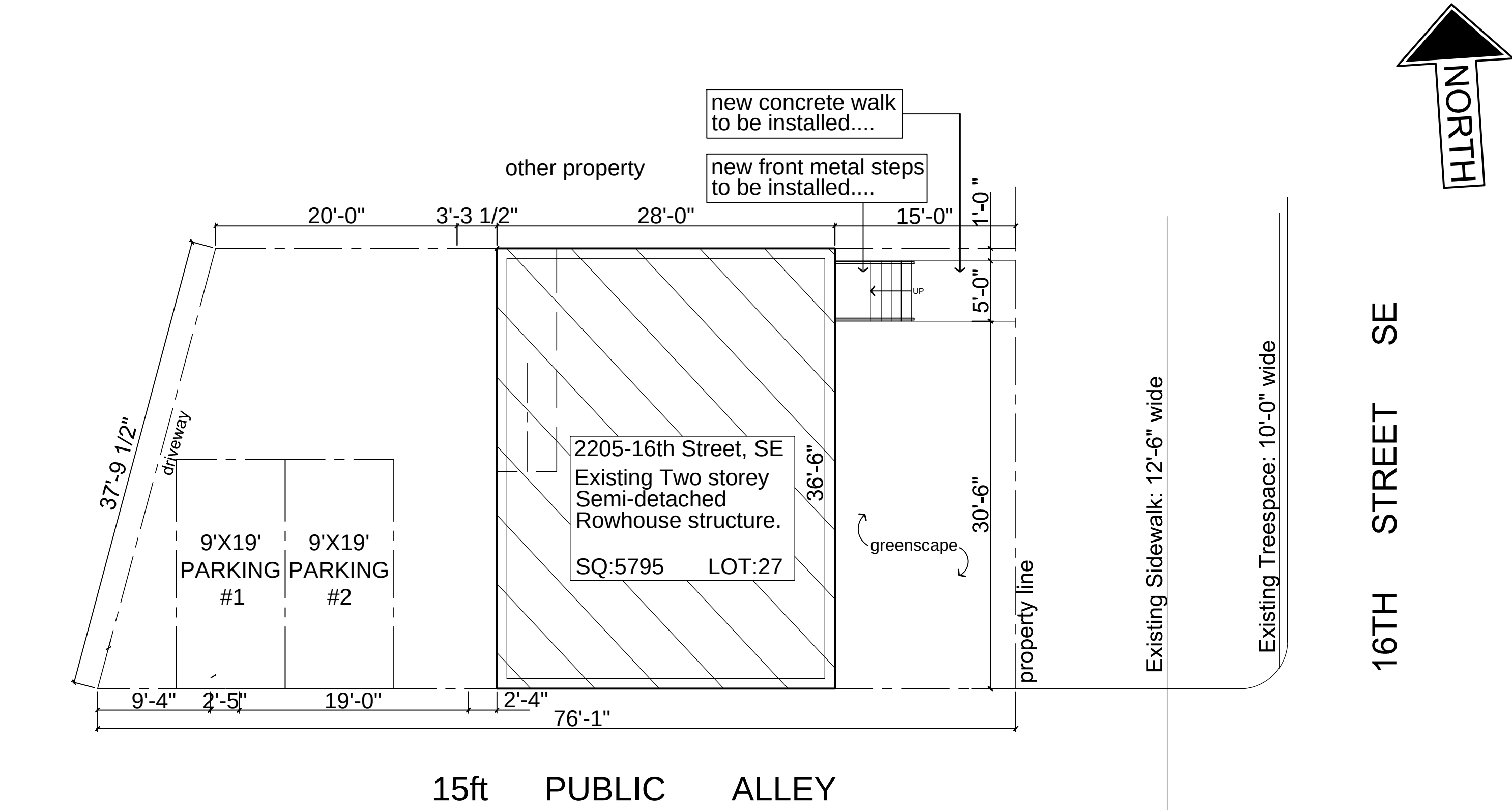
1,2,3. Flooring Systems- The finish flooring (item 1), vapor barrier (item 2) and the subflooring (item 3), may consist of any one of the following systems:

- System No. 1
- 1- Finish Flooring- 1 by 4 in. T & G, laid perpendicular to joists; or 15/32 in. thick plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G long edges and conforming with PS 1-83 specifications; or thick non veneer APA rated Sturd-I-Floor T&G panels per APA specifications PRP-108. Long dimension of panel (strength axis) or face grain of plywood to be perpendicular to joists with joints staggered.
 - 2- Vapor Barrier- Commercial rosin-sized, 0.010 in. thick.
 - 3- Subflooring- 1 by 6 in. T&G, fastened diagonally to joists; or 15/32 in. thick plywood, min grade "C-D" Exposure 1 or "C-D" with exterior glue conforming with PS 1-83 specifications; or 7/16 in. non veneer APA-rated sheathing panels per APA specifications PRP-108. Long dimension of panel (strength axis) or face grain of plywood to be perpendicular to the joists with joints staggered.
 - 4- Cross blocking- typical.
 - 5- Wood joists- 2"x8", 2"x10", 2"x12"-typical
 - 6- Gypsum- 5/8"...(2-5/8's to be installed as per homeowner's request)

EXISTING/PROPOSED 1HR FIRE-RATED WALL

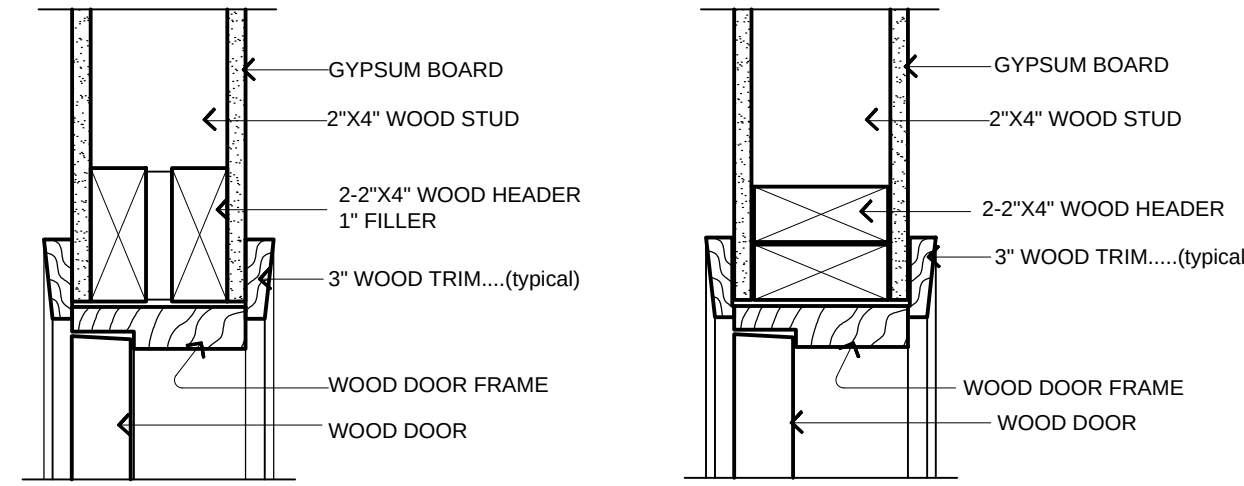


1. Nailheads-- Exposed or covered with joint finishes.
 2. Joints-- Exposed or covered with fiber tape and joint finishes. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of classified veneer baseboard. Joints reinforced.
 3. Nails-- 6d cement coated nails 1- 7/8 in. long, 0.0915 in. shank diam, 1/4" in. diam heads, and 8d cement coated nails 2-3/8 in. long, 0.113 in. shank diam, 9/32 in. diam. heads.
 4. Wallboard, Gypsum-- 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. O.C. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. O.C. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.
- Coral Gypsum Inc.- Type BG-C or ODNL
Canadian Gypsum Company- Type AR, C, IP-X1, IP-X2, SCX, SMX, WRC, WRX or WSX.
Celotex Corp.- Type 1 or FRP.
Continental Gypsum Company-- Type CG-2, CG-3,CG-3W, CG-3WS, CG-S, CG-SWS or CG-C.
Eagle Gypsum Corp.- Type EG-C or EGX-11.
GP Gypsum Corp.- Type S, 9, C, DGG, GPFSS, GPFS-C.
James Hardie Gypsum- Type Fire X
National Gypsum Co.- Charlotte, NC- Type FSK, FSK-4, FSK-G.



SITE PLAN

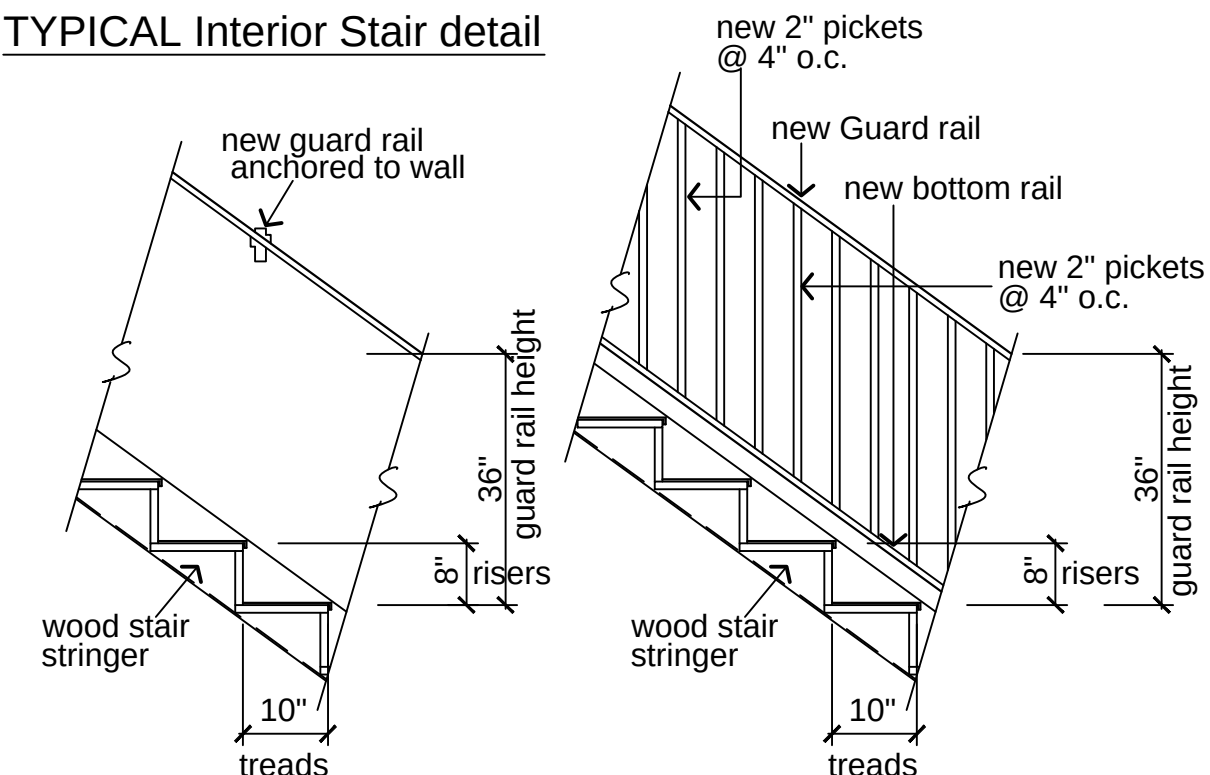
SCALE:1/8"=1'-0"



INTERIOR DOOR HEADER INTERIOR DOOR JAMB

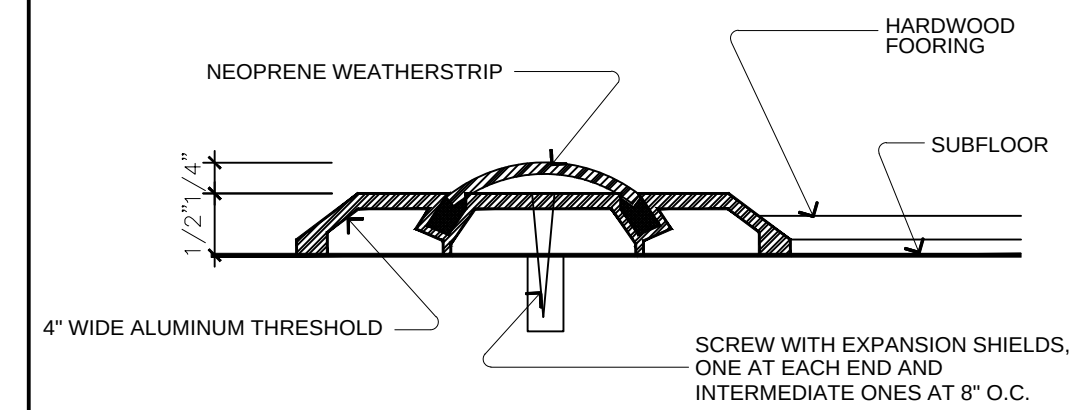
TYPICAL INTERIOR DOOR
JAMB AND HEAD

TYPICAL Interior Stair detail

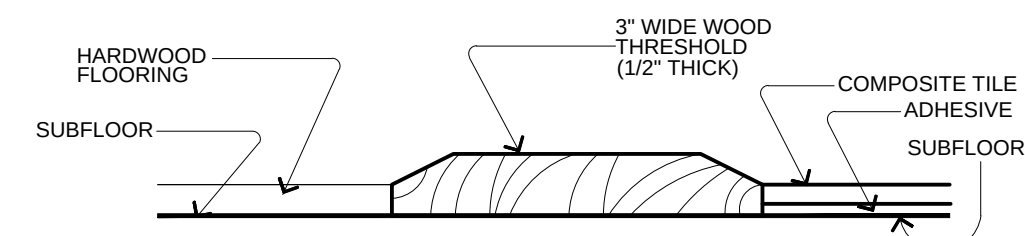


HAND RAIL detail
SCALE: 1/2"=1'-0"

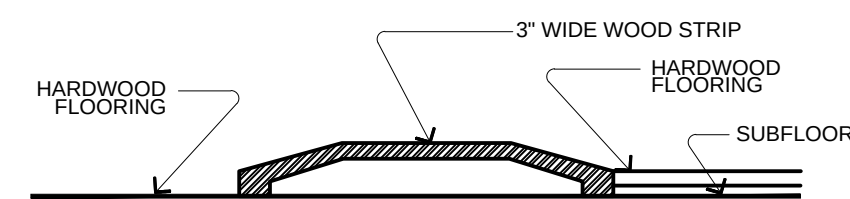
STAIR DETAILS w/ risers and treads
SCALE: 1/2"=1'-0"



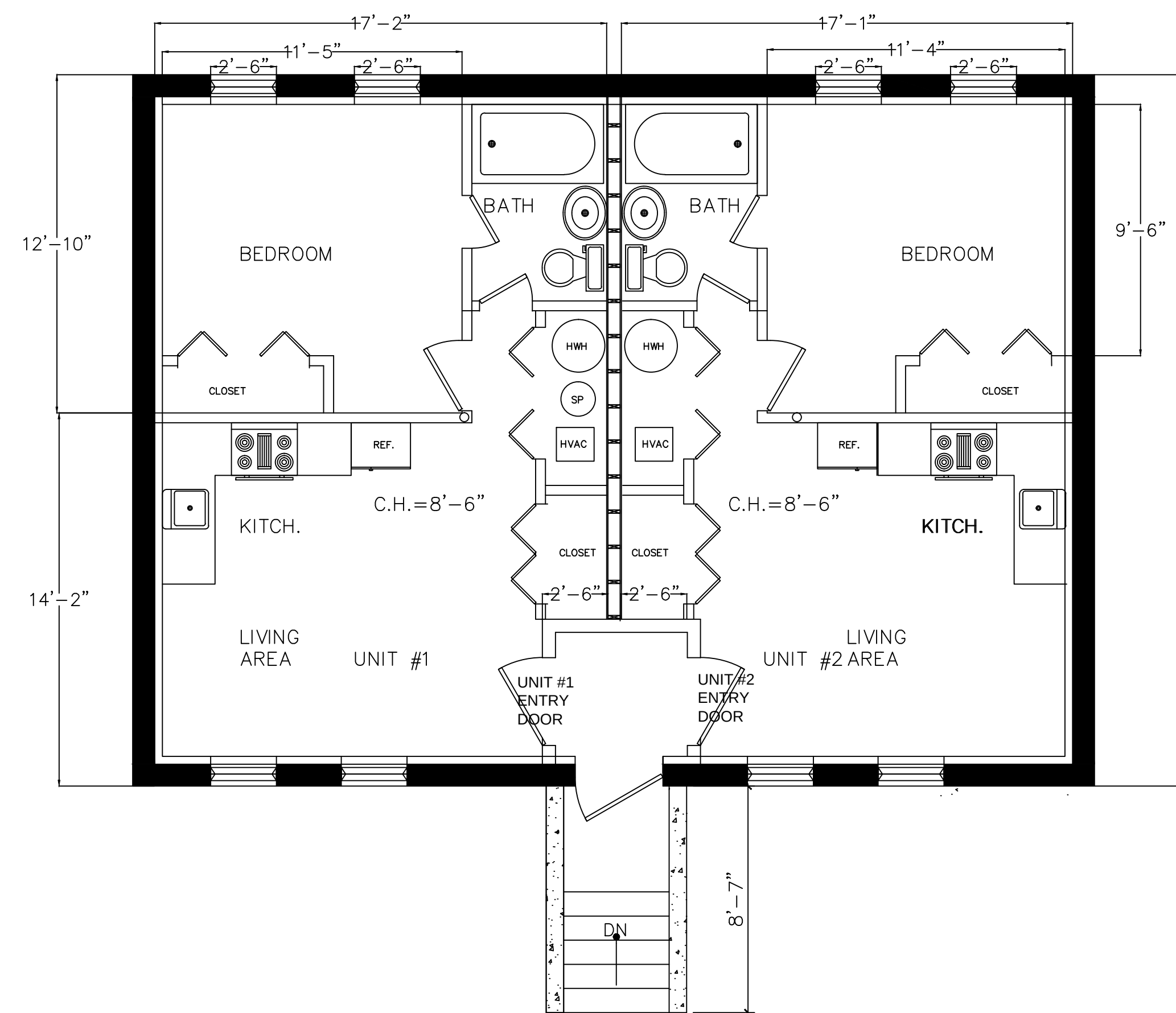
EXTERIOR DOOR SILL
(TYPICAL)



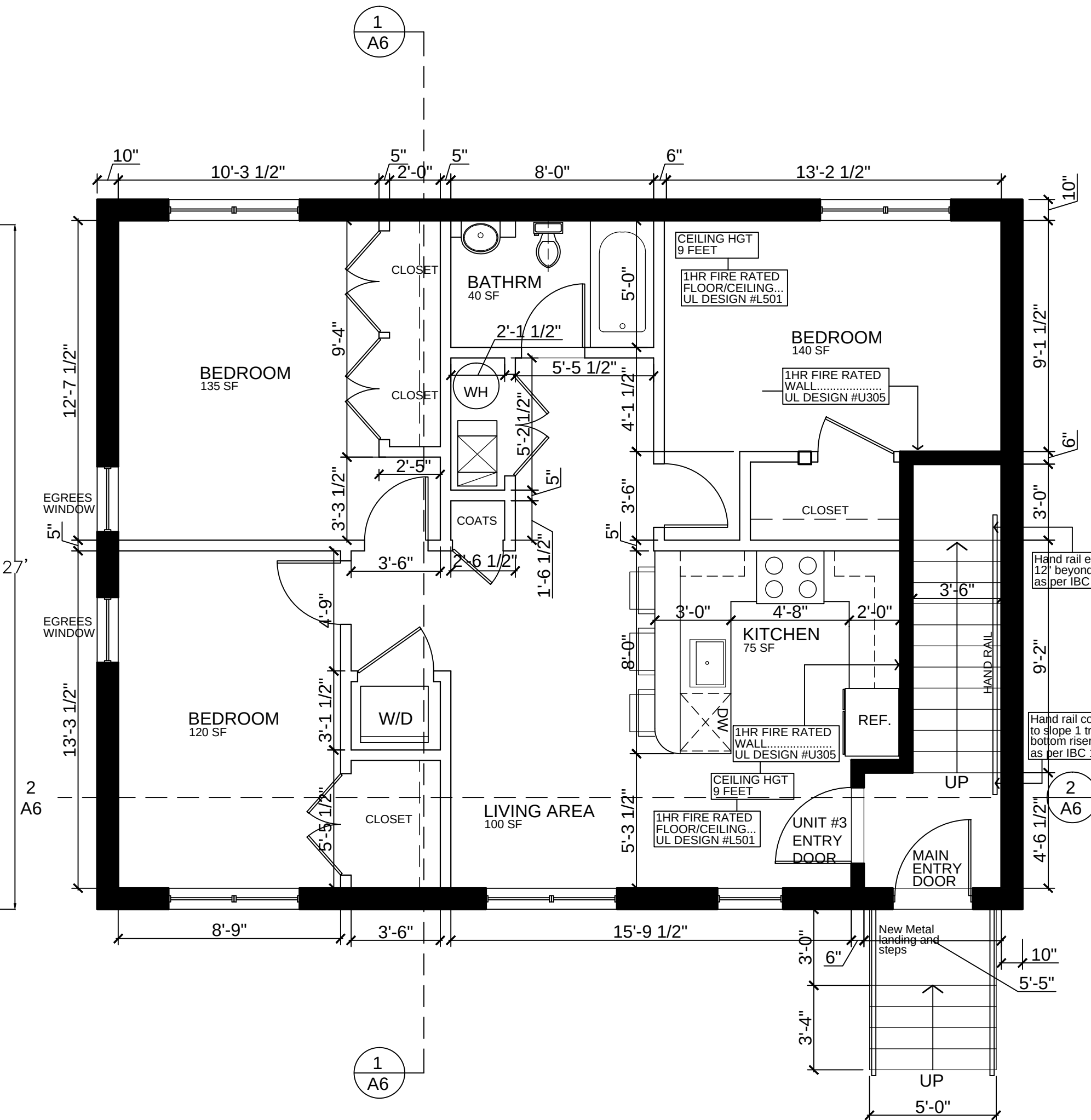
BATHROOM DOOR SILL
(TYPICAL)



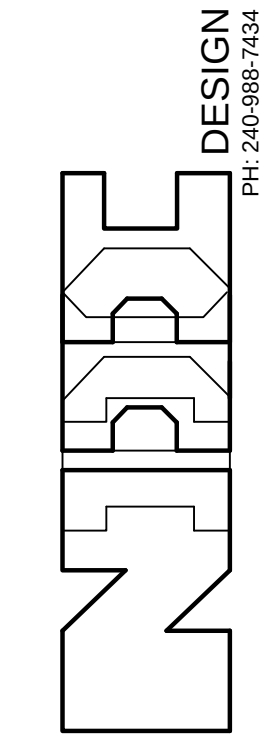
DETAIL BETWEEN
BEDROOM AND CORRIDOR
(TYPICAL)



PROPOSED
CELLAR FLOOR PLAN
SCALE: 1/4"=1'-0"



PROPOSED
FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



RESIDENTIAL BUILDING

PROPOSED FLOOR PLANS

2205-16TH STREET, SE
WASHINGTON, D.C.

SQUARE: 5795 LOT: 27

A1

DATE: MAY 19, 2014

new 1" line pickets @ 4" o.c. secured to metal posts

new 4" metal post

new bottom rail

new top handrail

new 1" line pickets @ 4" o.c. secured to metal posts

guard rail height 36"

risers 8"

finish floor

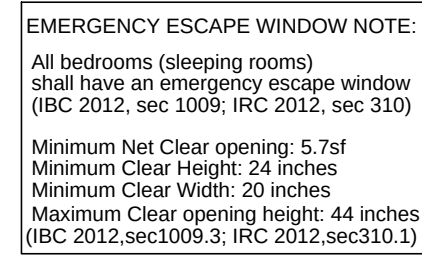
10"

treads

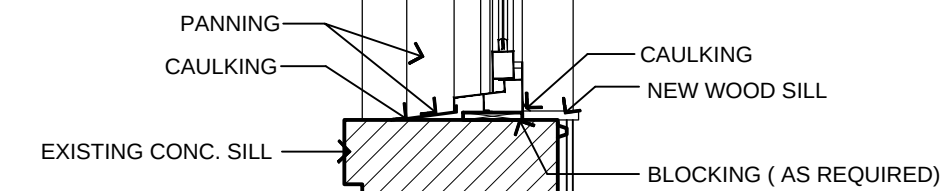
stringer

typical stair detail with kick plate anchored to footings

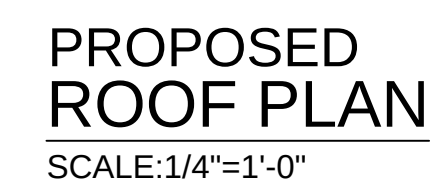
NTS



SCALE: 1/2"=1'-0"



TYPICAL WINDOW DETAIL



SCALE:1/4"=1'-0"

DESIGN
PH: 240-988-7434

PROPOSED FLOOR PLANS

SQUARE: 5795 LOT:27

DATE : MAY 19, 2014

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (AS PER IECC 2012, TABLE 402.1.1)										
CLIMATE ZONE	FENESTRATION U-FACTOR(b)	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC(b,e)	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE(c) WALL R-VALUE
4 (except marine)	0.35	0.60	NR	38	13	5/10	19	10/13	10, 2 ft	10/13
BUILDING PROJECT										
4	0.30	0.55	NR	49	19	5/10	19	10/13	10, 3 ft	10/13
Notes: (a) R-values are minimums, U-factors and SHGC are maximums, R-19 batts compressed into a nominal 2x6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value. (b) The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. (c) "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall. (d) R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs. (e) There are no SHGC requirements in the Marine Zone. (f) Basement wall insulation is not required in warm-humid locations as defined by Figure 301.1 and Table 301.1. (g) Or insulation sufficient to fill the framing cavity, R-19 minimum. (h) Not applicable.....reference Table 402.1.1, chapter 4 in IECC 2012 if required. (i) The second R-value applies when more than half the insulation is on the interior of the mass wall.										

RESIDENTIAL BUILDING

PROPOSED FRONT AND REAR ELEVATIONS

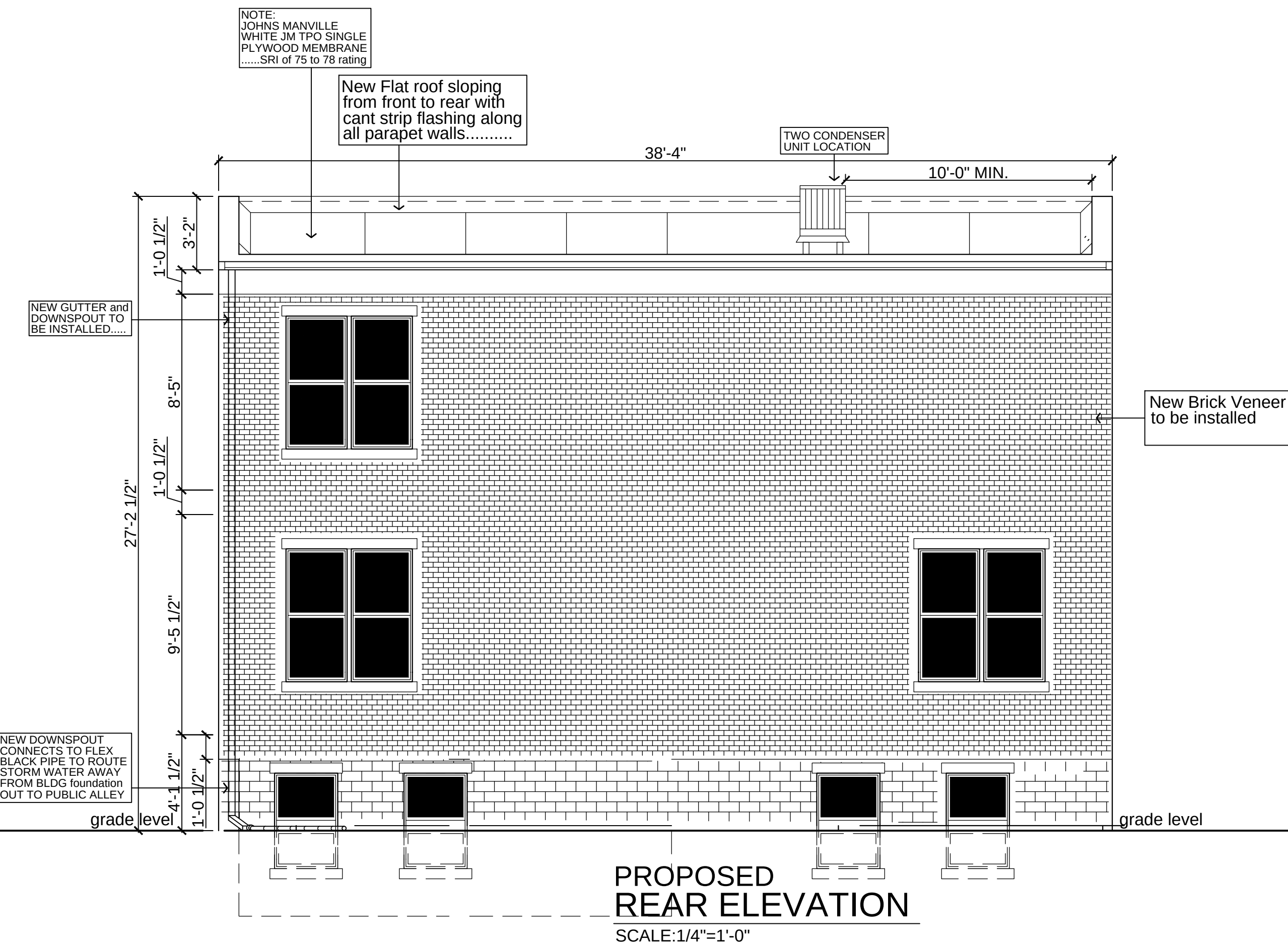
2205-16TH STREET, SE
WASHINGTON, D.C.

SQUARE: 5795 LOT:27

NOTE
PH: 240-988-7434

A3

DATE : MAY 19, 2014



UTILITY NOTE

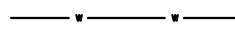
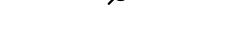
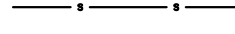
THE UNDERGROUND UTILITY LOCATIONS SPECIFICALLY NOTED IN THE TABLE BELOW AND GRAPHICALLY SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF FIELD SURVEY INFORMATION AND/OR EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE INDICATED FROM THE INFORMATION NOTED IN THE TABLE BELOW WHICH COMPRISES THE RECORD INFORMATION OBTAINED BY THE SURVEYOR. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, UNLESS SPECIFICALLY NOTED ON THE DRAWING. THE FOLLOWING UTILITY COMPANIES HAVE BEEN SOLICITED FOR THEIR PLANS AND RECORD UTILITY DRAWINGS, LISTED BELOW ARE SPECIFIC PLAN/SHEET NUMBERS OF DRAWINGS PROVIDED BY THE UTILITY COMPANY OR LACK OF RESPONSE IS NOTED.

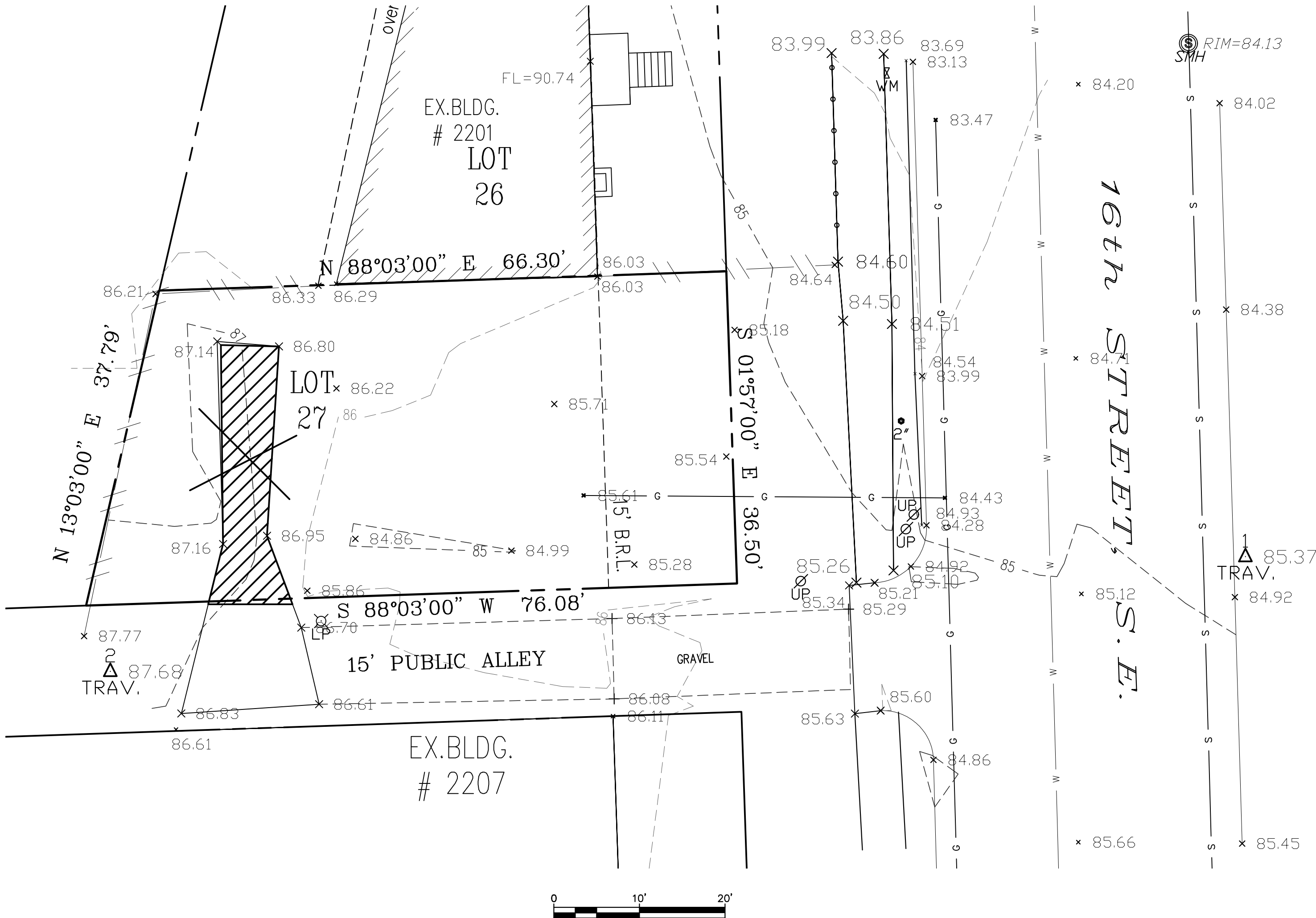
WATER & SEWER PLANS - WASA

W.A.S.A. WATER & SEWER PLAN CD-21-22-NW (WATER & SEWER)

THE OWNER/DEVELOPER OF THE SUBJECT PROPERTY IS RESPONSIBLE FOR OBTAINING INFORMATION AND COORDINATING WITH ALL OTHER UTILITIES NOT LISTED IN THE TABLE ABOVE. THE OWNER/DEVELOPER IS ALSO RESPONSIBLE FOR CONTACTING "MISS UTILITY" 48 HOURS PRIOR TO CONSTRUCTION.

LEGEND

	WATER LINE
	TREE
	SHRUB
	GAS METER
	STORMDRAIN MANHOLE
	SEWER MANHOLE
	SPOT ELEVATION
	SPOT ELEVATION
	TRAVERSE POINT
	UTILITY POLE
	SEWER LINE
	PROPERTY LINE
	LIMIT OF DISTURBANCE
	SILT FENCE
	WOOD FENCE
	CHAIN LINK FENCE
	REMOVE TREE
	DEMOLITION WORK



D.C. BOUNDARY NOTE

BOUNDARY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE DISTRICT OF COLUMBIA SURVEYOR'S OFFICE. PROPERTY LINE DIMENSIONS FROM OFFICIAL RECORDS MAY NOT NECESSARILY AGREE WITH ACTUAL MEASURED DIMENSIONS. A "SURVEY TO MARK" PREPARED BY A DISTRICT OF COLUMBIA REGISTERED LAND SURVEYOR AND VERIFIED BY THE OFFICE OF THE SURVEYOR MAY BE REQUIRED TO ESTABLISH THE FINAL BOUNDARY LOCATION FOR THIS PROPERTY.

SHEET INDEX

SHEET C1. EX. CONDITIONS AND DEMOLITION PLAN
SHEET C2. SITE PLAN

NOTES:

- 1) THE SUBJECT PROPERTY IS LOCATED AS TAX ASSESSMENT NO. 5795 0027. THE SITE ADDRESS IS 2205 16th STREET, SOUTH EAST. WASHINGTON, DC
- 2) THE HORIZONTAL DATUM IS BASED ON PLAN FROM THE OFFICE OF THE SURVEYOR, DISTRICT OF COLUMBIA.
- 3) ON SITE BENCH MARK NONE
- 4) THE VERTICAL DATUM IS BASED ON DC SEWER MANHOLE.
- 5) NO TITLE REPORT FURNISHED.

"MISS UTILITY" NOTE

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.

KRIS CONSULTANTS, LLC

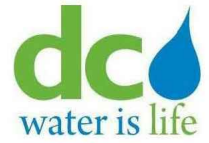
301 PIPING ROCK DRIVE, SILVER SPRING, MD. 20905
TEL: (301) 439-1891 FAX: (301) 439-5636
EMAIL: krisconsultant@verizon.net

EXISTING CONDITION &
DEMOLITION PLAN

LOT 27 SQUARE 5795
2205 16th STREET, SE
WASHINGTON, D.C.

SHEET NO. C1 OF 2

FILE NO. 15-1020

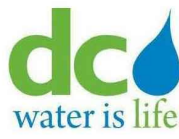


General Construction Notes

- 1. Contact:** Notify the following DC Water departments prior to the commencement of utility construction:
 - Construction Inspection Section at 202-787-4024 at least two weeks prior to the commencement of utility construction to schedule pre-construction meeting.
 - Department of Water Services at 202-612-3400 or 3460 at least one week prior to the commencement of water utility construction.
 - Department of Sewer Services at 202-264-3824 or 3829 at least one week prior to the commencement of sewer utility construction.
- 2. Standards:** All construction, materials, and appurtenances shall comply with the latest editions of the DC Water Project Design Manual, Standard Details & Design Guidelines, and Specifications.
- 3. Lead Service Replacement:** If this project includes the replacement of a water main that has existing lead water service laterals, the Contractor is responsible for contacting the DC Water Construction Inspection Section at 202-787-4024 at least 90 days prior to construction to allow adequate time to initiate standard lead service replacement protocol. Lateral replacement includes the full length of pipe in public space.
- 4. Owner Responsibility:** The Owner is responsible for all work and costs associated with excavation, installation, and restoration of public space to perform a water/sewer connection/abandonment. Once the Contractor has obtained a Public Space Permit he/she must then contact DC Water prior to performing the excavation to install/inspect the utility work. The Owner shall be held responsible for all damages to existing structures and utilities caused by construction activity.
- 5. DC Water Responsibility:** DC Water is only responsible for installation of small water service taps (2" diameter and less) to the public main, small water service tap removals from the public main, furnishing & installing the meter in public space, and inspection of work performed on the public systems.
- 6. Miss Utility:** Contact Miss Utility at 800-257-7777 48 hours before any digging.
- 7. Plan Set:** A set of signed & sealed and DC Water stamped Plans shall be kept at all times at the job site on which all changes or variations in the work, including all existing utilities, are to be recorded and/or corrected daily.
- 8. Abandonments:** The Owner must physically disconnect existing water, sewer, and storm laterals that are to be abandoned at their connection to the public main.
- 9. Unmetered Water:** There shall be no unmetered connections to the City's water system, including connections bypassing meters for testing on-site plumbing or for obtaining construction water.
- 10. Pressure Testing Against Valves:** Pressure testing against valves will not be allowed.
- 11. Water Meter Installation:** To schedule the installation of a domestic water meter contact Permit Operations at 202-646-8600. DC Water will furnish and install the meter after the connection to the main has been made and the meter pit/vault has been installed.

February 2013

Page 1

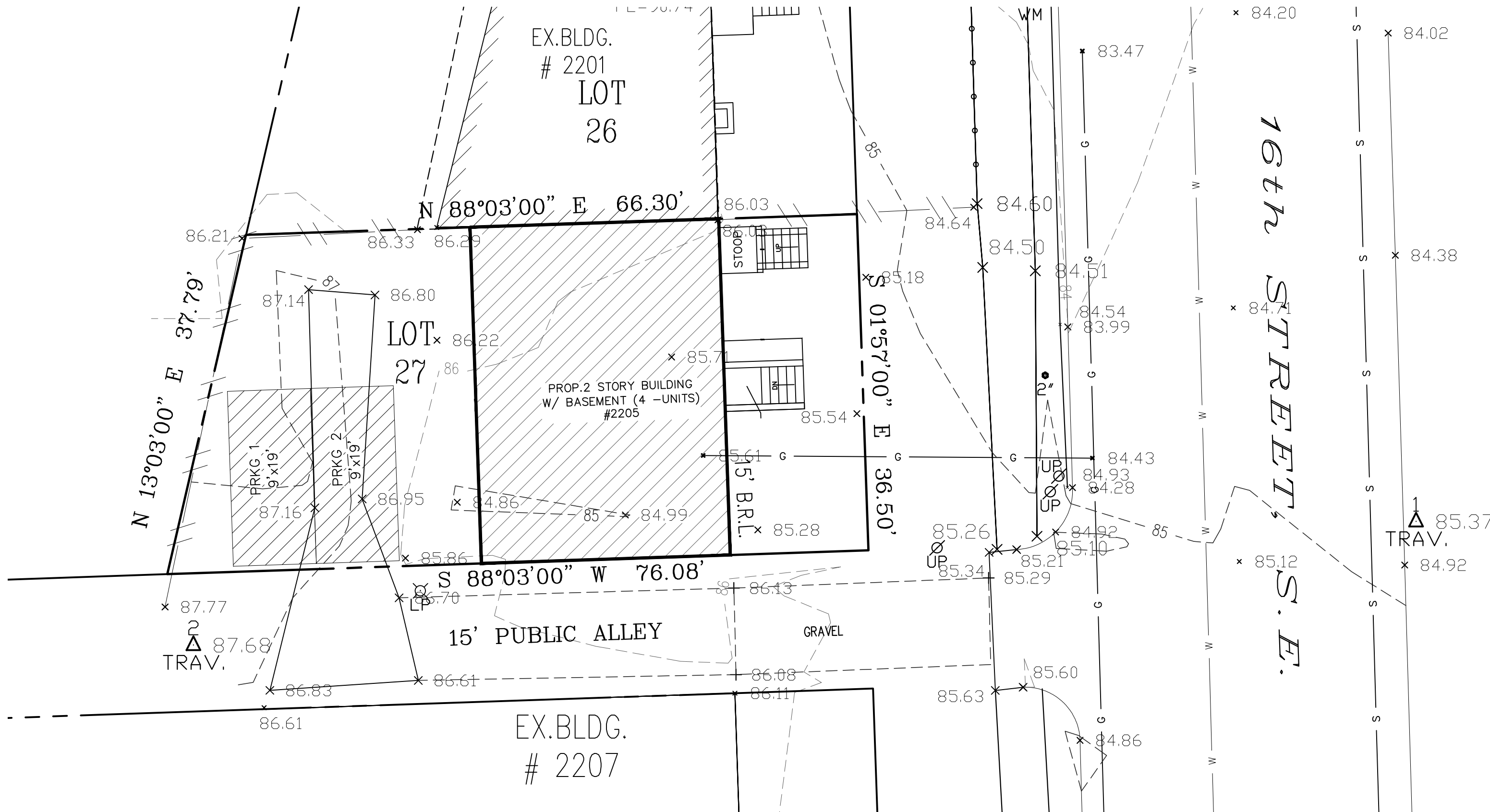


General Construction Notes

- 12. Cross Contamination Control:** ASSE 1048 certified backflow prevention assemblies are required on all fire services and are to be located inside the building (unless an external location is necessary or required by DC Water) where it is supplied, owned, operated, and maintained by the Owner. DC Water does not furnish nor install fire double check detector fire protection backflow prevention assemblies.
- 13. Utility Service Disruptions:** Phase all utility work to maintain utility services to the surrounding area during all phases of construction. Limit required utility shut-downs in number and duration. Coordinate these shut downs with DC Water Construction Inspection staff.
- 14. Water Valve Operation:** The Contractor is required to coordinate with DC Water for all necessary water main shut downs with adequate advanced notice. Only DC Water employees may shut down a public water main. A certified plumber is only authorized to turn off valves inside meter pits.
- 15. Water Gate Valve Location:** Locate gate valves for domestic and fire services as close to the public water main tee as possible. However, if necessary adjustments are required due to conflicts, coordinate with a DC Water inspector.
- 16. Material:** The Contractor is responsible for submitting shop cuts to the appropriate DC Water office for approval or obtaining a DC Water approval stamp for all work in public space in advance of installation. Only approved materials may be used.
- 17. Temporary Conditions Minimum Cover:** A nominal four feet of cover is required for all water mains at final grade. Cover of less than four feet requires DC Water approval.
- 18. As-Built:** Developers, contractors and/or plumbers must submit final construction as-built information to the appropriate DC Water inspector(s) for review and approval, upon completion of installation of new services or abandonment of existing services. When the final as-built is approved all deposits will be returned to the applicant. See DC Water as-built requirements for additional information.
- 19. Conflicts:** The Contractor shall field verify the location of existing underground utilities prior to installation of proposed utilities. A minimum of one foot vertical and five feet horizontal clearance shall be maintained from any utilities and public water and sewer mains.
- 20. Fire Hydrant Use:** The use of a fire hydrant as a water source is prohibited unless a permit has been obtained from DC Water for use of a specific hydrant(s). Daily or extended use permits can be obtained from the DC Water Permit Operations Department 202-646-8600.
- 21. Fire Hydrant Status:** The Contractor shall notify FEMS at 202-277-1889, prior to taking any fire hydrant out of service or rendering any hydrant inaccessible for any reason. FEMS is also to be provided with the location of any new installation of private fire hydrants.
- 22. DC Water Safety Office:** The DC Water Safety Office can be contacted at 202-787-4350.
- 23. Sewer Backwater Prevention:** The plumbing system must be in compliance with Section 715 of the 2006 International Plumbing Code which states a backwater is valve is required for all plumbing fixtures below the elevation of the manhole cover of the next upstream manhole in the public sewer.

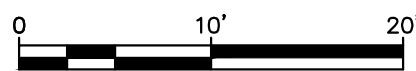
February 2013

Page 2



LEGEND

- LIMITS OF DISTURBANCE
- SF- PROP SILT FENCE
- 250 EX. SPOT ELEV
- +20 PROPOSED SPOT ELEV
- 91 TEST PIT REQUIRED



STANDARD SYMBOLS

- DIVERSION
- GRASSED SWALE
- LINED WATERWAY
- SUBSURFACE DRAIN

STANDARD SYMBOLS

- EARTH DIKE
- SWALE
- PERIMETER DIKE/SWALE
- PIPE SLOPE DRAIN
- ROCK OUTLET PROTECTION
- STONE CHECK DAM
- STONE OUTLET STRUCTURE
- SILT FENCE
- SUPER SILT FENCE
- STRAW BALE DIKE

STANDARD SYMBOLS

- STANDARD INLET PROTECTION
- AT GRADE INLET PROTECTION
- CURB INLET PROTECTION
- STANDARD INLET PROTECTION
- GABION INFLOW PROTECTION
- RIP-RAP INFLOW PROTECTION
- SUMP PIT
- STABILIZED CONSTRUCTION ENTRANCE
- PORTABLE PUMPING STATION
- REMOVABLE PUMPING STATION

PROJECT NARRATIVE:

THE PROJECT IS LOCATED AT 2205 16th STREET, S.E. WASHINGTON D.C. THE PROPERTY AREA IS 2,598 SQUARE FEET, AND IS CURRENTLY VACANT. THE OWNER OF THE PROPERTY WISHES TO CONSTRUCT A NEW TWO STORY BUILDING WITH BASEMENT.

LOCATION OF UTILITIES AND UTILITY CROSSINGS TO BE VERIFIED BY CONTRACTOR BY HAND DIGGING TEST PITS BEFORE START OF CONSTRUCTION.

UTILITY VERIFICATION NOTE

CONTRACTOR IS TO FIELD VERIFY LOCATIONS, INVERT ELEVATIONS AND MATERIALS OF ALL EX. UTILITIES AND STRUCTURES AT THE POINTS OF TIE-IN PRIOR TO COMMENCING ANY CONSTRUCTION WORKS.

BUILDING NOTE:

FOR EXACT LOCATION OF PIERS, COLUMNS, WALLS AND OTHER FEATURES INCLUDING THE INTERNAL DIMENSIONS INSIDE THE BUILDING, REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS.

"MISS UTILITY" NOTE

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.

SITE PLAN

KRIS CONSULTANTS, LLC

301 PIPING ROCK DRIVE, SILVER SPRING, MD. 20905
TEL: (301) 439-1891 FAX: (301) 439-5636
EMAIL: krisconsultant@verizon.net

LOT 27 SQUARE 5795
2205 16th STREET, SE
WASHINGTON, D.C.

REVISION

DATE

NO.

DATE
06-03-15

CHKD BY:
MA

DESIGN BY:
MA

SHEET NO. C2 OF 2

FILE NO. 15-1020

LANDSCAPE AREA MANAGEMENT

1. SOIL IN THE LANDSCAPE AREA IS TO BE REMOVED TO A DEPTH OF 24" FOLLOWING CONSTRUCTION.
2. SCARIFY GROUND AT 24" DEPTH AND REPLACE WITH TOPSOIL TO FINISHED GRADE PRIOR TO INSTALLING PLANT MATERIAL.

LANDSCAPE MAINTENANCE PLAN GUIDELINES

Recommended maintenance activities are listed for each landscape element. Maintenance activities should be done by a qualified individual. The maintenance professional should exercise proper judgment in regards to personal safety.

SOILS AND AMENDMENTS

Soil maintenance plans should provide guidance for: soil amendment application rate, schedule of work, and material source.

Decompaction

- Decompect topsoil by tilling or subsoiling and incorporating compost throughout the depth of compacted soil. Do not till soils underneath existing trees; instead consider practices such as mulching under the canopy or air tilling to ameliorate compaction.

Rate and application schedule

- Mulch – Apply yearly or as necessary to replace decomposed mulch.
 - Compost – Apply compost yearly at a depth of 1–2 inches. Coarse textured sand and clay soils require greater compost addition than loamy soils. The organic matter content of the chosen compost will influence the depth applied.
 - Fertilizer – Apply fertilizer only after incorporating compost into topsoil and conducting a soil test. This will avoid over-application of nutrients, as compost itself will increase the nutrient content.
- Material source**
- Compost should be well-decomposed material, stable, free of weeds, contaminants and foul odors. Compost may be derived from yard waste (decomposed leaves, grass clippings, branches) or food waste.
 - Mulch can be derived from organic sources such as shredded bark, or leaf mulch.

PROPERTY OWNER RESPONSIBILITY

The landscape maintenance plan must be issued to the property owner prior to the Certified Landscape Expert completing the Landscape Checklist. This plan serves as guidance for the property owner to ensure all GAR-related features are maintained. The property owner and all subsequent owners are obliged to maintain the GAR score at or above the minimum level set in the regulations. Should the GAR score fall below the minimum required, other GAR environmental performance features can be substituted to achieve an appropriate score; this process does not require plan resubmittal.

PLANTING MANAGEMENT

NEW AND EXISTING PLANTINGS

All Plantings

- Provide supplemental watering if rainfall is less than 1 inch per week during the first two growing seasons.
- Conduct weeding as necessary to reduce competition between weeds and plantings for nutrients, soil moisture, and sunlight.
- Replace mulch every 2–3 years, or as necessary to recommended depth (see below).
- Monitor the plantings for disease or stress and modify cultural practice as necessary. Employ an integrated pest management (IPM) approach if possible.
- Remove dead plant material and replant in the next appropriate growing season.

Trees and Shrubs

- For trees, install slow leak watering bags or tree buckets during the first two growing seasons. Water as necessary to supplement precipitation if less than 1 inch per week. Remove watering bags or tree buckets after plants have established.
- Inspect trees for signs of dead, diseased, or crossing branches and prune accordingly. Remove hazard limbs from established trees. Never remove more than 20% of the tree canopy during pruning activities in any year.
- Spread mulch at a maximum 3-inch depth and ensure mulch is not against the trunk of the tree.
- Maintain tree health by limiting all grade changes and other soil disturbance underneath the tree's Critical Root Zone.

Perennials and Groundcovers

- In the early spring, deadhead top-growth from perennials and warm-season grasses.
- Periodically divide perennials as necessary to encourage rejuvenated growth.
- Spread mulch at a maximum 2-inch depth.

Turfgrass

- Apply lime and fertilizer only as soil test results indicate.
- To reduce weed germination, maintain turfgrass at an increased height. Never mow more than one third of the grass height. Maintaining grass clippings in-place after mowing reduces fertilizer requirements.
- Regularly monitor and over-seed bare spots to prevent weed establishment.
- In late fall, core aerate and top-dress with organic matter.

SOIL SPECIFICATION

In the design phase, send samples of existing soil to a reputable agronomic soil testing laboratory to test a full range of soil quality parameters. For imported topsoil, perform testing prior to delivery and again prior to planting.

Soil Depth and Volume

Soil depth is measured by the depth of uncompacted topsoil. Topsoil shall be placed over material of suitable drainage that is clear of contaminants and debris. Recommended topsoil depth varies by plant type:

- Turfgrass, 6–12 inches
- Perennials, groundcover, and ornamental grasses, 12–18 inches
- Shrubs, 18–24 inches
- Trees, 24–36 inches

Trees in containers require irrigation to account for limited soil volumes and canopy intercept of precipitation. Under ideal circumstances, ground surface soil volumes for canopy trees (35-foot mature canopy) will provide at least 1,500 cubic feet for individual specimens and 1,000 cubic feet per tree in shared soil pits; this standard is compatible with the DDOE 2013 Stormwater Management Guidebook and may allow trees to be credited for stormwater retention value.

SOIL IMPROVEMENT SPECIFICATION (TOPSOIL)

Table 5 Topsoil Physical and Chemical Parameters

Topsoil characteristic	Test Method	Required Standard
Texture class		loam, silt loam, sandy clay loam, sandy loam, clay loam
% Sand (0.05 mm–2.00 mm)	Hydrometer	< 70%
% Silt (0.002 mm–0.05 mm)	Hydrometer	< 70%
% Clay (< 0.002 mm)	Hydrometer	< 30%
% Organic matter (by weight)	Loss of ignition	Lawn areas (4%–6%), Planting beds (5–7%)
pH		6.0–7.2, specific plantings may require alternate values
Macronutrients & micronutrients		Determined by professional soil scientist

Soil Source

The topsoil and subgrade may be from a naturally occurring soil or soil that has been mixed to achieve the requirements of the plant selections.

Debris Content

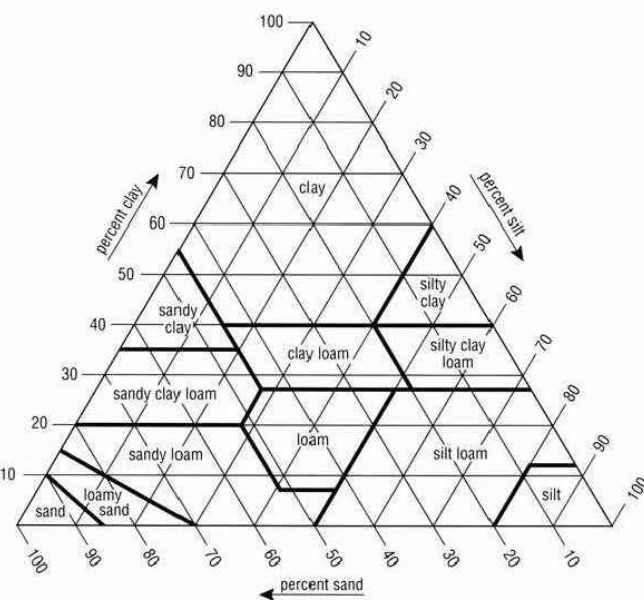
Particles and stone greater than 1 inch in the longest dimension should not be allowed. This includes fragments of brick, concrete, wood, glass, metal, stone, and plastic. The total volume less than 1 inch long should not be more than 5% of the soil volume. Stones ranging from 0.5–1 inch (1.25 to 2.5 cm) should not exceed 5% of the soil volume, and gravel ¼ to ½ inches (0.6–1.25 cm) should not exceed 5% of the soil volume.

Contaminants Prohibited

The soil shall have no herbicides, heavy metals, biological toxins, or hydrocarbons that will impact plant growth.

Texture

Topsoil texture can be variable and include: loam, silt loam, sandy clay loam, sandy loam, clay loam. The percent composition must fall within this range: sand (< 70 %), silt (< 70%), and clay (<30%). Particle size is determined according to USDA Classification: sand (< 0.002mm), silt: 0.002mm–0.05 mm, sand (0.05 mm–2 mm).



Soil texture triangle (source: USDA NRCS)

Organic Matter

Organic matter should be a minimum of 4% in lawn soils and 5% in planting beds. Percentage organic matter is measured by weight. Incorporate compost to raise organic matter content.

Soil pH

Soil pH determines the availability of nutrients in the soil. The exact pH range is dependent on the plant species to be planted and should be tested and adjusted based on species prior to installation. The ideal pH for most landscape plants falls in the range of 6.0–7.0, however other plants prefer a pH outside this range. A pH of 6.5–7.2 is beneficial to microbial activity that converts nitrogen, phosphorous, and sulfur into forms most available to plants.

Nutrient Recommendations

Have a soil scientist provide recommendations for macronutrients and micronutrients.

Subgrade Preparation

Using a backhoe or similar device, scarify and loosen the subgrade. Remove from the area all debris or stones that are one inch or greater.

Percolation

After preparing the subgrade, conduct a percolation test. Water should readily drain from the soil. Percolation rates of 1–2 inches per hour are preferred if irrigation will be installed. A drainage system should be installed if the native subsoil has a drainage rate less than 1 inch per hour.

Handling, Storage, and Spreading Topsoil

Material shall not be handled or hauled when it is wet, as after a heavy rainfall or if frozen. Soil shall be handled only when the moisture content is less than at field capacity. The Landscape Expert or a professional soil scientist shall be consulted to determine if the soil is too wet to handle. Stockpiles shall be covered during wet weather.

Spread topsoil in no greater than 12-inch lifts, using the lightest possible equipment. Compact the topsoil to the proper soil density so that it is suitable for root growth and plant stability.

Soil Density and Compaction

Soil density must be high enough to avoid settlement and low enough to encourage root growth. Using a rod penetrometer, soil and subsoil shall be less than 260 pounds per square inch (psi) throughout the depth of credited soil. Compaction completely inhibits root growth at 300 psi. A rod cone penetrometer should be used to measure compaction when soil moisture is at field capacity, after the soil is wetted but drained. The penetrometer shall be inserted at a rate of 72 inches per minute (1.2 inches/second), according to ASAE Soil Testing Specifications.

SOIL IMPROVEMENT SPECIFICATION (AMENDMENTS)

Compost

Compost shall be derived from plant material and provided by a member of the U.S. Composting Seal of Testing Assurance (STA) program. See www.compostingcouncil.org for a list of local providers.

Alternative specifications and/or certifications, such as those administered by the Maryland Department of Agriculture or other agencies, may be substituted, as authorized by DDOE. In all cases, compost material must meet standards for chemical contamination and pathogen limits pertaining to source materials, as well as reasonable limits on phosphorus and nitrogen coner to avoid excessive leaching of nutrients.

The compost shall be the result of the biological degradation and transformation of plant-derived materials under conditions that promote anaerobic decomposition. The material shall be well composted, free of viable weed seeds, and stable with regard to oxygen consumption and carbon dioxide generation. The compost shall have a moisture content that has no visible free water or dust produced when handling the material. It shall meet the following criteria, as reported by the U.S. Composting Council Seal of Testing Assurance Compost Technical Data Sheet provided by the vendor:

- a. 100% of the material must pass through a 1/2-inch screen
- b. The pH of the material shall be between 6 and 8
- c. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1.0 by weight
- d. The organic matter content shall be between 35% and 65%
- e. Soluble salt content shall be less than 6.0 mmhos/cm
- f. Maturity must be greater than 80%
- g. Stability shall be 7 or less
- h. Carbon/nitrogen ratio shall be less than 25:1
- i. Trace metal test result = "pass"
- j. The compost must have a dry bulk density ranging from 40 to 50 lb/ft³

Compost Application Rate

To achieve a minimum 5% organic matter content, apply compost at the rate specified below.

Add 1.75 inches of compost per 8 inches of existing topsoil and incorporate by rototilling or mixing prior to resspreading stockpiled topsoil. Scarify the subgrade down to a 4-inch depth. Using 35% to 60% organic matter in compost, this will provide a topsoil organic matter rate of 5%. The amended soil and subsoil together provide 12 inches of amended topsoil. For deeper soils, such as planting beds, mix compost and topsoil at the same rate.

The DDOE 2013 Stormwater Management Guidebook, Appendix J, describes compost application rates for impervious cover disconnections and grass swales.

Additional Amendments

Limestone – dolomitic limestone containing no less than 50% total carbonates and 25% total magnesium with a neutralizing value of at least 100%.

Acidulant – commercial grade sulfur, ferrous sulfate, and aluminum sulfate for horticultural use.

Fertilizer – granular or pelleted slow-release fertilizer consisting of 50% water-insoluble nitrogen, phosphorous, and potassium in a composition recommended by the soil testing laboratory.

LANDSCAPE AREA MANAGEMENT

1. SOIL IN THE LANDSCAPE AREA IS TO BE REMOVED TO A DEPTH OF 24" FOLLOWING CONSTRUCTION.
2. SCARIFY GROUND AT 24" DEPTH AND REPLACE WITH TOPSOIL TO FINISHED GRADE PRIOR TO INSTALLING PLANT MATERIAL.

PLANTING MANAGEMENT

1. ALL PLANT MATERIAL IS TO BE WATERED AND MAINTAINED FOR A ONE YEAR ESTABLISHMENT PERIOD.

PERMEABLE PAVEMENT MANAGEMENT

1. ALL PERMEABLE SURFACES ARE TO BE MAINTAINED AND VACUUMED PER MANUFACTURER RECOMMENDATIONS FOR LIFE OF PRODUCT.

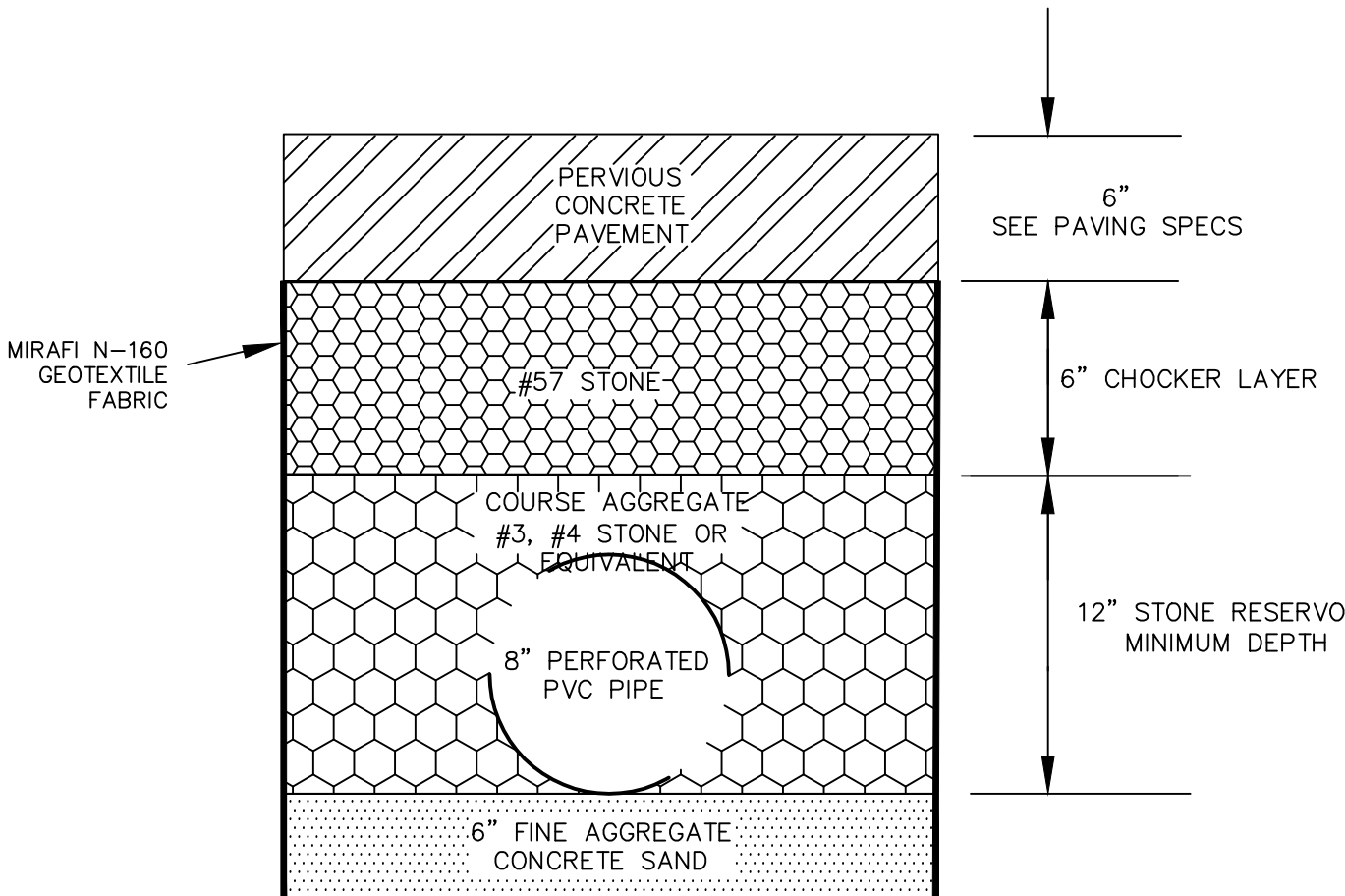
NOTE:

NO IRRIGATION IS PROPOSED FOR THE PROJECT. PLANT MATERIALS WILL BE WATERED THROUGH HOSE BIB CONNECTIONS ON EXTERIOR OF BUILDING.

SAND SPECIFICATIONS

WASHED ASTM C33 FINE AGGREGATE CONCRETE SAND IS UTILIZED FOR STORMWATER MANAGEMENT APPLICATIONS IN DISTRICT OF COLUMBIA. IN ADDITION TO THE ASTM C33 SPECIFICATION, SAND MUST MEET ALL OF THE FOLLOWING CONDITIONS:

1. SAND MUST MEET GRADATION REQUIREMENTS FOR ASTM C–33 FINE AGGREGATE CONCRETE SAND. AASHTO M–6 GRADATION IS ALSO ACCEPTABLE.
2. SAND MUST BE SILICA BASED..NO LIMESTONE BASED PRODUCTS MAY BE USED. IF THE MATERIAL IS WHITE OR GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE.
3. SAND MUST BE CLEAN. NATURAL, UNWASHED SAND DEPOSITS MAY NOT BE USED. LIKEWISE, SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED.
4. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE UNDER ANY CIRCUMSTANCE.



*PERVIOUS PAVEMENT DETAIL (TYP)

NOT TO SCALE

- * NOTE: REFER TO DDOT STD. DETAIL 621.01

PERVIOUS CONCRETE SPECIFICATIONS

DESIGN THICKNESS – PERVIOUS CONCRETE APPLICATIONS SHALL BE DESIGNED SO THAT THE THICKNESS OF THE CONCRETE SLAB SUPPORT THE TRAFFIC AND VEHICLE TYPES THAT WILL BE CARRIED. APPLICATIONS MAY BE DESIGNED USING EITHER STANDARD PAVEMENT PROCEDURES (e.g., AASHTO, ACI 325R, ACI 330R) OR USING STRUCTURAL VALUES DERIVED FROM FLEXIBLE PAVEMENT DESIGN PROCEDURES.

MIX & INSTALLATION – TRADITIONAL PORTLAND CEMENTS (ASTM C 150, C 1157) MAY BE USED IN PERVIOUS CONCRETE APPLICATIONS. PHOSPHORUS ADMIXTURES MAY ALSO BE USED. MATERIALS SHOULD BE TESTED (e.g., TRIAL BATCHING) PRIOR TO CONSTRUCTION SO THAT CRITICAL PROPERTIES (e.g., SETTLING TIME, RATE OF STRENGTH DEVELOPMENT, POROSITY, PERMEABILITY) CAN BE DETERMINED.

AGGREGATE – PERVIOUS CONCRETE CONTAINS A LIMITED FINE AGGREGATE CONTENT. COMMONLY USED GRADATIONS INCLUDE ASTM C 33 NO. 67 (3/4 IN. TO NO. 4), NO. 8 (3/8 IN. TO NO. 16) AND NO. 89 (3/8 IN. TO NO. 50) SIEVES. SINGLE-SIZED AGGREGATE (UP TO 1 INCH) MAY ALSO BE USED.

WATER CONTENT – WATER-TO-CEMENT RATIOS BETWEEN 0.27 AND 0.30 ARE USED ROUTINELY WITH PROPER INCLUSION OF CHEMICAL ADMIXTURES. WATER QUALITY SHOULD MEET ACI 304. AS A GENERAL RULE, POTABLE WATER SHOULD BE USED ALTHOUGH RECYCLED CONCRETE PRODUCTION WATER MEETING ASTM C 94 OR AASHTO M 157 MAY ALSO BE USED.

ADMIXTURES – CHEMICAL ADMIXTURES (e.g., RETARDERS OR HYDRATION) ARE USED TO OBTAIN SPECIAL PROPERTIES IN PERVIOUS CONCRETE. USE OF ADMIXTURES SHOULD MEET ASTM C 494 (CHEMICAL ADMIXTURES) AND ASTM C 260 (AIR ENTRAINING ADMIXTURES) AND CLOSELY FOLLOW MANUFACTURER'S RECOMMENDATIONS.

RESERVOIR LAYER – THE BASE COURSE SHALL BE AASHTO NO. 3 OR 4 COURSE AGGREGATE (3/4"–2" STONE) WITH AN ASSUMED OPEN PORE SPACE OF 30% (n=0.30).

PARKING AREAS MUST HAVE AN OVER–DRAIN INCORPORATED INTO THE DESIGN.

ENGINEERS MUST USE THE MANUFACTURER'S RECOMMENDATIONS IN THEIR SITE SPECIFIC DESIGNS. IN THE CASE OF POROUS CONCRETE USE THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMCA) RECOMMENDATIONS.

POROUS CONCRETE TO BE INSTALLED BY A NRMCA CERTIFIED INSTALLER.

POROUS CONCRETE MUST NOT BE FLOATED OR TROWELED, A STEEL ROLLER SHOULD BE USED FOR COMPACTION AND FINISHING. CONTROL JOINTS SHOULD BE CUT A MINIMUM OF EVERY TWENTY FEET USING A SPECIAL ROLLER JOINT TOOL.

EASEMENTS AND COVENANTS ARE REQUIRED FOR ALL COMMERCIAL USES AND FOR PARKING LOTS.

SIGNS, AT LEAST EIGHTEEN INCHES BY TWENTY FOUR INCHES WITH LETTERING AT LEAST TWO INCHES HIGH SHALL BE PLACED AT THE ENTRANCE TO PARKING AREAS AND IN OTHER LOCATIONS AS DETERMINED. THE SIGNS SHALL READ, "THIS PARKING LOT IS MADE OF POROUS PAVEMENT TO REDUCE STORM WATER RUNOFF. DO NOT USE ABRASIVES ON THE SURFACE OR RESURFACE OR SEAL."

CONSTRUCTION NOTES:

1. ALL SEDIMENT DEPOSITS IN THE EXCAVATED AREA WILL BE FULLY REMOVED PRIOR TO INSTALLING THE PERMEABLE PAVEMENT SUB–BASE, BASE, AND SURFACE MATERIALS.
2. THE NATIVE SOILS AT THE BOTTOM OF THE PERMEABLE PAVEMENT SYSTEM AREA SHALL BE SCARIFIED AND TILED TO A DEPTH OF THREE TO FOUR INCHES PRIOR TO PLACEMENT OF FILTER LAYER OR GEOTEXTILE FABRIC.

PERVIOUS CONCRETE SPECIFICATIONS:

1. UNDERDRAIN– THE UNDERDRAIN SHALL BE PERFORATED SCHEDULE 40 PVC WITH 3/8–INCH PERFORATIONS AT 6 INCHES ON CENTER AND INCLUDE FLOW CONTROL.
2. OBSERVATION WELL– THE PERVIOUS CONCRETE SHALL CONTAIN OBSERVATION WELLS THAT EXTEND VERTICALLY TO THE BOTTOM OF THE RESERVOIR LYER AND UPWARDS FLUSH WITH TEH SURFACE. THE OBSERVATION WELL IS COMPOSED OF ANCHORED 4 TO 6-INCH DIAMETER PVC PIPE.

STATEMENT BY CERTIFIED LANDSCAPE EXPERT

This is to certify that I have examined all required GAR plan submittals prior to submission. I further certify that all aspects of the submittal, including landscape elements within the Lot and the listed GAR score, meet the specifications required under Chapter 34 of Title 11 of the District of Columbia Municipal Regulations.

MICHAEL NORTON, PROFESSIONAL LANDSCAPE ARCHITECT

Name and Title (please type)

5146 DORSEY HALL DRIVE, 2ND FLOOR,

Address

ELLCOTT CITY, MD 21042

Date SEPTEMBER 21, 2015 Phone No. BALT.443.542.9199 x101
DC 240.342.2329x101

Michael Norton
Certified Landscape Expert Signature:

MARYLAND
Certifying Organization

3310
Certification Number

GAR PLAN NOTES AND DETAILS

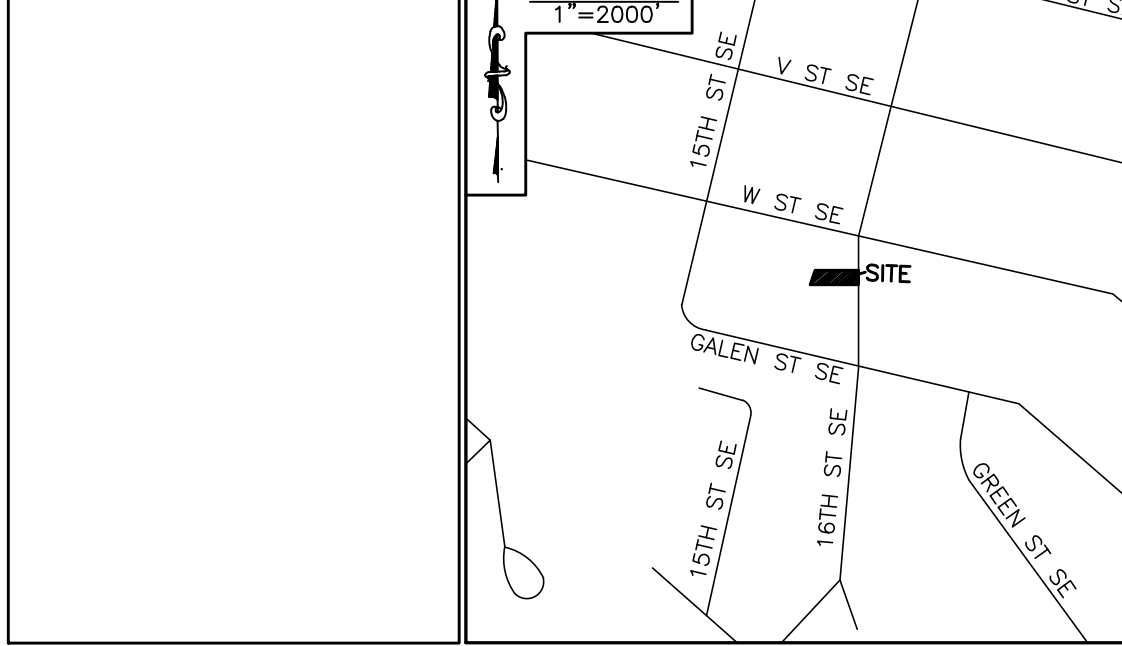
2205 16TH STREET SE
WASHINGTON, DC 20020

PREPARED FOR

DENABABA ENGINEERING
CONSULTANT, LLC
11803 EDMOND WOODS WAY'
BOWIE, MD 20721

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLCOTT CITY, MD 21042
BALT.443.542.9199 x101 WWW.NORTONLANDDESIGN.COM

REVISIONS



SCALE
1"=0"=10'-0"

DATE
SEPT. 2015

PROJ. NO.
15-113

SHEET NO.
L002