

**REFERENCE MATERIAL**

1. WARRANTY DEED IN FAVOR OF MICHAEL ARRIGO AND ERIN ARRIGO DEED BOOK 15772 PAGE 2694 COBB COUNTY, GEORGIA RECORDS

**FLOOD NOTE**

THIS PROPERTY IS NOT LOCATED IN A FEDERAL FLOOD AREA AS INDICATED BY F.I.R.M. OFFICIAL FLOOD HAZARD MAPS. THE FLOOD INFORMATION ON THIS PLAN HAS BEEN DETERMINED AFTER REVIEW OF MAPS WHICH ONLY APPROXIMATE THE LOCATION OF THE APPLICABLE FLOOD HAZARD AREA. FOR MORE ACCURATE INFORMATION, A SECOND OPINION OF THE APPLICABLE FLOOD HAZARD AREA IS RECOMMENDED. FOR FURTHER INFORMATION CONTACT THE LOCAL DRAINAGE DEPARTMENT, CORPS OF ENGINEERS, AN INSURANCE COMPANY OR APPRAISER.

**LEGEND**

- DENOTES BUILDING LINE
- DENOTES PROPERTY LINE
- R/W DENOTES RIGHT-OF-WAY
- BC DENOTES BACK OF CURB
- G DENOTES GUTTER
- EP DENOTES EDGE OF PAVING
- TW DENOTES TOP OF WALL
- BW DENOTES BOTTOM OF WALL
- X DENOTES FENCE
- RCP DENOTES REINFORCED CONCRETE PIPE
- CMP DENOTES CORRUGATED METAL PIPE
- PP DENOTES POWER POLE
- LP DENOTES LIGHT POLE
- GW DENOTES GUY WIRE
- P DENOTES POWER LINE
- PM DENOTES POWER METER
- PB DENOTES POWER BOX
- FO DENOTES FIBER OPTIC
- A/C DENOTES AIR CONDITION
- CB DENOTES CABLE BOX
- TB DENOTES TELEPHONE BOX
- GM DENOTES GAS METER
- GV DENOTES GAS VALVE
- GLM DENOTES GAS LINE MARKER
- WM DENOTES WATER METER
- WV DENOTES WATER VALVE
- FH DENOTES FIRE HYDRANT
- MW DENOTES MONITORING WELL
- HW DENOTES HEADWALL
- JB DENOTES JUNCTION BOX
- DI DENOTES DROP INLET
- S DENOTES SANITARY SEWER LINE
- SSMH DENOTES SANITARY SEWER MANHOLE
- CO DENOTES CLEAN OUT
- P.O.B. DENOTES POINT OF BEGINNING
- P.O.C. DENOTES POINT OF COMMENCEMENT

**IMPERVIOUS CALCULATIONS**

EXISTING IMPERVIOUS CONDITIONS  
 HOUSE = 2,042± SQ.FT.  
 GRAVEL = 19.8± SQ.FT.  
 STEPPING STONES = 12.2± (TOTAL)  
 CONCRETE DRIVEWAY = 589.6± SQ.FT.  
 CONC. WALK = 182.1± SQ.FT.  
 CONCRETE PORCH = 117.3± SQ.FT.  
 GRAVEL = 87.8± SQ.FT.  
 WOOD LANDING = 17± SQ.FT.  
 STEPS = 1± SQ.FT.  
 CONCRETE = 12.9± SQ.FT.  
 BRICK PATIO = 330.4± SQ.FT.  
 SCREENED PORCH = 172± SQ.FT.  
 TOTAL IMPERVIOUS AREA = 3,602.2± SQ.FT. OR 34%

**SURVEY NOTES**

CITY OF SMYRNA ZONING R-15  
 MINIMUM LOT AREA = 15,000 SQ.FT.  
 MINIMUM HEATED FLOOR AREA = 2,000 SQ.FT.  
 MAXIMUM IMPERVIOUS LOT COVERAGE = 35%  
 MINIMUM LOT WIDTH AT FRONT SET BACK = 85 FEET  
 MINIMUM FRONT SET BACKS  
 MAJOR THOROUGHFARE = 50 FEET  
 MINOR THOROUGHFARE = 40 FEET  
 OTHER STREETS = 35 FEET  
 MINIMUM SIDE SET BACK = 10 FEET  
 MINIMUM REAR SET BACK = 30 FEET  
 MAXIMUM BUILDING HEIGHT = 35 FEET  
 ALL ZONING MATTERS MUST BE APPROVED BY THE CITY OF SMYRNA PLANNING AND ZONING DEPARTMENT PRIOR TO CONSTRUCTION.



**SURVEYOR'S CERTIFICATE**

This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Regulation for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

Michael R. Noles  
 Georgia RLS #2646  
 Member SAMSOG

Michael R. Noles Georgia RLS No. 2646 3-13-24

**SURVEY NOTES**

1. STORM SEWER, SANITARY SEWER AND OTHER BURIED UTILITIES MAY HAVE BEEN PAVED OR COVERED OVER. THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES. UNDERGROUND UTILITIES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES MAY BE ENCOUNTERED. PLEASE CALL ALL LOCAL UTILITY PROVIDERS AND OR 811 FOR FURTHER INFORMATION.



2. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT A CURRENT TITLE SEARCH MAY DISCLOSE. FOR NEW PERMITS THE LOCAL ISSUING AUTHORITY MAY REQUIRE ADDITIONAL EASEMENTS NOT SHOWN.
3. THIS PLAT WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS OR ENTITY NAMED HEREON. THIS PLAT DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS, OR ENTITY WITHOUT THE EXPRESS RECERTIFICATION OF THE SURVEYOR NAMING SUCH PERSON, PERSONS OR ENTITY.
4. THE FIELD DATA UPON WHICH THIS PLAT IS BASED WAS GATHERED BY AN OPEN TRAVERSE AND HAS A CALCULATED POSITIONAL TOLERANCE OF 0.03 FEET. THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 1,602,205 FEET. A GEOMAX ZOOM 90 SERIES ROBOTIC TOTAL STATION WITH CARLSON SURVEY 2 DATA COLLECTOR WERE USED IN THE COLLECTION OF FIELD DATA.
5. BEARINGS SHOWN WERE COMPUTED FROM ANGLES TURNED FROM A SINGLE MAGNETIC OBSERVATION.
6. THIS PROPERTY IS SUBJECT TO CURRENT ZONING REGULATIONS AND RESTRICTIONS.
7. ALL REBARS SET ARE 1/2" REBARS UNLESS OTHERWISE NOTED.
8. THE EXISTENCE, SIZE, AND LOCATION OF IMPERVIOUS BUFFERS ARE SUBJECT TO FINAL DETERMINATION BY THE LOCAL ISSUING AUTHORITY CITY OR COUNTY.

NO.	REVISIONS	DATE

**McCLUNG SURVEYING**  
 McClung Surveying Services, Inc.  
 4833 South Cobb Drive Suite 200  
 Smyrna, Georgia 30080 (770) 434-3383  
 www.mcclungsurveying.com Certificate of Authorization #LSF000752

SURVEY FOR  
**MICHAEL ARRIGO**  
**ERIN ARRIGO**

2730 MORRIS CIRCLE S.E.  
 SMYRNA, GEORGIA

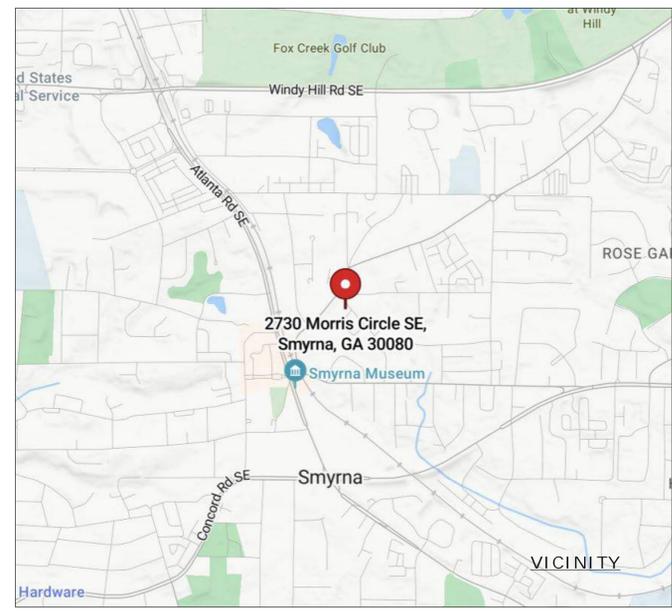
TOTAL AREA= 0.243± ACRES  
 OR 10,603± SQ. FT.

SCALE IN FEET

LOT 4  
 MORRIS MANOR

LAND LOT 560  
 17TH DISTRICT 2ND SECTION  
 COBB COUNTY, GEORGIA  
 PLAT PREPARED: 3-13-2024  
 FIELD: 3-12-2024 SCALE: 1"=20'

JOB#263323 PG 6 OF 12



SITE PLAN PREPARED FOR  
 THE ARRIGO RESIDENCE:  
 2730 MORRIS CIRCLE, SE  
 SMYRNA, GA 30080

LAND LOT 560  
 17TH DISTRICT, 2ND SECTION  
 COBB COUNTY, GA

**CONTRACTOR**

GEORGIA CLASSIC POOL  
 1301 IRON MOUNTAIN RD  
 CANTON, GA 30115  
 770-521-0708

24 HR CONTACT  
 ASHLEY DOVER  
 GEORGIA CLASSIC POOL  
 404-863-2450  
 GeorgiaClassicPool.com

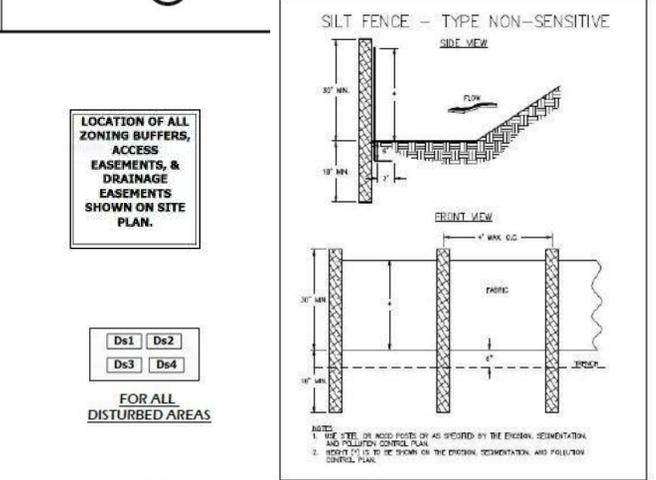
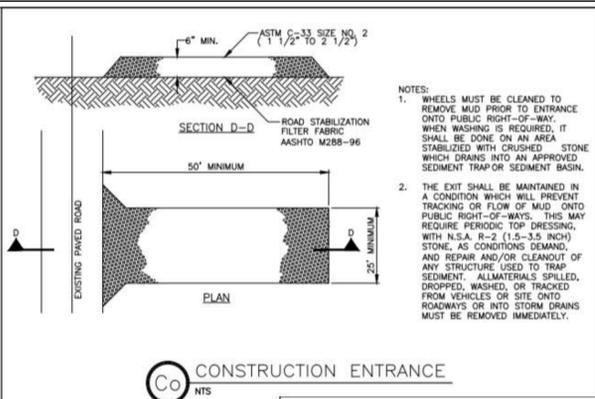
**INDEX:**  
 PAGE 1 - COVER/EXISTING CONDITIONS  
 PAGE 2 - PROPOSED CONDITIONS  
 PAGE 3 - BUILDING DETAILS  
 PAGE 4 - STORMWATER DETAILS

04/17/2024  
 REVISED 04/25/2024 PER COMMENTS. STORMWATER PAGE ADDED.  
 REV 05/22/2024 PER COMMENT ON FENCING.  
 REV 06/11/2024 TO ADD PROPOSED CABANA.

ALL PAGES TO BE PRINTED  
 ON 36" X 24" PAPER TO  
 BE TO SCALE.

PAGE 1 OF 4  
 EXISTING CONDITIONS





**FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES**  
**GEORGIA SOIL AND WATER CONSERVATION COMMISSION**  
**STRUCTURAL PRACTICES**

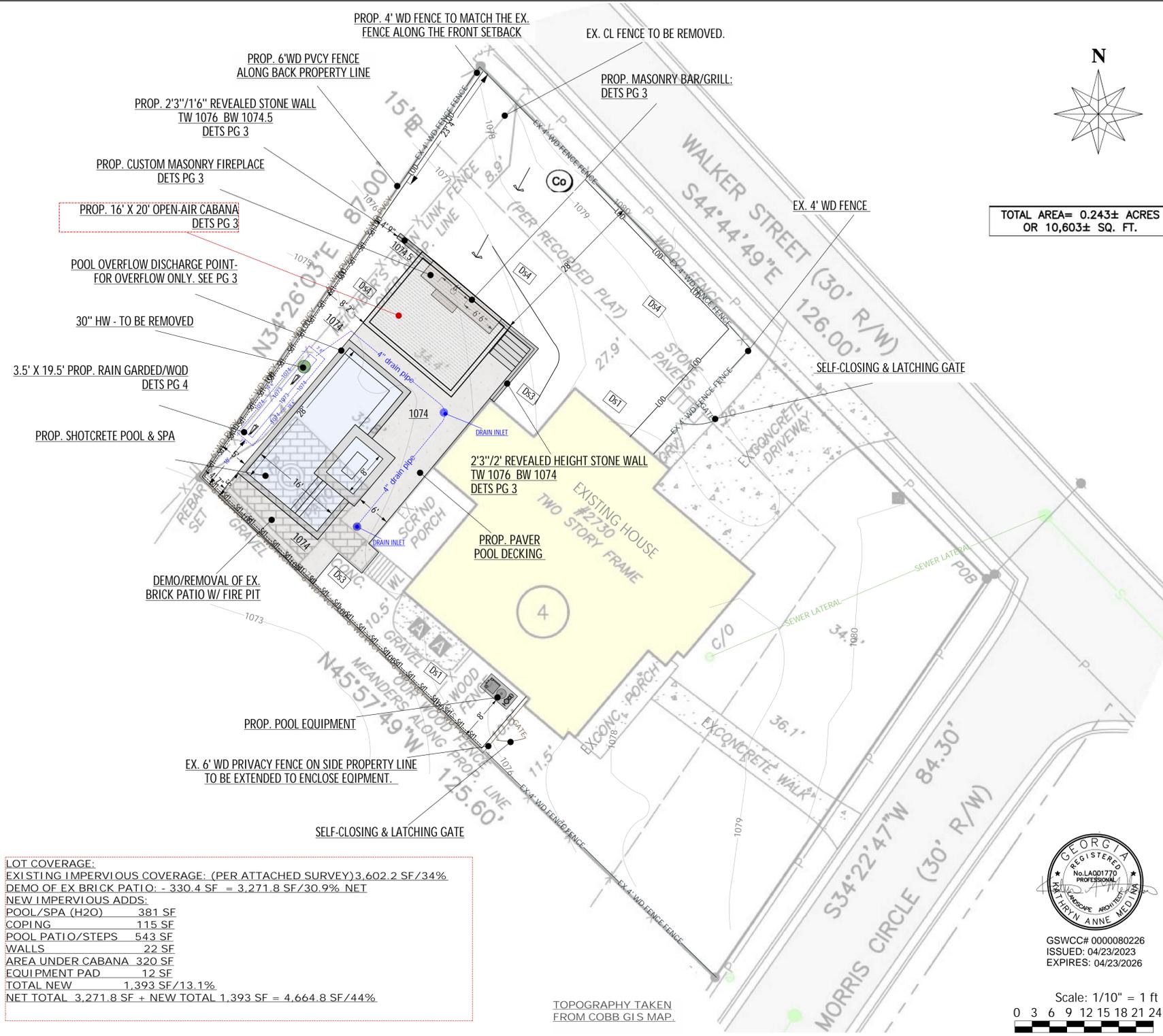
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.

**VEGETATIVE PRACTICES**

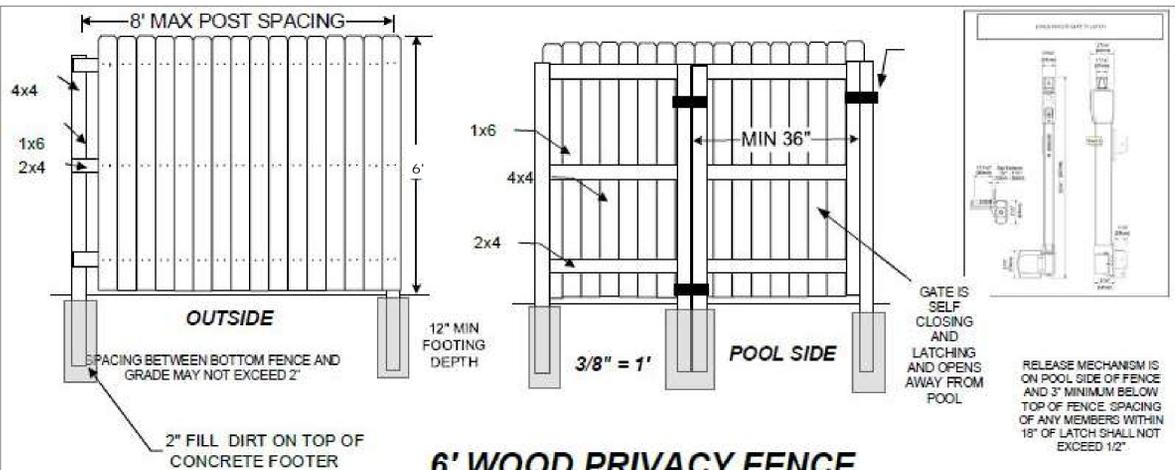
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SOODING)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.

**EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES:**

- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES & PRACTICES PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- WASHOUT OF THE CONCRETE MIXER DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
- PREVENT TRACKING OF MUD ONTO ALL PUBLIC RIGHTS -OF-WAY, IMMEDIATELY REMOVE ANY MUD, CONCRETE AND OR CONSTRUCTION DEBRIS TRACKED OR SPILLED ONTO THE ROAD.
- LEAVE SILT FENCE IN PLACE UNTIL ALL AREAS ARE PERMANENTLY STABILIZED.



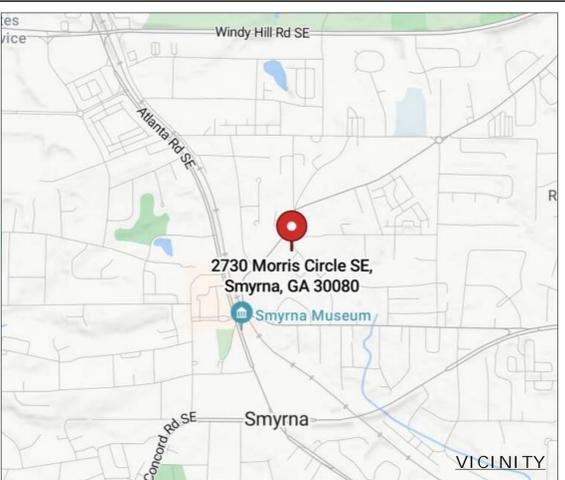
**LOT COVERAGE:**  
 EXISTING IMPERVIOUS COVERAGE: (PER ATTACHED SURVEY) 3,602.2 SF/34%  
 DEMO OF EX BRICK PATIO: - 330.4 SF = 3,271.8 SF/30.9% NET  
 NEW IMPERVIOUS ADDS:  
 POOL/SPA (H2O) 381 SF  
 COPING 115 SF  
 POOL PATIO/STEPS 543 SF  
 WALLS 22 SF  
 AREA UNDER CABANA 320 SF  
 EQUIPMENT PAD 12 SF  
 TOTAL NEW 1,393 SF/13.1%  
 NET TOTAL 3,271.8 SF + NEW TOTAL 1,393 SF = 4,664.8 SF/44%



**ISPS Section 305.4**

Where a wall of a dwelling or structure serves as part of the barrier, doors and operable windows with a sill height of less than 48 inches that provide direct access to the aquatic vessel through the wall, shall be equipped with one or more of the following:

1. An alarm that produces an audible warning when the door or its screen or window, is opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located 54 inches or more above the threshold of the door. In dwellings or structures required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located not greater than 54 inches and not less than 48 inches above the threshold of the door.



**PROPOSED SCOPE OF WORK:**  
 DEMO & HAUL OFF OF EXISTING BRICK PATIO & FIRE PIT. CONSTRUCTION OF NEW SHOTCRETE SWIMMING POOL & ATTACHED SPA, PAVER POOL PATIO, STONE RETAINING WALLS, MASONRY FIRE PLACE & BAR WITH GRILL AREA, & OPEN-AIR CABANA. LOCATION- BACK YARD.

SITE PLAN PREPARED FOR THE ARRIGO RESIDENCE:  
 2730 MORRIS CIRCLE, SE  
 SMYRNA, GA 30080

LAND LOT 560  
 17TH DISTRICT, 2ND SECTION  
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PAGE 2 OF 4  
 PROPOSED CONDITIONS

04/17/2024  
 REV 04/25/2024  
 REV 05/22/2024  
 REV 06/11/2024



\*\*\* RELEASED FOR CONSTRUCTION



# BIOINFILTRATION - RAIN GARDENS

Rain Gardens are one name for a range of vegetated, infiltration practices. Also called "bioinfiltration," Rain Gardens are shallow, landscaped depressions that are filled with a mix of native soil and compost and planted with trees, shrubs, and other perennial vegetation. Rain Gardens are designed to temporarily store stormwater runoff as surface ponding before it filters through the specialized soil and infiltrates into the underlying soil. In soils with lower infiltration rates, runoff is collected by an underdrain and discharged to the drainage system. Rain Gardens can be individual cells or multiple cells connected in series. Rain Gardens can be used to manage stormwater runoff from rooftops, driveways, patios, and other areas around your home. Rain Gardens control runoff volumes and rates via detention, attenuation, and losses due to infiltration, interception, evaporation, and transpiration. Water quality treatment is accomplished through sedimentation, filtration, adsorption, uptake, or biodegradation and transformation of pollutants by soil organisms, soil media, and plants. A Rain Garden can be a beautiful and functional addition to your landscape.

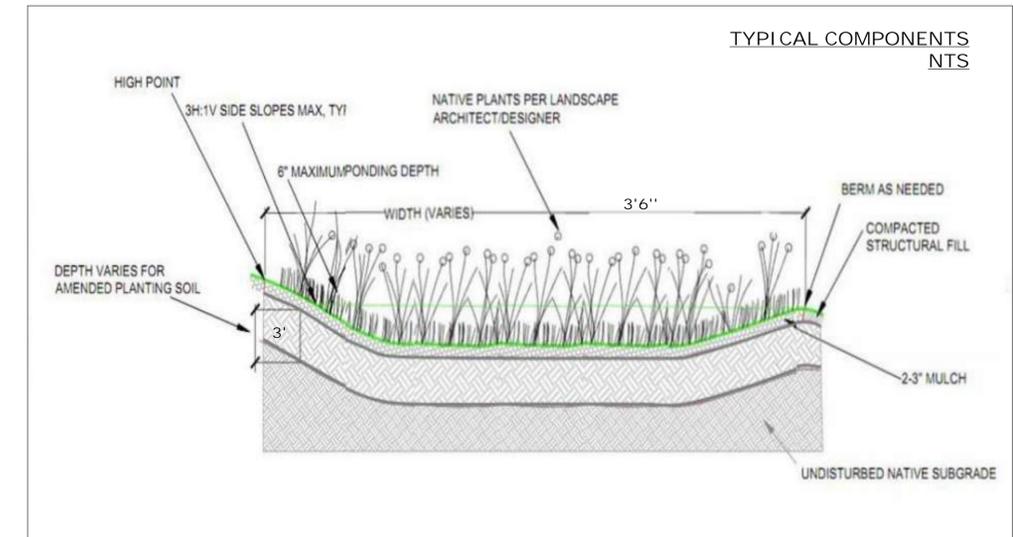
Figure 9. Raingarden or Bioinfiltration in front yard.



## Design

- Proper construction methods and pre-planning are essential for the success of any infiltration practice, including Rain Gardens. Over compaction of the underlying soil or fine sediment contamination onto the existing subgrade during construction will significantly degrade or completely eliminate the infiltration capability of the practice.
- A maximum ponding depth of 6 inches is allowed within Rain Gardens. On average, Rain Gardens drain within a day which will not create a mosquito problem.
- Design the entrance to the Rain Garden to immediately intercept inflow and reduce its velocity with stones, dense hardy vegetation or other means.
- If the sides of the Rain Garden will be mowed, the sides should be designed with slopes of 3:1 (H:V) or flatter.
- For best results, test the soil characteristics as you would for a garden, or contact your local County Extension Service for help [www.caes.uga.edu/extension/fulton](http://www.caes.uga.edu/extension/fulton).
- Soils for Rain Gardens should be amended native soils containing: 2/3 native soils and 1/3 compost.
- A mulch layer consisting of 2 to 3 inches of non-floatable organic mulch (fine, shredded, hardwood mulch, pine straw, or leaf compost) should be included on the surface of the Rain Garden. Pine bark and wood chips should not be used.
- Rain Gardens have a better appearance and can be more easily maintained if they have defined edges as seen in image above.
- Overflows from the Rain Garden should be designed and constructed to resist erosion and may consist of a small berm or an inlet grate set at the proper elevation in the garden. The grate should be domed or set at a slant to allow clogging debris to fall off.
- Vegetation commonly planted in Rain Gardens includes native trees, shrubs, and other herbaceous vegetation. When developing a vegetation plan for the Rain Garden, choose vegetation that will stabilize soils and tolerate the stormwater runoff rates and volumes that will pass through the Rain Garden.
- Incorporating trees into traditional bioretention practices is Highly Recommended. The Tree Protection Ordinance provides extra (2x) credit for trees planted in rain gardens and other infiltration practices.
- Vegetation used in Rain Gardens should also tolerate both wet and dry conditions. See Appendix F of Volume 2 of the Georgia Stormwater Management Manual (ARC, 2001) for a list of vegetation appropriate for use in Rain Gardens in Georgia.

Figure 10. Bioinfiltration with cobble inlet.



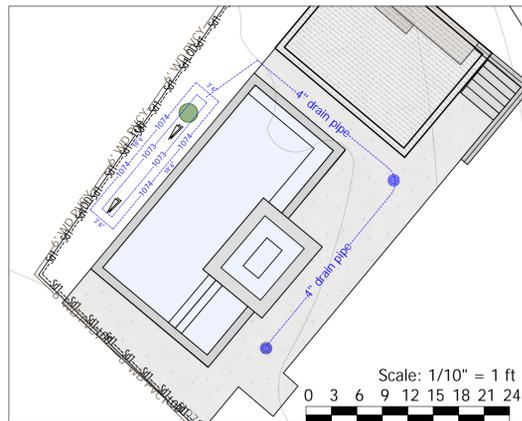
### CONSTRUCTION STEPS:

1. Locate Rain Garden(s) where downspouts or driveway runoff can enter garden flowing away from the home. Locate at least 10 feet from structures with basements, not within the public right-of-way, away from utility lines, not over septic fields, and not near a steep bluff edge.
2. Measure the contributing drainage area and determine required surface area and planned excavation depth from the table on the next page.
3. Perform infiltration test according to Appendix A. If the rate is less than 0.25 in/hr an underdrain is necessary. If the rate is more than 0.50 in/hr the size of the garden may be decreased 10% for every 0.50 in/hr infiltration rate increase above 0.50 in/hr.
4. Measure elevations and stake out the garden to the required dimensions. Ensure: (1) positive flow into garden, (2) the overflow elevation allows for six inches of ponding, and (3) the perimeter of the garden is higher than the overflow point.
5. If the garden is on a gentle slope, a berm at least two feet wide can be constructed on the downhill side, or the Rain Garden can be dug into the hillside and ensuring erosion control at the garden inlet(s).
6. Remove turf or other vegetation in the Rain Garden. Excavate garden without compacting the soils in the bottom of the garden. Level bottom of garden as much as possible to maximize infiltration area.
7. Mix compost, topsoil, and some of the excavated subsoil together to make the 'amended soil'. The soil mix should be 1/3 compost, 2/3 native soil (topsoil and subsoil combined).
8. Fill Rain Garden with the amended soil, leaving the surface eight inches below your highest surrounding surface. Eight inches allows for 6 inches ponding and 2" of mulch. The surface of the Rain Garden should be as close to level as possible.
9. Build a berm at the downhill edge and sides of the Rain Garden with the remaining subsoil. The top of the berm needs to be level and set at the maximum ponding elevation.
10. Plant the Rain Garden using a selection of plants chosen from those listed in Appendix B.
11. Add two to three inches of non-floating organic mulch to the surface of the Rain Garden with. The best choice is finely shredded hardwood mulch. Pine straw is also an option.
12. Water all plants thoroughly. Regular watering is likely necessary to establish plants during the first growing season.
13. During Rain Garden construction, build the inlet feature as a pipe directly connected to a downspout or use a rock lined swale with a gentle slope. An impermeable liner under the rocks at the end of the swale near the house is recommended to keep water from infiltrating there. Test the drainage of water from the source to the garden prior to finishing.
14. Create an overflow at least 10 feet from property lines and ensure it is protected from erosion.

### MINIMUM MAINTENANCE REQUIREMENTS:

1. Irrigate vegetation as needed in first two seasons
2. Remove weeds
3. Replace unsuccessful plantings
4. Replenish mulch
5. Repair eroded areas
6. Rake clogged surface to restore infiltration
7. Monitor Rain Garden for appropriate drainage times. If garden does not drain an underdrain may be necessary.

### LOCATION



### SIZING CALCULATION:

Contributing Drainage Area (square feet)	Depth of Amended Soil (inches)			
	18	24	30	36
100	6.6	5.7	5.1	4.6
500	35	30	25	23
1000	65	60	50	45
2000	135	115	100	90
3000	200	170	150	140
4000	260	230	200	185
5000	330	290	255	230

Measure contributing drainage area and read area for given media depth.

Contributing Drainage Area:	1,393	Sq Ft
Depth of Soil Media:	36	Inches
Area of Rain Garden:	68	Sq Ft

\*RAIN GARDEN VEGETATION TO BE CHOSEN BY HOMEOWNER & LANDSCAPER FROM VOL. 2 OF THE GEORGIA STORMWATER MANAGEMENT MANUAL.

SITE PLAN PREPARED FOR THE ARRIGO RESIDENCE: 2730 MORRIS CIRCLE, SE SMYRNA, GA 30080

LAND LOT 560 17TH DISTRICT, 2ND SECTION COBB COUNTY, GA

### CONTRACTOR

GEORGIA CLASSIC POOL  
1301 IRON MOUNTAIN RD CANTON, GA 30115 770-521-0708

### 24 HR CONTACT

ASHLEY DOVER  
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404-863-2450  
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PAGE 4 OF 4 STORMWATER DETAILS

04/25/2024

REV 06/11/2024

