

F-2/1-PRESENTATION

PERMIT PARTNERS, LLC
300 E. Highland Mall Blvd Ste. 207
Austin, Texas 78752
David C. Cancialosi

September 1, 2021

City of Austin
301 W. 2nd St.
Austin, Texas 78701
City of Austin Board of Adjustment

RE: Variance request for site at 3401 Rivercrest Dr. to amend impervious cover – Amended cover letter for October meeting

Dear Board of Adjustment Commissioners,

Per your request please find a bullet point list containing reasonable use, hardship, adverse impact and other related information.

- The site is ~37,000 lot built atop a hill as part of the platted Rivercrest Section 2 subdivision approved in mid-1960's. It is comprised of two lots which combined and individually do not meet LA lot size requirements.
- The individual platted lots were legally compliant with "A" zoning in mid-1960's; however, are sub-standard to LA zoning requirements: Individual nor combined, they do not have minimum 1 ac in size and do not have 100' along a public right-of-way as required by LA zoning performance standards.
- The site was originally zoned "A" when COA asserted control over this area. In 1984, COA changed zoning to LA, which changed "A" zoned, legally compliant lots along the lake to a legal non-compliant lot (re: size) and associated structures (re: IC).
- Owner wishes to exercise reasonable use as intended by both the original plat and zoning change approval asserted by local jurisdictions to allow single-family house and associated accessory improvements.
- Current home is in need of repair and updating. Main concern is structural integrity of retaining walls surrounding hillside. Please see attached drainage letter per your request at August hearing. Rerouting the retaining walls and placement of new walls is necessary.
- This request is to amend impervious coverage calculations to 1) meet the actual LA code requirements and 2) correct erroneous permit issuance and inspection passage occurring in 2006.
- When COA forced LA zoning on this property it made site immediately non-compliant with respect, mostly, to impervious coverage. It was unbuildable by any reasonable standards. The subsequent 2006 permit approval exacerbated this issue.
- In 2006 COA approved extensive plans for new construction via permit #2006-002550, albeit erroneously. This approval was issued accordingly to SF-2 zoning standards. SF-2 zoning allows one to count the gross lot area of the entire ~37,000 SF lot (which approved 16% IC of gross lot area coverage per said application); however, LA zoning requires one to delineate calculations on a per slope basis with no allowance for averaging or "total" sum of all slopes. It's simply "per slope".
- The slope regulations were in place in 2006 for 22 years, yet were not applied despite the entire neighborhood being subject to LA zoning. This was and is not an unsubstantial error.
- One item of major note is that under LA zoning, this site loses almost 60% of it's area to non-buildable area, ie, the 35%+ slope area. This leaves about 15,000 SF to divide among different slopes allowing little IC in each of those categories.
- The request to reduce the degree of non-compliance is as follows:
 - **Reduce from 53% IC in the 0-15% slope to 48% IC**
 - **Reduce 54.25% IC in the 15-25% slope to 49% IC**
 - **Amend from 4.41% IC in the 25-35% slope to 18% IC (driven by retaining walls)**
 - **Amend .83% IC in 35% slope to 3%.**
 - These changes reflect reduction from 21.51% to 20.89% IC on gross lot calculations, or 8,084 SF to 7,883 SF. Although small, these numbers are in right direction and reflect owner's efforts to reduce non-compliance to best of ability. Moving forward, this site's IC will be correctly accounted for.

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- Roughly 1,500 SF driveway bifurcates the lot adding significant IC which cannot be removed. This easement serves rear lot access to multiple houses along Rivercrest Dr. The parking area is across the easement.
- The variance will rectify the city errors and creation of non-compliance status to the property.
- The finished product will be in architectural keeping with residences found through the Rivercrest neighborhood.
- The site is not general to the area in it's shape, size, errors by others, and matters beyond owner's control. Rivercrest neighborhood is full of non-compliance issues due to application of LA zoning regulations to said lots. The Board has approved many variances needing variances for various issues in the neighborhood.
- The site is very specific in that it's essentially a steep hill with a flat top area to be used for a relatively small building pad (compared to total lot size), yet remains constrained by LA zoning to an excessively small footprint in each of the allowable LA slope categories.
- There are no known properties with these specific mix of issues in this area.
- The overall goal is to rectify past errors while reducing the degree of non-compliance to the extent possible.
- The owner has engaged many design professionals to further that endeavor.
- The request before you is reasonable and in keeping with the hardship requirements.

We respectfully request the Board hear these requests in good faith and approve the requested variance as originally requested at the August 2021 hearing.

Sincerely,



David C. Cancialosi, agent for owner

F-2/3-PRESENTATION

From the office of:

PERMIT PARTNERS, LLC
300 E. Highland Mall Blvd, Ste. 207
Austin, Texas 78752
David C. Cancialosi
512.593.5368



April 1, 2020

City of Austin c/o Elaine Ramirez
Board of Adjustment
One Texas Center
505 Barton Springs
Austin, Texas 78704

RE: Variance request to maintain and reduce impervious cover at 3401 Rivercrest Dr.

Dear Board of Adjustment Commissioners,

My client is seeking a variance to maintain a single-family residence built in 2006 era. The residence is located in the Rivercrest subdivision located along the banks of Lake Austin. The neighborhood was platted in the mid 1960's and a majority of the lots are non-compliant with respect to Lake Austin zoning as a result of the development occurring prior to the City's blanket application of LA zoning to the neighborhood in the mid 1980's.

The house in question is not along the main body of the lake and has zero water frontage. It is on a steep hill with the flat area atop it supporting the existing house and associated improvements. The house spans two lots – lots 4 & 5 Rivercrest Addition Section 2. The combined acreage of lots 4 and 5 is 37,400 SF. Despite both lots being used as one single-family development they remain substandard to LA zoning requirement of 1 acre minimum. Each lot 4 and lot 5 being of substandard size independently, the combined lot size is 37,400 SF, yet 21,490, or 57%, of the lot contains slope in excess of 35%.

Regardless the city issued permit #2006-002550 for new construction of a two story house and covered wood decks with associated improvements. That permit issuance was completely erroneous and started a slew of problems passed from one owner to the next as the house continually required maintenance. The city approved a gross area calculation of 16.2% IC vs. the required *per slope* IC calculations which had been the required method of calculation since 1984 and remain as such to this day.

The city compounded its error by again issuing permit approval for an accessory structure in 2007. That approved pool application confirmed 16,000+ SF IC was allowed on-site. Both applications note a 1,300 SF driveway that crosses the lot. The driveway takes access from Rivercrest Dr. and serves a number of houses on located beyond this house and on the same side of the street. Most of these houses only access is from the rear of their homes via this driveway. Some do have front parking along Rivercrest Dr. but not all. The driveway cannot be removed as it is an access easement utilized by multiple parties. Yet, it counts as impervious coverage against this property.

In sum, the multiple retaining walls found throughout the hillside are in need of repair; the driveway easement cannot be removed; the site is substantially encumbered by excessive 35% slopes; and prior issuance of city permits clearly exacerbates the existing impervious coverage numbers. From a gross area IC calculation perspective, the owner proposes less than ½ the impervious coverage than what the city stated was allowed in the 2006 and 2007 permit approvals. The request before you is to reduce the degree of non-compliance while bring significant structural components of the site into compliance so as to avoid a hillside failure or similar damage to the house or those around it. This will be done via light redevelopment of the existing house and parking area into a garage, pool remodel, new hardscape, and other accessory improvements

Reasonable Use

A single-family residential use with associated accessory uses on a LA zoned lot is reasonable and in keeping with the stated allowances in the land development code. This use was contemplated when the original Rivercrest Section 2 plat was approved.

Hardship

The house was built in 2006 via City-approved permits. Those permits were issued erroneously in terms of the how the impervious cover was calculated. The impervious cover was not calculated in accordance with LDC 25-2-551, *Lake Austin* zoning performance standards. They were, however, calculated using gross lot area and not per slope, i.e., 0-15%, 15-25%, 25-35%, 35%+ slope categories which allow a relative amount of impervious in each slope category. Now, to perform any work on the site my client bears the burden of mistakes not created by her. The remedies are too great to perform without assistance from the BOA and the variances are necessary to utilize the property as originally intended then permitted for by the City.

The current request proposes to reduce the impervious cover from 53% in the 0-15% slope to 48%, from 54.25% in the 15-25% slope to 49%, from 4.41% in the 25-35% slope to 18%, and from .83% in the 35%+ slope to 3%. This change in IC is from 21.51% to a proposed 20.89% impervious coverage, or 8,084 SF IC to 7,883 SF IC when calculated on a gross lot area basis.

The driveway easement is definitive hardship that requires 1,500+ SF of IC. This is out of my client's control.

The septic placement is requiring a significant amount of retaining walls stretching from the build site down to the street due to the topography of the site. This also exacerbates the impervious cover for the steep topography on the lot.

The 37,000+ SF (combined) lot has 57% of unbuildable space. The only flat part is the existing foundation and parking areas. This area is supported by retaining walls, which are failing and need to be replaced and relocated. When the 2006 and 2007 permits were incorrectly issued by the city then said permits were finalized by the field inspectors, the issues we are addressing via this request before you were permanently created for the site.

Permits issued in error, non-compliant building sites, substandard lot size, taxed but unbuildable land, and eroding building integrity of existing on-site structures cumulatively contribute to a handful of substantive, legitimate hardships. The owner requests the Board's assistance by way of granting the requested variances so the site may be properly restored to one of beauty but structural integrity and safety typically found throughout the Rivercrest neighborhood.

Not General to the Area

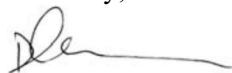
There are no known lots in the area with this specific issue.

Area of Character

The proposed remodel will be in keeping with the surrounding homes along Rivercrest Dr. No adverse impacts will be imposed on surrounding properties. The overall impervious coverage is being reduced while the structural integrity and infrastructure of the site is being vastly improved.

Please find the remainder of the application packet and findings attached.

Sincerely,



David C. Cancialosi, Agent for Owner

3401 RIVERCREST DRIVE

Case #C15-2021-0062

VARIANCE REQUEST – 3401 RIVERCREST

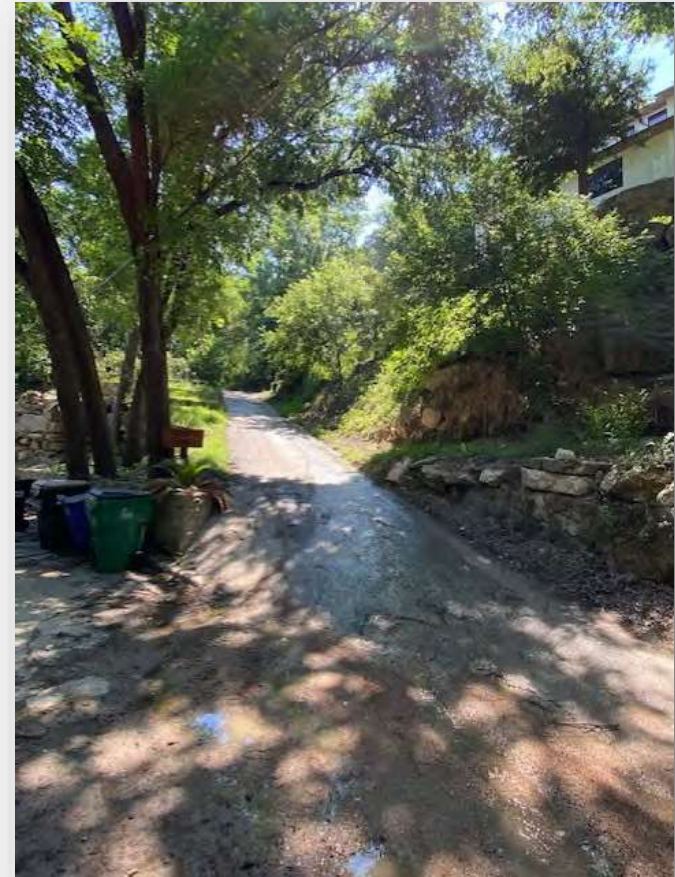
Portion of the City of Austin Land Development Code applicant is seeking a variance from:
-LDC 25-2-55I

Propose to amend the impervious cover:

- from 53% in the 0-15% slope to 48%,
- from 54.25% in the 15-25% slope to 49%
- from 4.41% in the 25-35% slope to 18%, and
- from .83% in the 35%+ slope to 3%.

This change in IC is from 21.51% to a proposed 20.89% impervious coverage, or 8,084 SF IC to 7,883 SF IC when calculated on a gross lot area basis.

3401 RIVERCREST – PRIVATE DRIVEWAY ENTRANCE



3401 RIVERCREST – PRIVATE DRIVEWAY ENTRANCE



3401 RIVERCREST – DRIVEWAY ENTRANCE / PARKING



3401 RIVERCREST – PRIVATE DRIVEWAY AREA / ENTRANCE



3401 RIVERCREST – DRIVEWAY / FRONT YARD VIEW



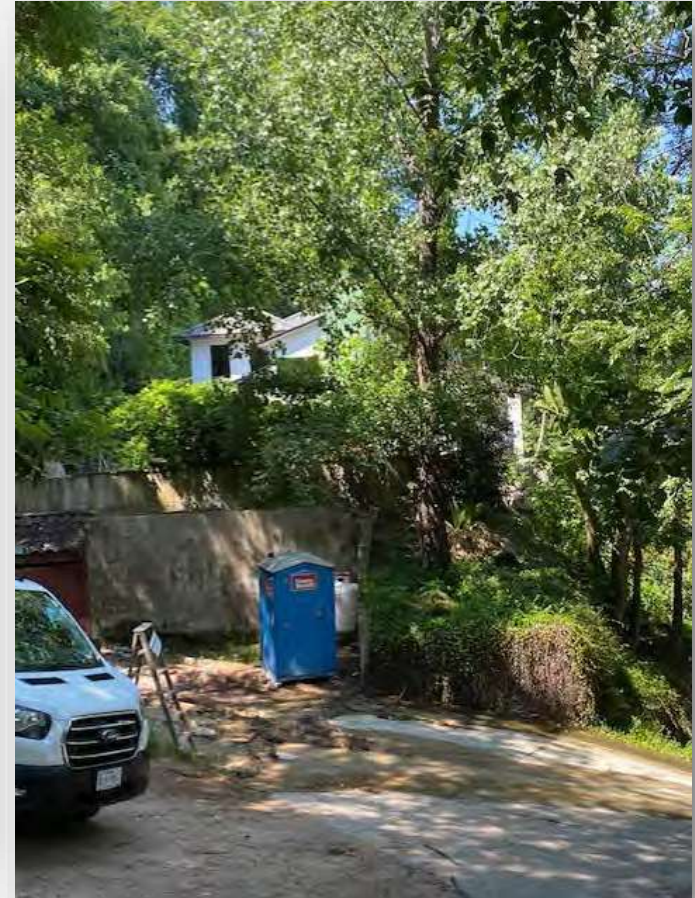
3401 RIVERCREST – FRONT YARD VIEW



3401 RIVERCREST – ENTRANCE VIEW FROM PARKING AREA



3401 RIVERCREST – PARKING AREA / RETAINING WALL



3401 RIVERCREST - FAILING RETAINING WALL DETAIL



3401 RIVERCREST - FAILING RETAINING WALL DETAIL



3401 RIVERCREST – RETAINING WALL



3401 RIVERCREST – RETAINING WALL



3401 RIVERCREST – RETAINING WALL SIDE VIEW



3401 RIVERCREST – RETANING WALL SIDE VIEW



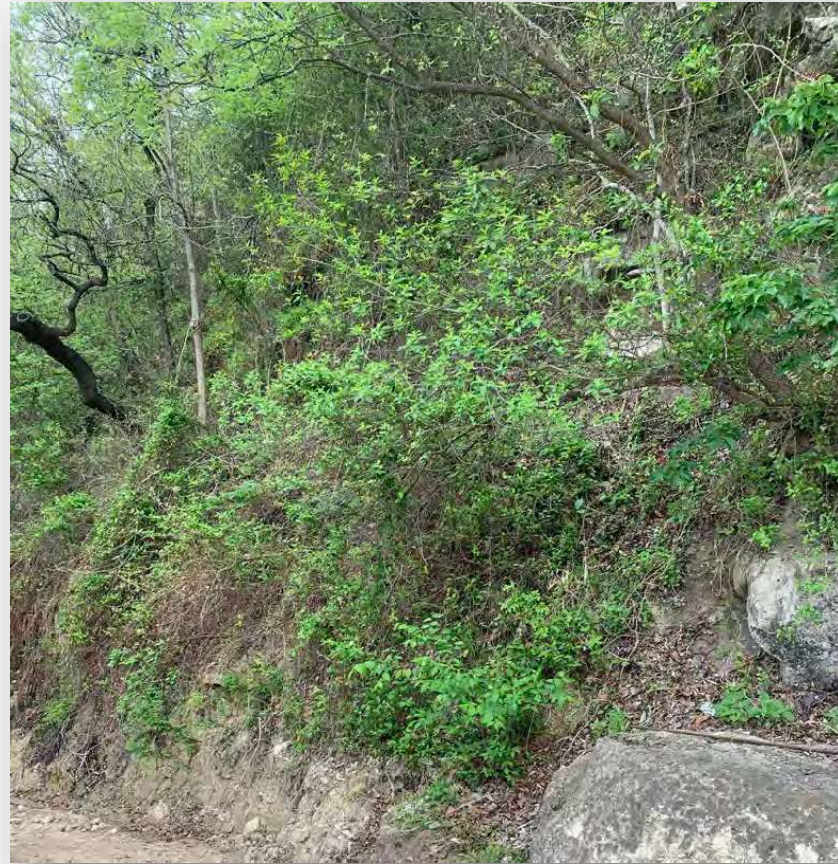
3401 RIVERCREST – RETAINING WALL AERIAL VIEW



3401 RIVERCREST – CONSTRUCTION PATH / PARKING AREA VIEW



3401 RIVERCREST – BACKYARD / ELEVATED SLOPE



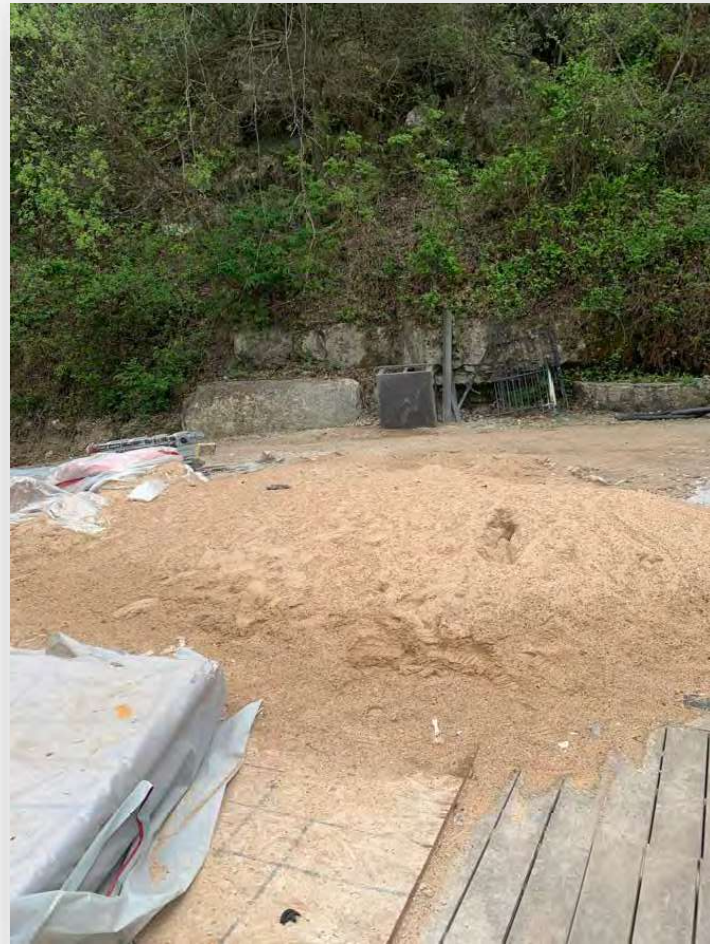
3401 RIVERCREST – EXISTING POOL



3401 RIVERCREST – EXISTING POOL



3401 RIVERCREST – PROPOSED SIDE YARD AREA



3401 RIVERCREST – PROPOSED SIDE YARD / NEW SF VIEW



3401 RIVERCREST – SIDE YARD AREA / RAILING



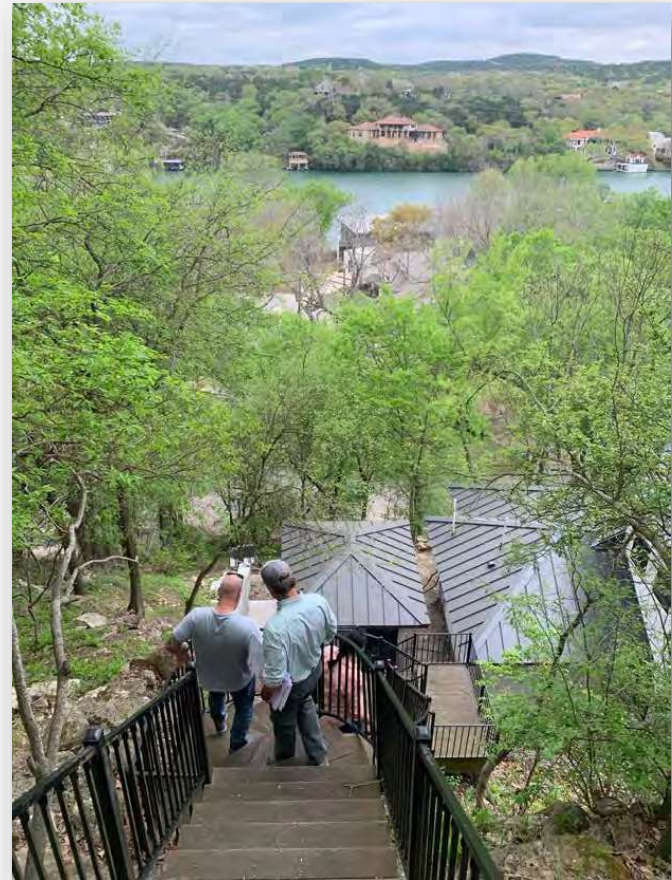
3401 RIVERCREST – REAR VIEW / GABION RETAINING WALL



3401 RIVERCREST – REAR VIEWING DECK



3401 RIVERCREST – STAIRS TO VIEWING DECK



3401 RIVERCREST – FRONT YARD VIEW



3401 RIVERCREST – FRONT YARD VIEW



THANK YOU

F-2/35-PRESENTATION

info@GarwoodArchitecture.com 512.730.3747

GENERAL NOTES

EXISTING IMPERVIOUS COVERAGE CALCULATIONS	
AREA DESCRIPTION	EXISTING AREA
House Footprint	2,409 sq ft
Storage Building Footprint	127 sq ft
Retaining Wall at Storage Building	34 sq ft
AC Pad	18 sq ft
Wood Deck at House	175 sq ft
Wood Steps to Upper Wood Deck	149 sq ft
Upper Wood Deck	142 sq ft
Stone Patio at House	24 sq ft
Stone Patio at Pool	360 sq ft
Wood Deck at Pool	54 sq ft
Pool Coping	101 sq ft
Parking Pad	643 sq ft
Retaining Walls at Parking Pad	85 sq ft
Driveway	252 sq ft
Access Drive	1,558 sq ft
Guest Parking Area	1,521 sq ft
Rock Walls at Guest Parking Area	153 sq ft
Total Impervious Cover	8,084 sq ft
Total Lot Area	37,498 sq ft

EXISTING IMPERVIOUS COVERAGE CALCULATIONS PER ZONE						
IMPERVIOUS COVER ZONES BASED ON SLOPE MAP	SYMBOL	LOT SQUARE FOOTAGE PER ZONE	ALLOWABLE PERCENTAGE PER ZONE	MAX ALLOWABLE SQUARE FOOTAGE PER ZONE	EXISTING SQUARE FOOTAGE PER ZONE	EXISTING PERCENTAGE PER ZONE
00% - 15%		10,348 sq ft	35%	3,622 sq ft	5,537 sq ft	53.51%
>15% - 25%		4,209 sq ft	10%	421 sq ft	2,285 sq ft	54.28%
>25% - 35%		1,451 sq ft	05%	73 sq ft	64 sq ft	4.41%
>35%		21,490 sq ft	00%	0 sq ft	178 sq ft	0.83%
TOTALS		37,498 sq ft		4,116 sq ft	8,064 sq ft	21.51%

Total Lot Area	37,498 sf (100%)
Non-Buildable Area	33,382 sf (89% of property)
Allowed Buildable Area (impervious coverage)	4116 sf (11% of property)



EXISTING SLOPE MAP PLAN

SCALE: 1" = 20'-0"

NEW IMPERVIOUS COVERAGE CALCULATIONS	
AREA DESCRIPTION	EXISTING AREA
House Footprint	2,409 sq ft
Storage Building Footprint	127 sq ft
Retaining Wall at Storage Building	34 sq ft
AC Pad	18 sq ft
Wood Deck at House	175 sq ft
Wood Steps to Upper Wood Deck	149 sq ft
Upper Wood Deck	142 sq ft
Concrete Walls	244 sq ft
Concrete Steps	381 sq ft
Pool Coping / Planters	119 sq ft
Pool and Collection Pool	400 sq ft
New Accessory Structure Footprint	960 sq ft
Driveway	473 sq ft
Access Drive	1,558 sq ft
New AC Pad	8 sq ft
Landscape Wall and Steps	48 sq ft
Rock Walls at Guest Parking Area	88 sq ft
Concrete Retaining Wall	443 sq ft
Total Impervious Cover	7,853 sq ft
Total Lot Area	37,498 sq ft

NEW IMPERVIOUS COVERAGE CALCULATIONS PER ZONE						
IMPERVIOUS COVER ZONES BASED ON SLOPE MAP	SYMBOL	LOT SQUARE FOOTAGE PER ZONE	ALLOWABLE PERCENTAGE PER ZONE	MAX ALLOWABLE SQUARE FOOTAGE PER ZONE	SQUARE FOOTAGE PER ZONE	PERCENTAGE PER ZONE
00% - 15%		10,348 sq ft	35%	3,622 sq ft	4,931 sq ft	47.66%
>15% - 25%		4,209 sq ft	10%	421 sq ft	2,037 sq ft	48.40%
>25% - 35%		1,451 sq ft	05%	73 sq ft	258 sq ft	17.78%
>35%		21,490 sq ft	00%	0 sq ft	607 sq ft	2.82%
TOTALS		37,498 sq ft		4,116 sq ft	7,833 sq ft	20.89%



NEW SLOPE MAP PLAN

SCALE: 1" = 20'-0"



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ARCHITECT
C. C. C. C.
IN 10/2011

Steen Residence
Garage /
Pool Cabana /
Guest Suite

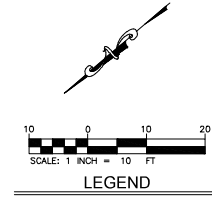
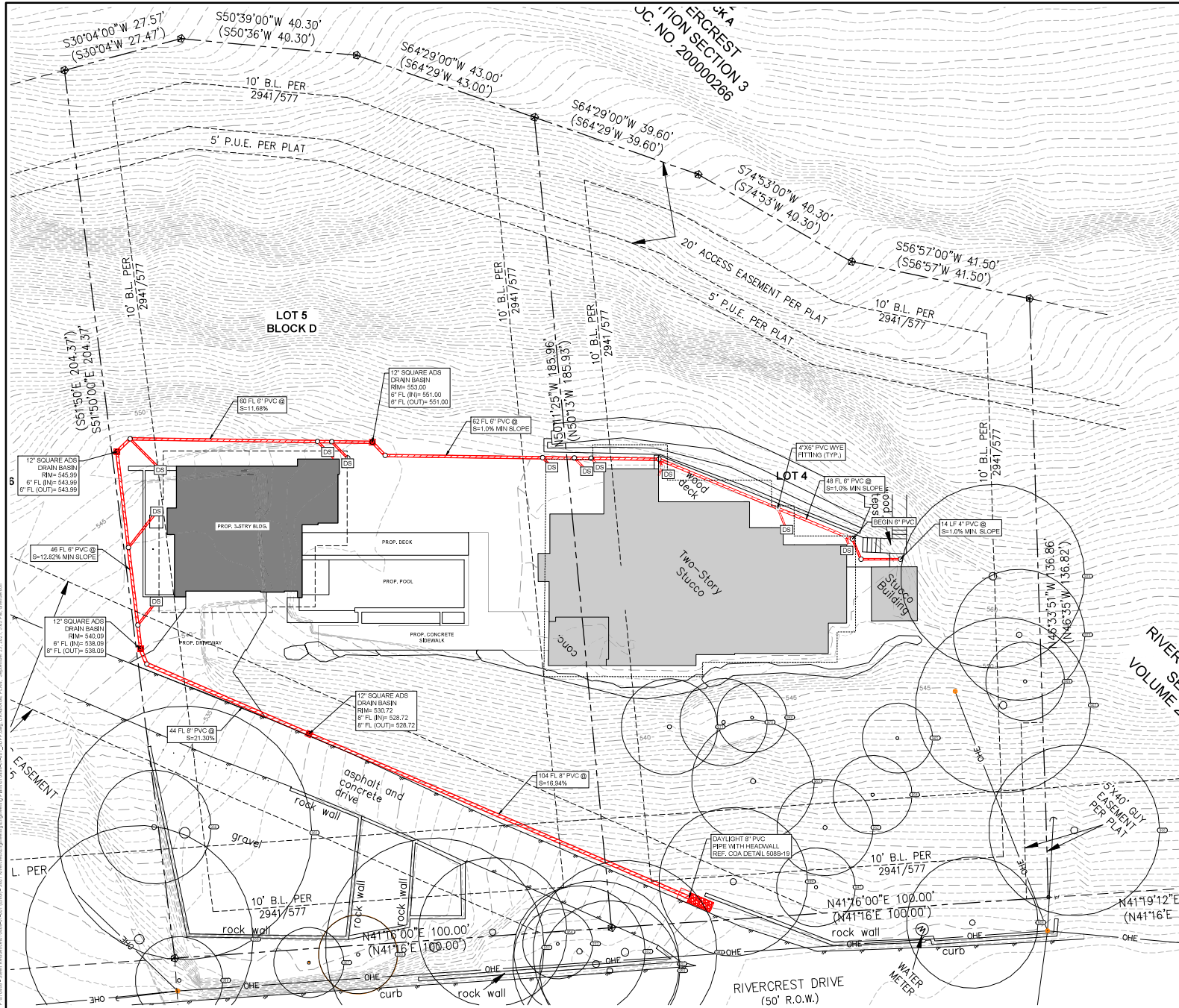
NO.	DATE	DESCRIPTION
1	10/20/2021	ISSUED FOR PERMITTING
2	10/20/2021	REVISED PER PERMITTING
3	10/20/2021	REVISED PER PERMITTING

SHEET TITLE
NEW AND EXISTING
SLOPE MAP PLANS

SHEET

A0.2

F-2/36-PRESENTATION



DS = INSTALL ADS INLINE DRAIN WITH 8" SQUARE BRASS GRATE BELOW DOWNSPOUT (TYP)

Bowman
 1800 E. 17th Street, Suite 100
 Austin, Texas 78746
 Phone (512) 327-1180
 Fax (512) 327-1181
 www.bowmanengineering.com

REVISION	DATE	DESCRIPTION
1		

DRAINAGE PLAN
 STEEN RESIDENCE
 3401 RIVERCREST DRIVE
 AUSTIN, TEXAS, 78724



DESIGN	DRAWN	CHKD
NK	DCH	NK
JOB No. 070468-01-001		
SHEET 1 OF 4		



THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON AN APPROXIMATE MAP ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

<p>BOARDS C.R.Z. TEMPORARY ACCESS ROAD, EXISTING ROADWAY OR EASEMENT AS APPROVED WOOD CHIP MULCH AREA 100 mm (4")-150 mm (6") DEPTH LINEAR CONSTRUCTION THROUGH TREES</p>	<p>FENCE LOCATION PRIOR TO CLEARING, GRADING AND PAVING PERMEABLE PAVING AREA CURB FENCE LOCATION (URING PERMEABLE PAVING INSTALLATION) C.R.Z.</p>
<p>LIMIT OF CONSTRUCTION LINE AS SHOWN ON PLAN NATURAL AREAS CRITICAL ROOT ZONE (C.R.Z.) RADIUS = 12 mm PER mm (1 FT. PER INCH) OF TRUNK DIAMETER INDIVIDUAL TREE</p>	<p>TREES IN PAVING AREA MINIMUM NECESSARY WORK AREA (WOOD CHIP MULCH 60 TO 150 mm (4" TO 6" DEPTH) BLDG. C.R.Z. ADD BOARDS STRAPPED TO TRUNK DUE TO CLOSENESS OF FENCE, LESS THAN 1.5 m (5') FROM TRUNK. TREES NEAR CONSTRUCTION ACTIVITY GROUP OF TREES</p>
<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 5/16/2010 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 610S-1</p>

<p>CHAIN LINK FENCE 3 m (10'-0") MAX. 1.5 m (5'-0") FENCE LOCATION (LIMITS OF CRITICAL ROOT ZONE) RADIUS=12 mm PER mm (1 FT PER IN) OF TRUNK DIAMETER DRIPLINE (VARIES) CRITICAL ROOT ZONE DRIPLINE TREE PROTECTION FENCE 6.0 m FOR 500 mm DIA. TREE 20" DIA. TREE</p>	<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 5/16/2010 ADOPTED</p>
<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 610S-2</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 610S-2</p>

<p>FLOW 800 mm (24") MIN. 450 mm (18") MIN. WOVEN WIRE SHEATHING ROCK BERM FLOW 600 mm (24") MIN. 450 mm (18") MIN. 100 mm (4") CROSS SECTION</p>	<p>NOTES: 1. USE ONLY OPEN GRADED ROCK 75 TO 125 mm (3 TO 5") DIAMETER FOR ALL CONDITIONS. 2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE). 3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC. 4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTATION PROBLEM. 5. WHEN THE SITE IS COMPLETELY STABILIZED THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.</p>
<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 5/16/2010 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 639S-1</p>

<p>EXISTING GRADE 15 m (50') MIN. GRADE TO PREVENT RUNOFF FROM LEAVING SITE 200 mm (8") MIN. ROADWAY PROFILE PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY 150' MIN. R.O.W. PLAN VIEW</p>	<p>NOTES: 1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK. 2. LENGTH AS EFFECTIVE BUT NOT LESS THAN 15 m (50'). 3. THICKNESS: NOT LESS THAN 200 mm (8"). 4. WIDTH NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS. 5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS. 6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. 7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.</p>
<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 5/16/2010 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 641S-1</p>

<p>STILT FENCE FABRIC STEEL OR WOOD FENCE POSTS MAX. 2.4 m (8') SPACING 2" x 4" WELDED WIRE BACKING SUPPORT FOR FABRIC (12.5 GA. WIRE) 800 mm (24") 150 mm (6") MIN. 150 mm (6") MIN. FABRIC TIES IN TRENCH (BACKFILLED) TRENCH CROSS SECTION STANDARD SYMBOL FOR SILT FENCE (SF) SF L</p>	<p>NOTES: 1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600 mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600 mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE. 2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED WITH A SPREAD OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. 3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE Laid IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL. 4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST. 5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. 6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPED EROSION FLOW OR DRAINAGE. 7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.</p>
<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 9/1/2010 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 642S-1</p>

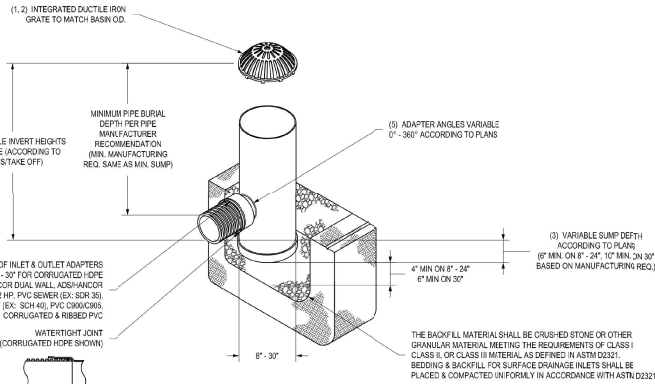
<p>DIRECTION OF FLOW 4 FT SPACING (NOTY SECTION) MULCH SOCK MATERIAL USE UNTREATED WOOD CHIPS PRODUCED FROM A3 (THREE) INCH MINUS SCREENING PROCESS (EQUIVALENT TO TXDOT ITEM 161, COMPOST, SECTION 1.6.2.B, WOOD CHIP REQUIREMENTS). MULCH CONSISTS PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDER BARK, STUMP GRINDINGS, OR COMPOSTED BARK. LARGE PORTIONS OF SILT, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MULCH. MIN. 24" MULCH MATERIAL</p>	<p>NOTES: 1. STEEL OR WOOD POSTS WHICH SUPPORT THE MULCH SOCK SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600 mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600 mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE. 2. THE TOE OF THE MULCH SOCK SHALL BE PLACED SO THAT THE MULCH SOCKS LAY FLAT AND PERPENDICULAR TO THE LINE OF FLOW. IN ORDER TO PREVENT WATER FROM FLOWING BETWEEN THE JOINTS OF ADJACENT ENDS OF MULCH SOCKS, LAP THE ENDS OF ADJACENT MULCH SOCKS A MINIMUM OF 300 mm (12 inches). 3. MULCH MATERIAL MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH; IT IS NOT ACCEPTABLE FOR THE MULCH MATERIAL TO CONTAIN GROUND CONSTRUCTION DEBRIS, BIOLOGICALS, OR MANURE. 4. ROCK MATERIAL WILL BE 100% BIODEGRADABLE, PHOTODEGRADABLE, OR RECYCLABLE SUCH AS RUBBER TYRE, UV PHOTODEGRADABLE PLASTIC, POLYESTER, OR ANY OTHER ACCEPTABLE MATERIAL. 5. MULCH SOCKS SHOULD BE USED AT THE BASE OF SLOPES NO STEEPER THAN 2:1 AND SHOULD NOT EXCEED THE MAXIMUM SPACING CRITERIA PROVIDED IN CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL TABLE 1.4.5.1 FOR A GIVEN SLOPE CATEGORY. 6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.</p>
<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT [Signature] 9/1/2010 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD NO. 648S-1</p>



THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

<p>Bowman 6001 Lanesville, Georgia, USA 1180 E. First Street, Suite 100, Waco, Texas 76786 1120 S. Capital of Texas Hwy, Austin, Texas 78745 www.bowmanengineering.com</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	DATE	DESCRIPTION						
	DATE	DESCRIPTION							
<p>EROSION AND SEDIMENT CONTROL DETAILS</p> <p>STEEN RESIDENCE 3401 RIVERCREST DRIVE AUSTIN, TEXAS, 78724</p>	<p>DESIGN NK DRAIN DCH CHK NK</p> <p>JOB No. 070468-01-001</p> <p>SHEET 2 OF 4</p>								

NYLOPLAST DRAIN BASIN WITH DOME GRATE



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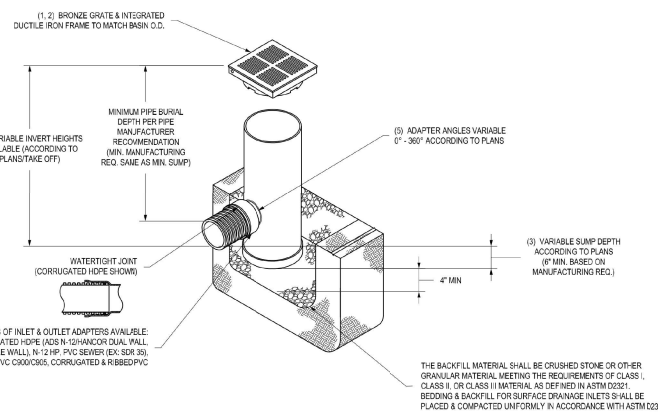
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BURNFORD, LA 70018
PHN (770) 10-2443
FAX (770) 10-2449
www.nyloplast-usa.com

Nyloplast

DRAIN BASIN WITH DOME GRATE
QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-307 REV. D

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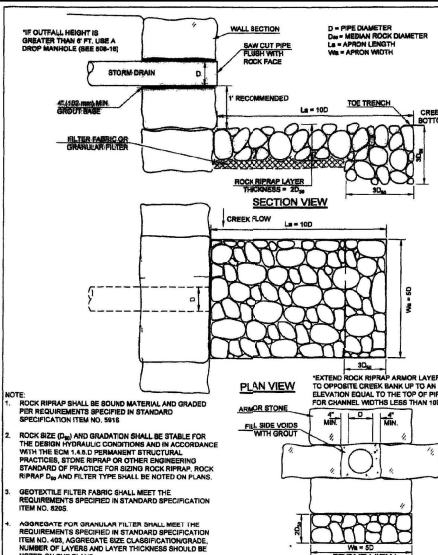
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DRAIN BASIN WITH BRONZE GRATE QUICK SPEC
INSTALLATION DETAIL

DWG NO. 7001-110-306 REV. C



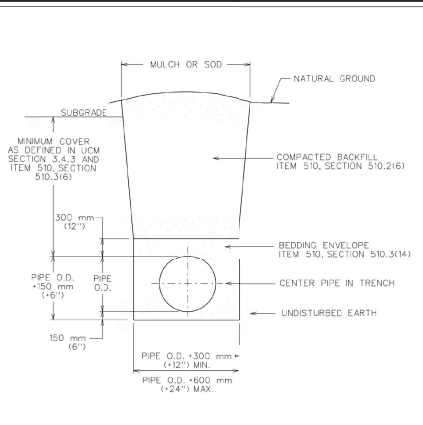
- NOTE:
1. ROCK RIPRAP SHALL BE SOUND MATERIAL AND GRADED FOR REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 5018.
 2. ROCK SIZE (D₅₀) AND GRADATION SHALL BE STABLE FOR THE DESIGN HYDRAULIC CONDITIONS AND IN ACCORDANCE WITH THE ICA 148 D PERMANENT STRUCTURAL PRACTICE. STONE RIPRAP OR OTHER ENGINEERING STANDARD OF PRACTICE FOR SIZING ROCK RIPRAP, ROCK RIPRAP D₅₀ AND FILTER TYPE SHALL BE NOTED ON PLANS.
 3. GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 6005.
 4. AGGREGATE FOR GRANULAR FILTER SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 400. AGGREGATE SIZE CLASSIFICATION, NUMBER OF LAYERS AND LAYER THICKNESS SHOULD BE NOTED ON PLANS.

CITY OF AUSTIN
WATERWATER PROTECTION DEPARTMENT

STORMDRAIN OUTFALL PROTECTION
WALL PENETRATION

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE USE
OF THIS STANDARD

STANDARD NO.
508S-19



- REFERENCES:
1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
 2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"
 3. SECTION 510.3(8), "TRENCH DEPTH AND DEPTH OF COVER"
 4. SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN
DEPARTMENT OF PUBLIC WORKS

TYPICAL TRENCH DETAIL
WITH UNFINISHED SURFACE

RECORD COPY SIGNED 03/13/06
BY BILL GARDNER

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE USE
OF THIS STANDARD

STANDARD NO.
510S-5

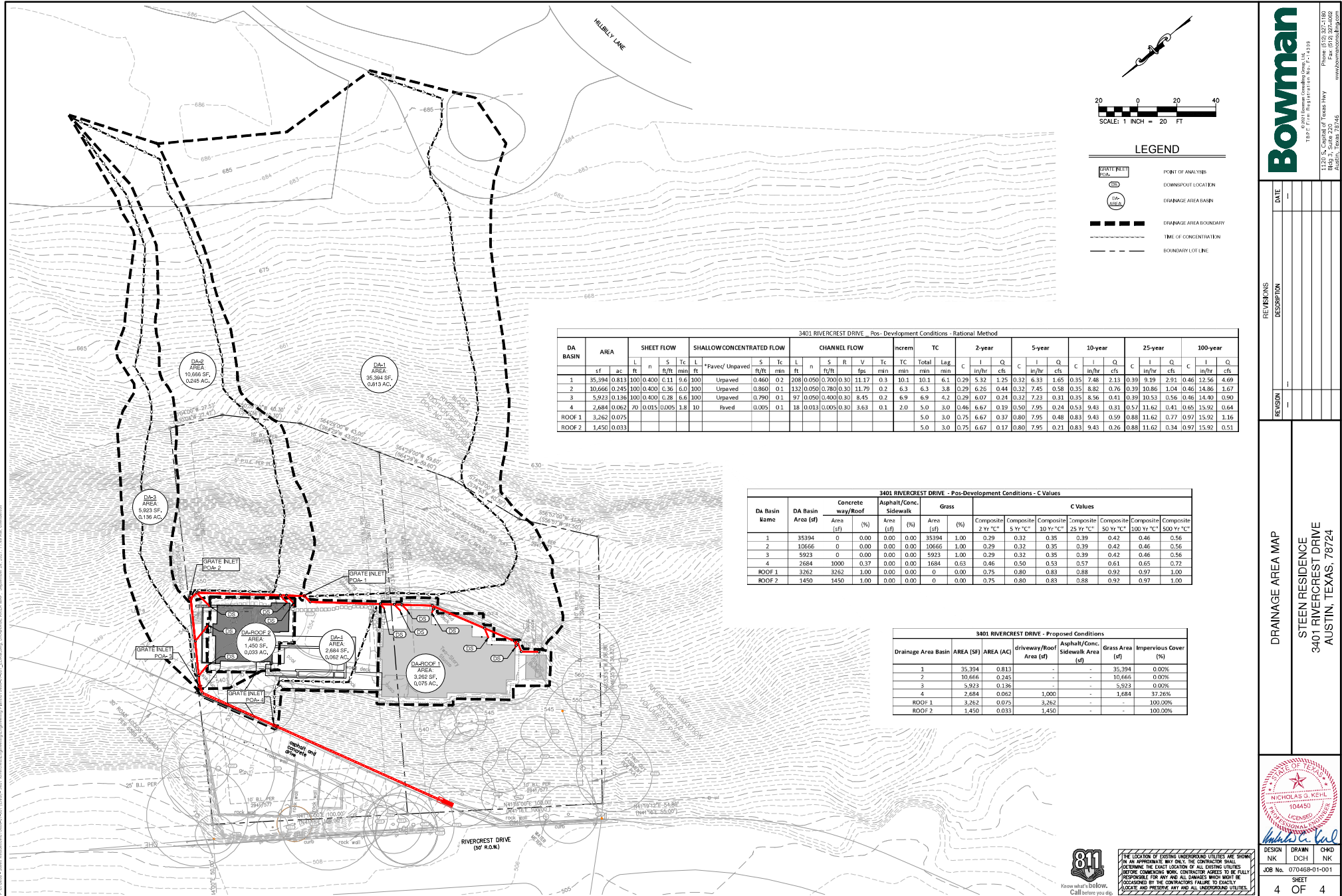
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STEEN RESIDENCE
3401 RIVERCREST DRIVE
AUSTIN, TEXAS, 78724



DESIGN NK
DRAWN DCH
JOB NO. 070460-01-001
SHEET 3 OF 4

F-2/39-PRESENTATION



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REVISIONS	DATE	DESCRIPTION
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DRAINAGE AREA MAP
STEEN RESIDENCE
3401 RIVERCREST DRIVE
AUSTIN, TEXAS, 78724

NICHOLAS G. KEHL
104450
Professional Engineer
State of Texas
Civil Engineering

DESIGN	DRAWN	CHECK
NK	DCH	NK
JOB No.	070468-01-001	
SHEET	4	OF 4