

THE MAKING OF A MODERN FILIPINO HOUSE



INTRODUCTION

In this tutorial, I will try as much as I can to simply explain how did I ended up with this Filipino Villa using my usual workflow in doing visualization from modelling and rendering using Sketchup, Vray for Sketchup and with Photoshop on simple post-processing.

Though, nothing is quite remarkable on my work-flow compared to other artists, really. It's rather my basic visual sense towards architecture. And as an architect, It's always a part of my job doing stuff like this.

This is quite an experimental tutorial so, please bear with me on this, :)

created by: Jonald Magistrado

The Model



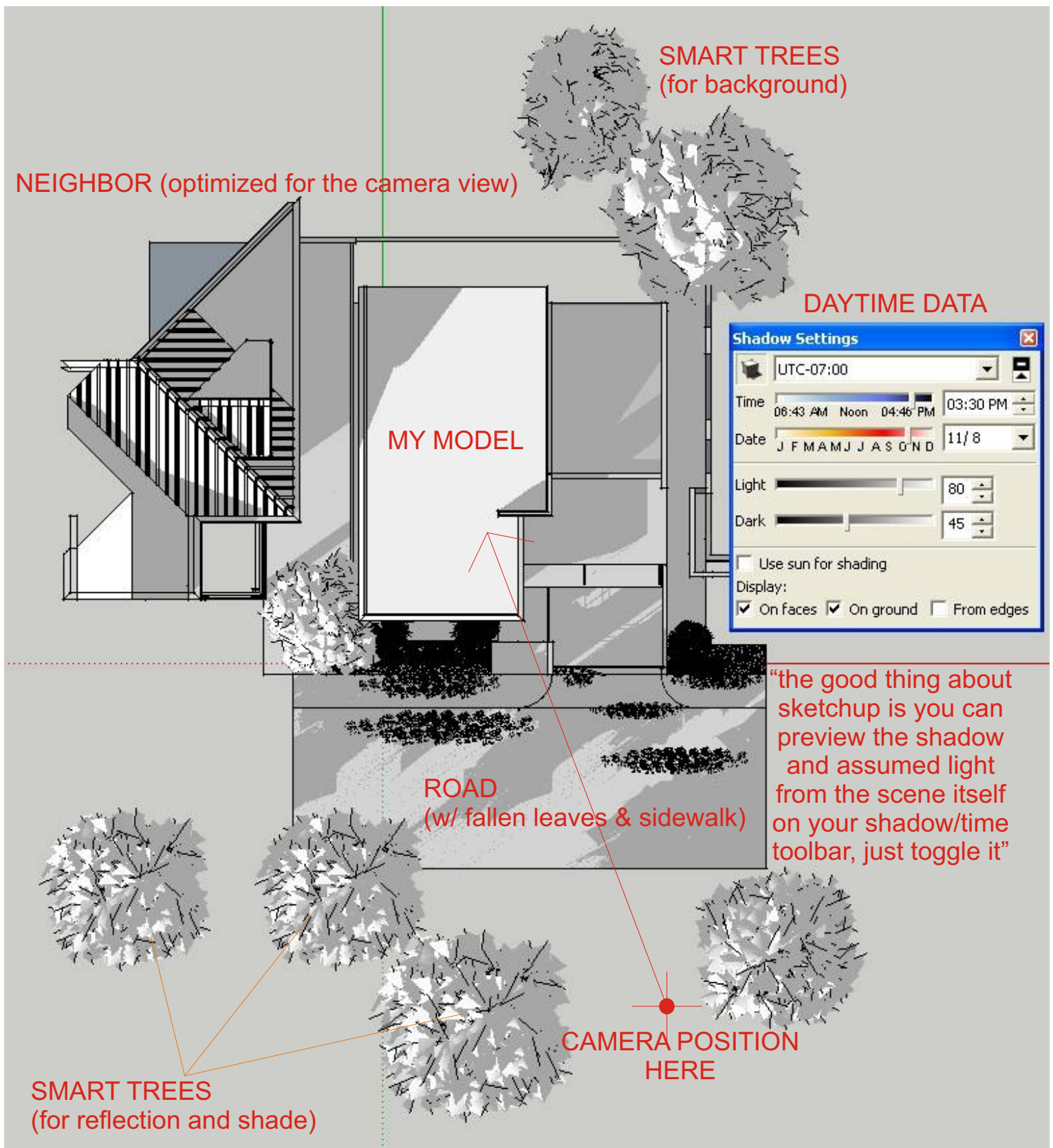
On modelling, As much as possible I limit myself from using excessive plug-ins. As you can see on the image above it is my final model, note that this scene is optimized only with one camera view.

Here are the plug-ins I usually can't model without:

- ✍ Mirror
- ✍ Purge All
- ✍ Round Corner
- ✍ Get Midpoint
- ✍ Remove Material
- ✍ Bezier Curves
- ✍ FFD
- ✍ Align
- ✍ Fur

and Vray plug-in.. :D

Note: Always make it a point to wisely layer every single model/group/components in the scene to your most comfortable way. Because this will help you a lot in manipulating your scene as it gets more detailed and heavier. It is by turning the layer off when not needed, this is important for low pc specs like me. Another reference for modelling is Sir Peter Guthrie's Sketchup Modelling video on his site, please do watch it. <http://www.peterguthrie.net/blog/category/tutorial/>



Here is the Scene Set-Up with labels. As you can see, I try to optimize my model so, “Everything that will not be seen on the camera is not really modelled nor textured”. But I only do this because it’s too heavy making changes and having so many components and models in the scene. Maybe not if I got an i7 rig. XD

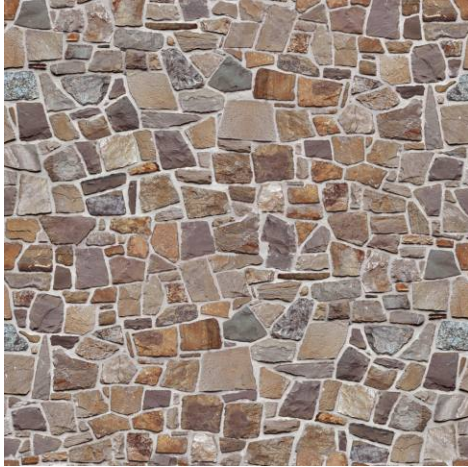
Note: It is always good to render your scene at around 2:30-3:30pm on afternoon scene and 4:30-6:00 at dusk scene if you’re after a good shadow and less intense sunlight and with more artistic mood but that is just my opinion.

MATERIALS

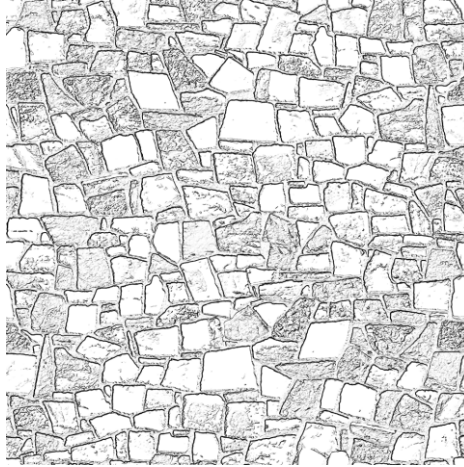
i am never really good at material mapping and texturing, I always make it a point to get materials on Sketchup itself or Vray procedural maps, then apply reflections, bumps or whatsoever. I always use right-click and edit texture positions manually.

Here are the list of main materials I used:

Stone Texture



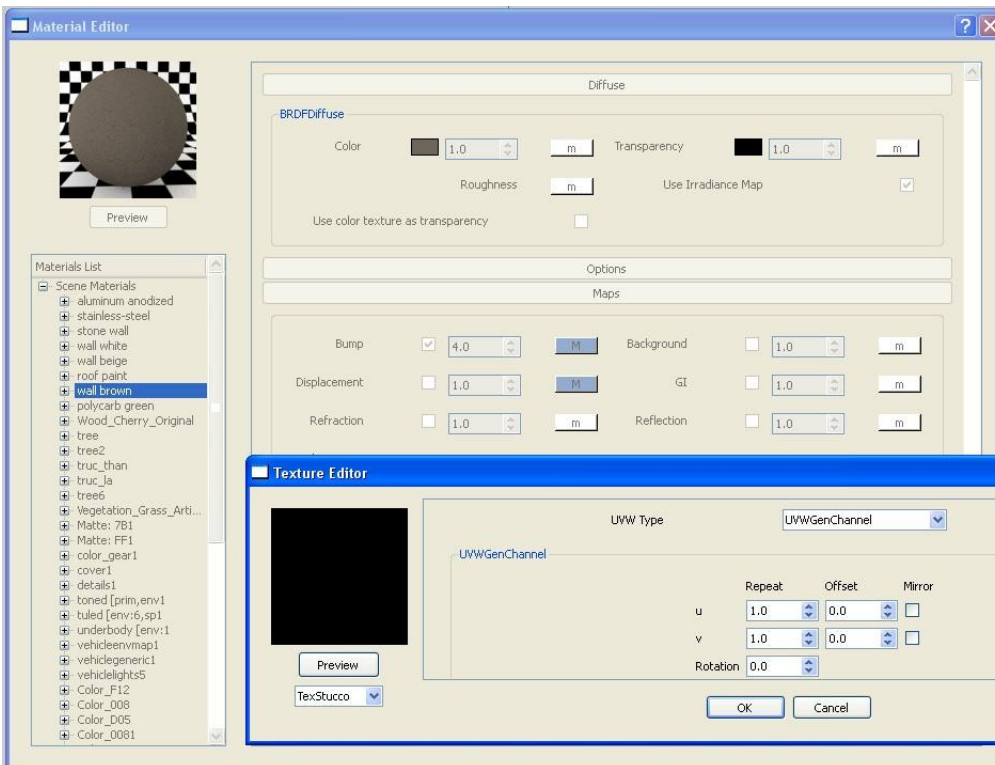
Diffuse



Bump/Displacement

NOTE: other materials like sidewalk/asphalt/grass etc. are basically from sketchup material textures itself. I just modified them in PS including their bumps and displacement, in case you ask..

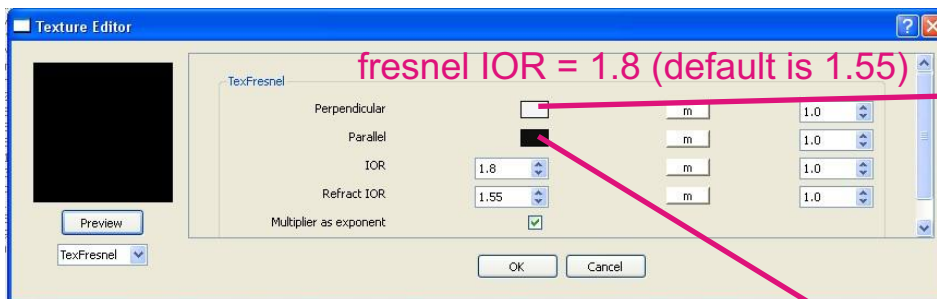
Basic Wall Material Set-Up



basic procedural mapping on the wall:

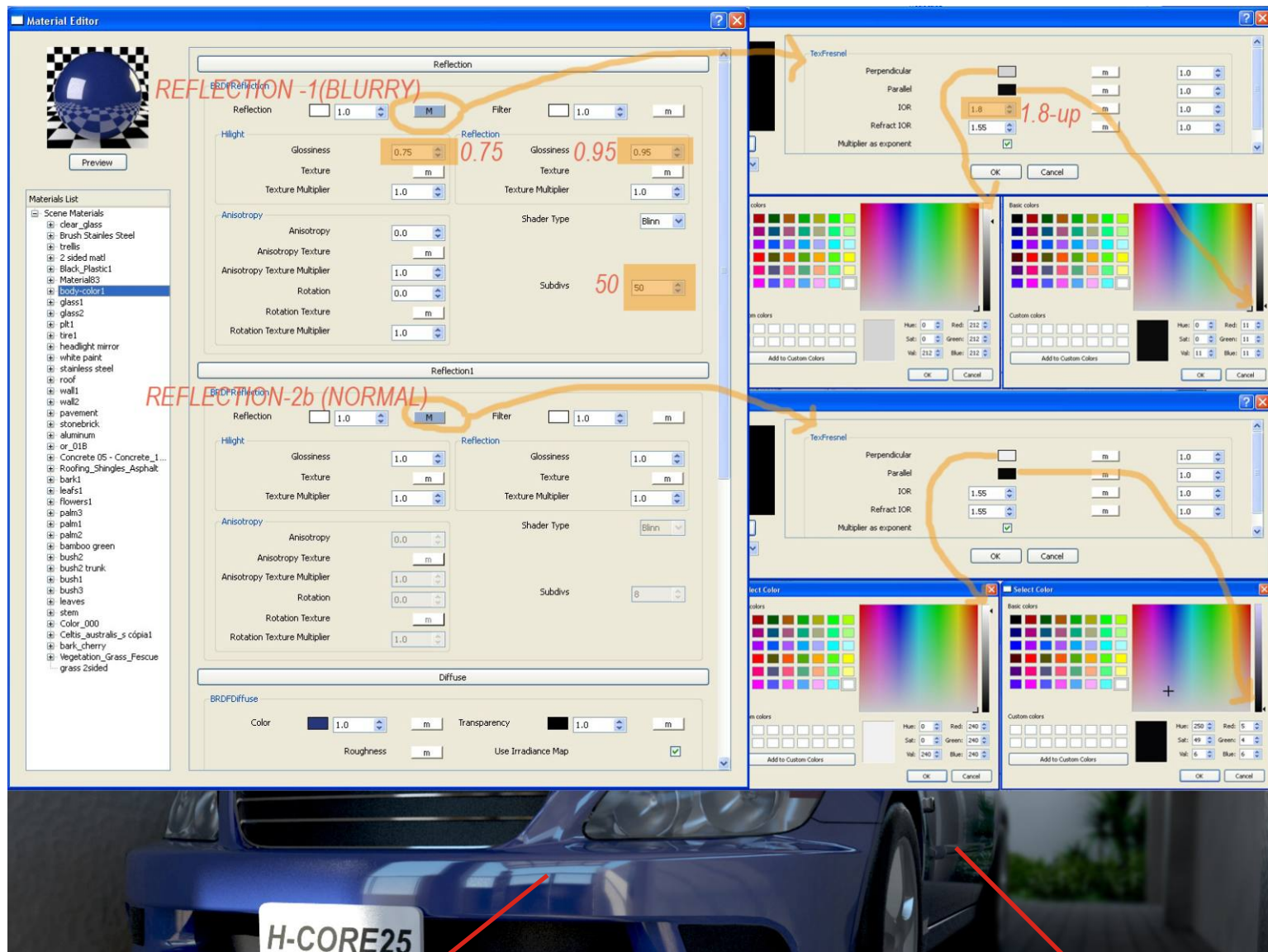
- first choose color
- then click “m” on bump map
- click the dropdown menu until you see “**STUCCO**”
- I always set it to .5 on **size** but you can change it to smaller or even higher map size. But in my case the default 1 value is quite big on the output.
- put your bump multiplier, I always assume it to be 2-5 depending on draft renders i make.
- it is always fun to experiment on this depending on your taste.

Sometimes I put reflection on wall, but this time I havent got it on because of long render times. But it doesnt matter as long as it will look good on your output. I always depend the extent of material details on the camera view wether it is noticeable or not.



For me, you get more reflection as the surface is bending towards perpendicular angle to the camera. so adjusting the black color towards white will gradually change the transparency to reflection from glass at either parallel/perpendicular position to the camera. Just always remember white means more reflections and black is pure transparency/opaque only.

To explain it further, notice the example automotive paint material below and the output i made during experimenting fresnel reflection properties. I also added some shots of my renders benefitting from this experiment.



This part here is perpendicular to the camera view so it will create more reflection based on fresnel perpendicular property value slider (white color)

This part here is almost parallel to the camera view so it will create more reflection based on fresnel parallel property value slider (black color)

As you can see, both perpendicular and parallel property under fresnel are changed, I used two reflections here by the way, but this paint set-up is used on my usual blend vray sun+sky settings so it renders differently on other settings. More of these experiments below either on metal/glass/plastic:



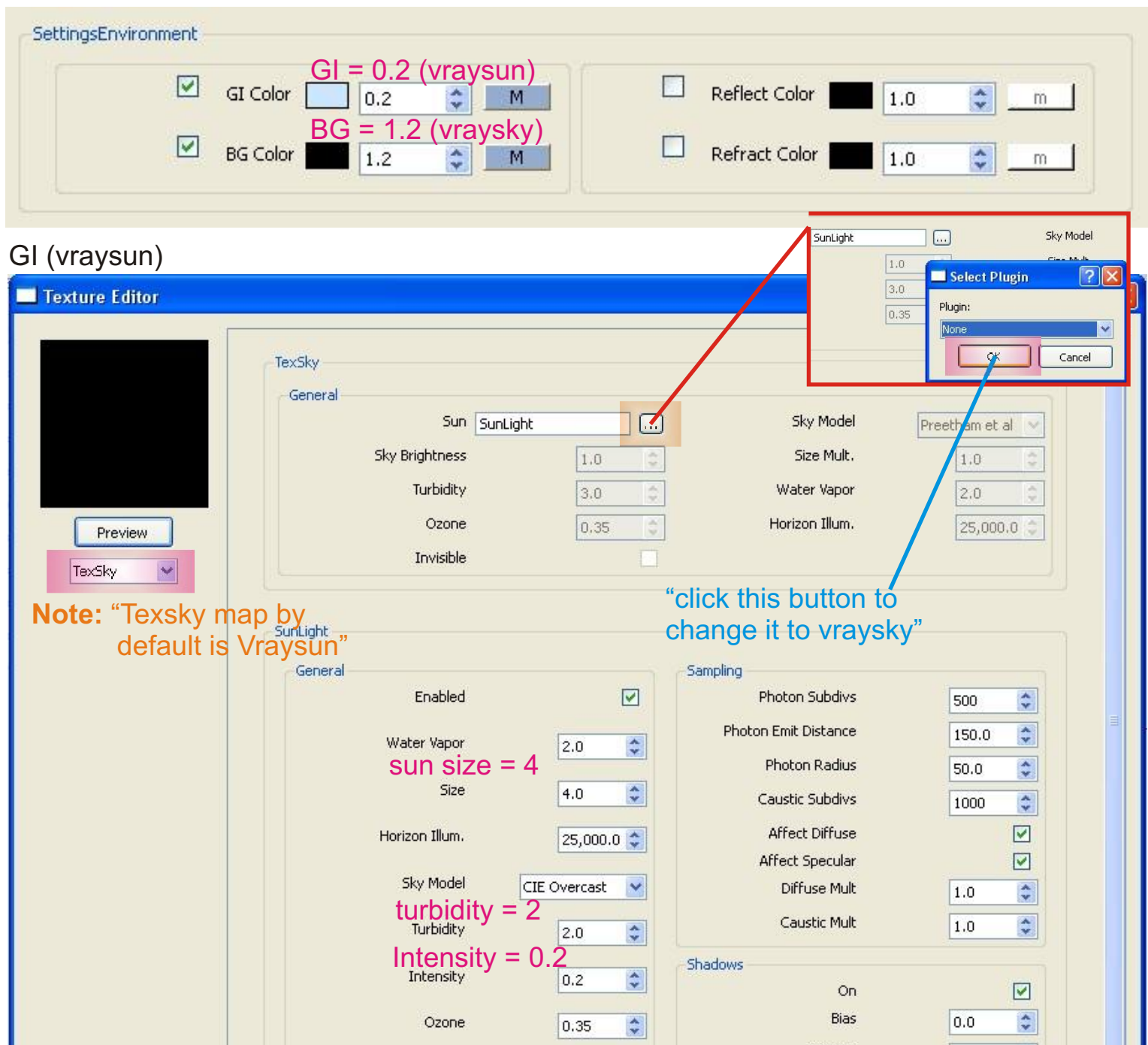
RENDERING

After roughly finishing the modelling and material texturing stage, here comes the Rendering which I find the most crucial stage where everything is quite delicate on the output.

I always render a rough draft or AO pass with override materials on but glass materials or smart tree leaves excluded. I know Sir Zernan Suarez had written about a tutorial on this process of overriding material in his Blog, just check it. But in this scene I opt to render it with my AO pass ticked on and quite small values for my Noise Threshold/Image Sampler/DMC Sampler. Here are my basic settings in the scene it is not that special, and still under experimentation but you might have improve it with your preferences though.

Environment Setting:

I always start tweaking first on my Environment setting, my aim here is to have a scene with soft shadows from GI and still with hard shadows from the Sun, I think it is more realistic that way. So, I used a blend-type setting with only vraysun on GI and vraysky (sun ticked-off) on BG.



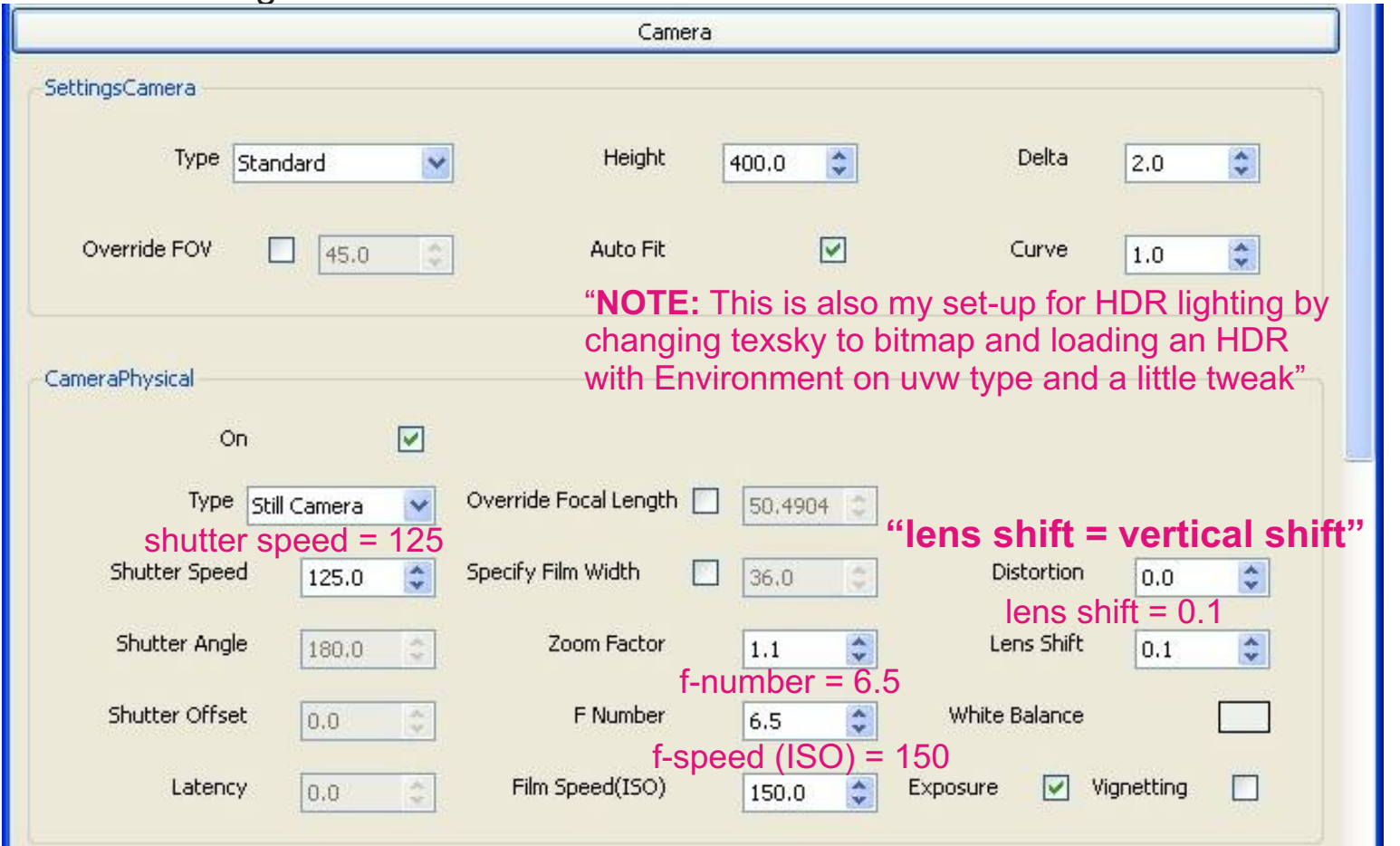
BG(VraySky)



Maybe your wondering why the setting is so unusual, It is because I prevent my Sunlight to throw in excessive intensity resulting on dark shadows, thus lowering its values and boosting the BG/vraysky will lit these parts plus providing soft shadows and better reflections.

Always remember using this type of setting is so difficult that it requires a lot of trial and errors, even I haven't found my perfect set-up yet because I still got parts that are dark and parts that are overexposed/reflected. Remember that strong light/shadow comes from the GI and soft light/shadows comes from the BG. You just have to carefully blend the two for a desrable effect.

Camera Setting:



At this point, my camera set-up is quite bright than that of the default. It is set this way to compensate with the adjustments I made in the environment setting and preventing over exposed areas from the Sunrays and boost reflection and soft shadow from the BG. Other artist changes vraysky to an HDR, both work the same but some HDR do require more multipliers or vice versa.

Samplers and Tresholds (IR/LC and others not here are default)

Image Sampler

Image Sampler

Type

Adaptive DMC

Min Subdivs

1

Max Subdivs

8

Color Threshold

0.002

Antialiasing filter

☒

Catmull Rom

Size

1.5

Adaptive DMC

color treshold =0.002

DMC Sampler

SettingsDMCSampler

Adaptive Amount

0.85

Noise Threshold

0.002

Path Sampler

Schlick

Min Samples

8

Subdivs Mult

1.0

noise treshold =0.002

Color Mapping

SettingsColorMapping

Type

Reinhard

Bright Multiplier

0.8

Gamma

2.2

Clamp Output

☐

Correct LDR Textures

☐

Affect Background

☒

Adaptation Only

☐

Dark Multiplier

1.0

Input Gamma

2.2

Clamp Level

1.0

Correct RGB Colors

☐

Sub-Pixel Mapping

☒

Linear Workflow

☒

Reinhard

Indirect Illumination

SettingsGI

GI

On

☒

Reflective GI Caustics

☐

Refractive GI Caustics

☒

Post-Processing

Saturation

1.0

Contrast

1.0

Contrast Base

0.5

Save maps per frame

☐

Ambient Occlusion

On

☒

Radius

10.0

Subdivs

8

Amount

0.8

Raw Render



Raw Render
(w/o correction)

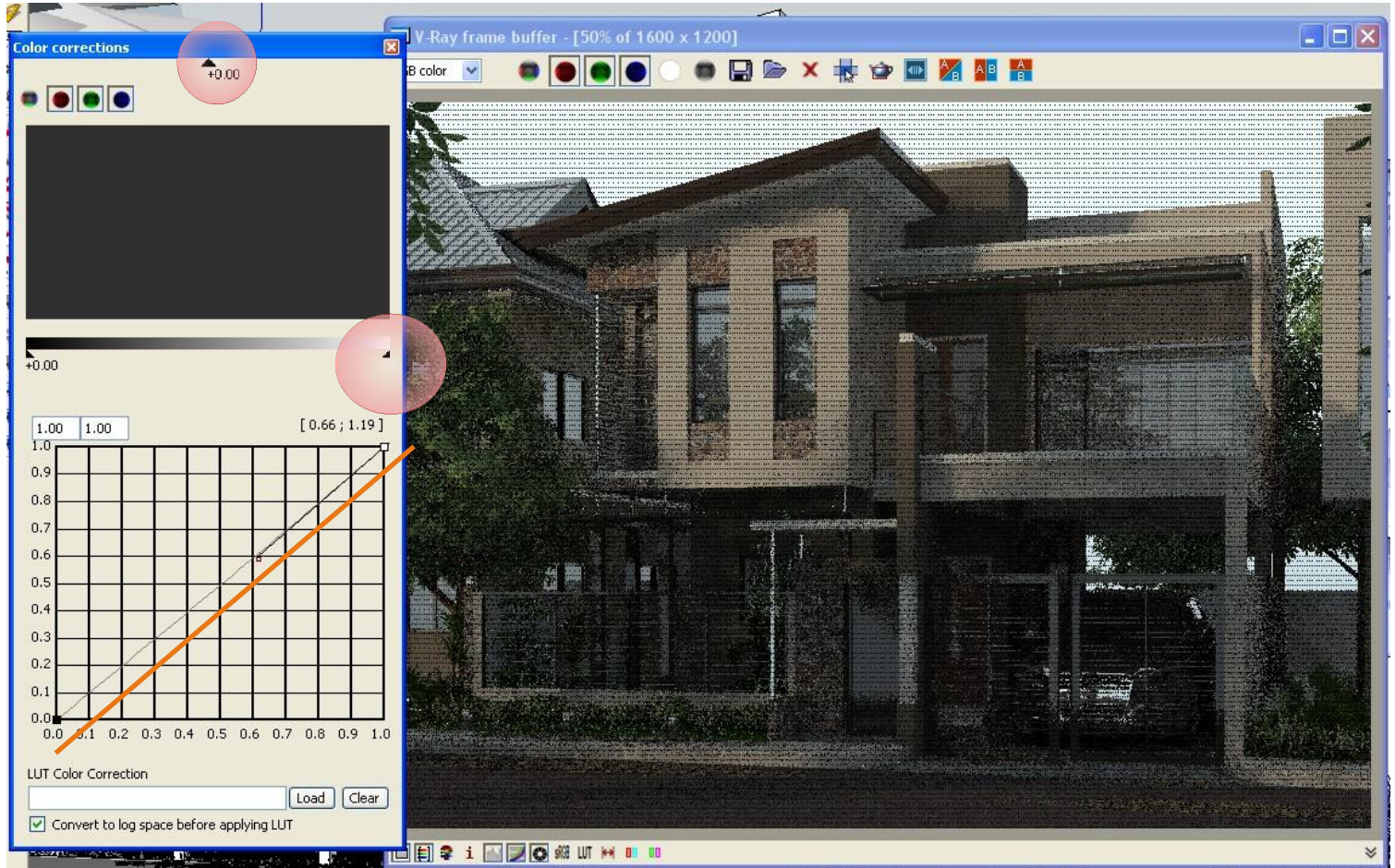
NOTE: I used 1200x1600 resolution for this render.

Raw Render
(color corrected)

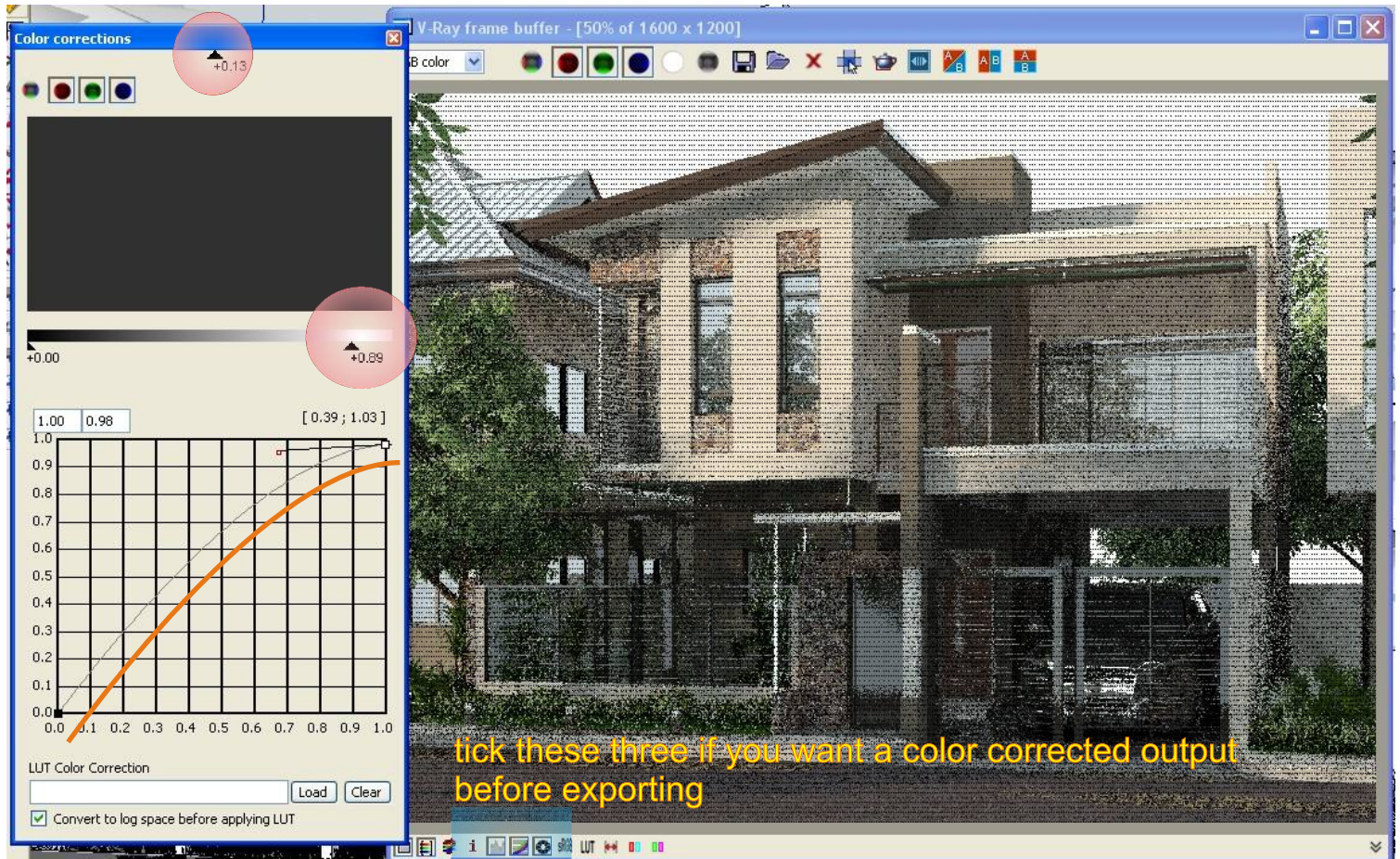


This is the raw render without correction, I'm not even sure here if this is linear. It's a bit dark than expected due to the fact that I've used lower sun intensity and bright values for camera setting and compared to the ones I rendered with only using vray sun on both BG and GI. I don't know if I am making it right but, I use the color correction in Vray Frame Buffer itself or fixed this on PS. Either way you can still arrive with a more color corrected output. The succeeding images will further explain my statement here:

Raw Render Preview without color correction on VFB



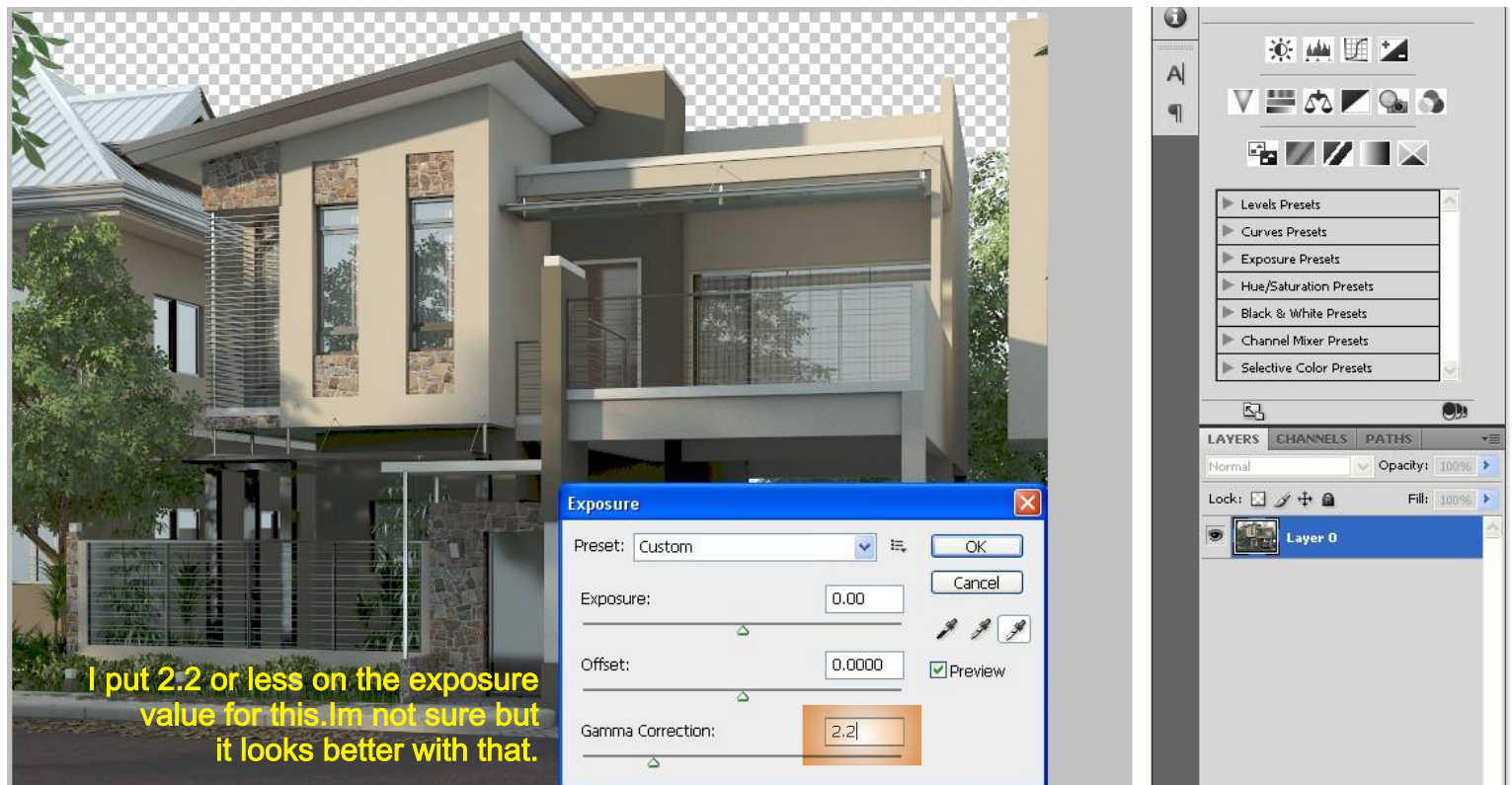
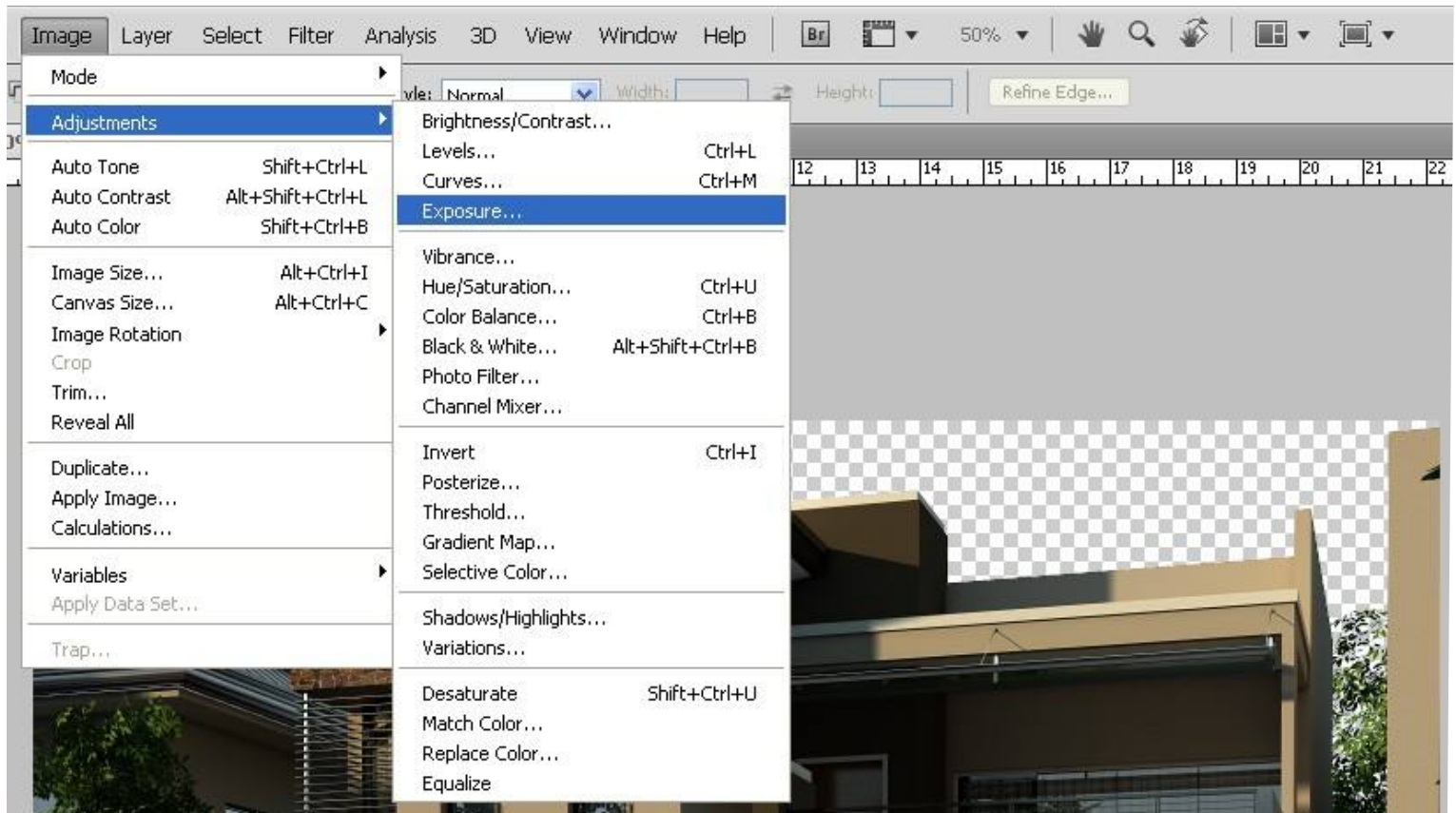
Raw Render Preview after color correction on VFB



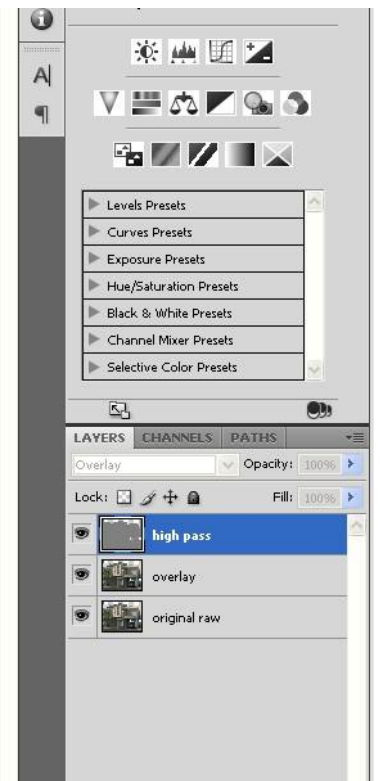
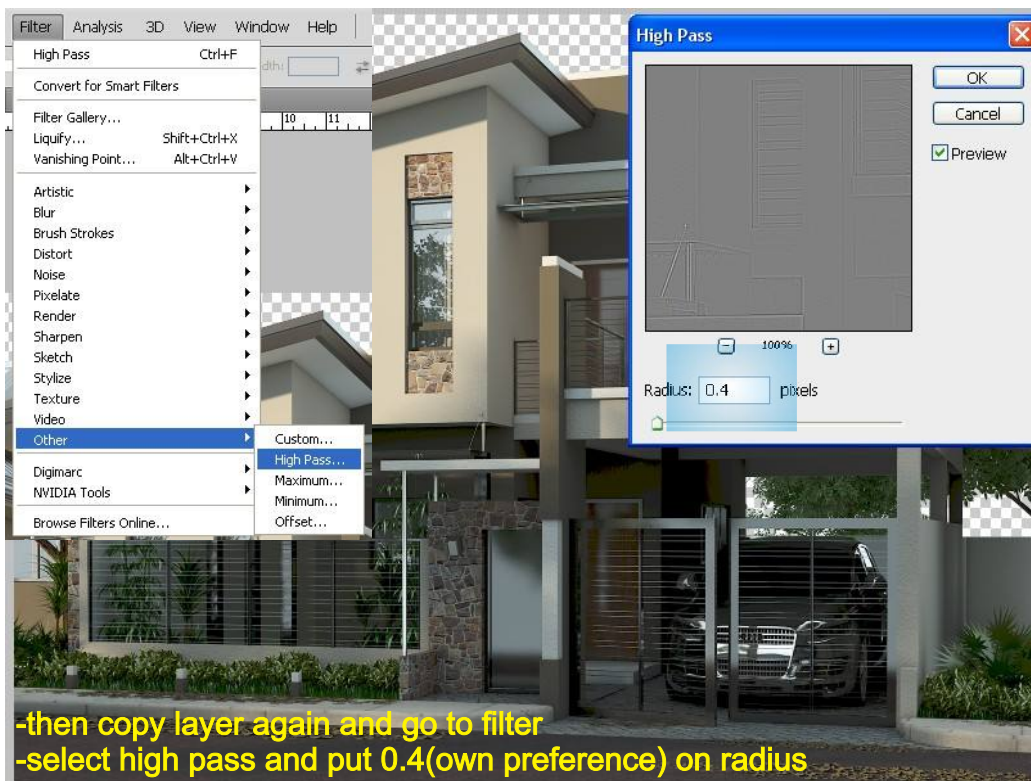
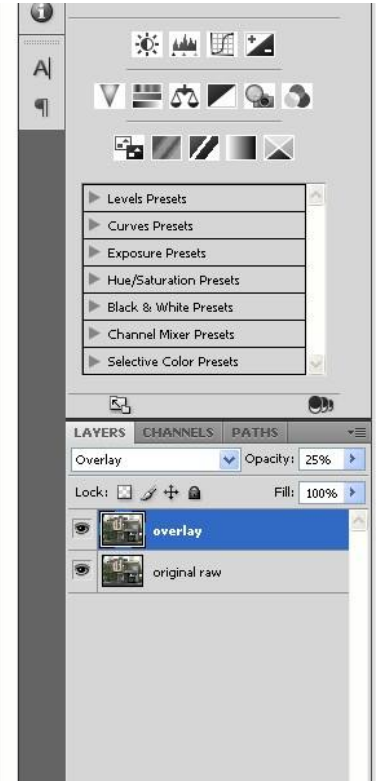
Post-Processing

The post-process I've done so simple I just open up my Raw-Render on PS either corrected or not. The images below will show hoe I do it..

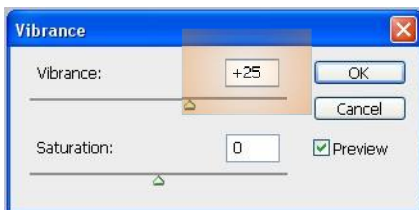
Uncorrected Raw Render:



Layers in Photoshop



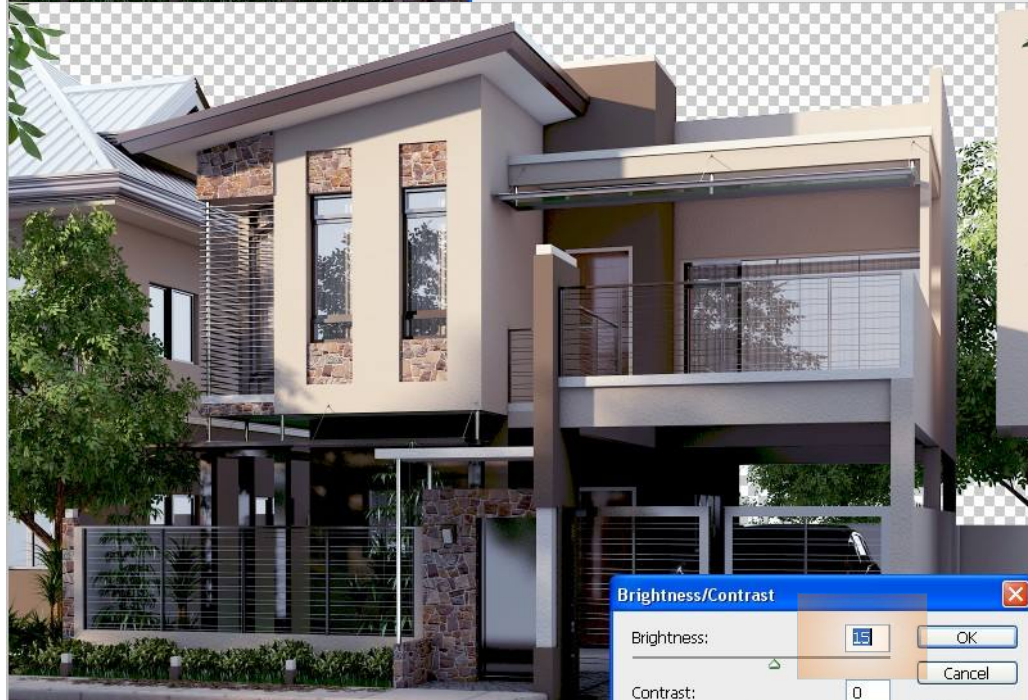
If your already happy with the result its time to merge all files. Remember you may repeat all the steps above, but overdoing it may ruin your image so take it one step at a time and be carefull on putting values. At this point you must at least have rested your eyes for a while the next steps are all about colors and tones so lets continue..



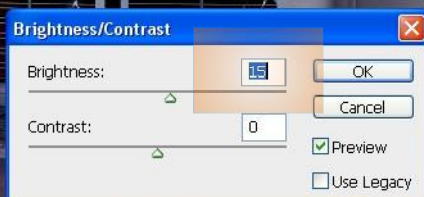
-add vibrance = 25



-add color balance

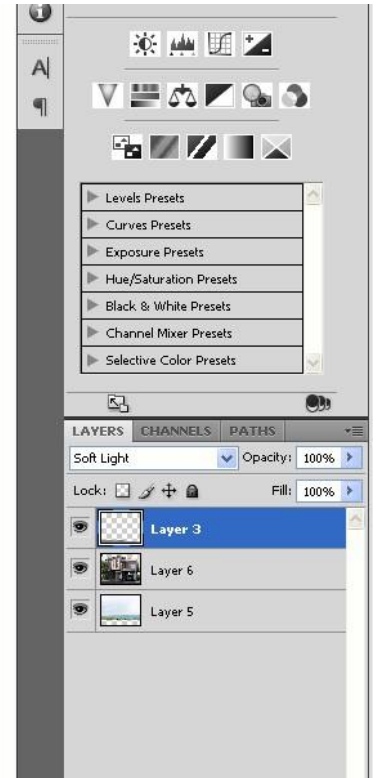
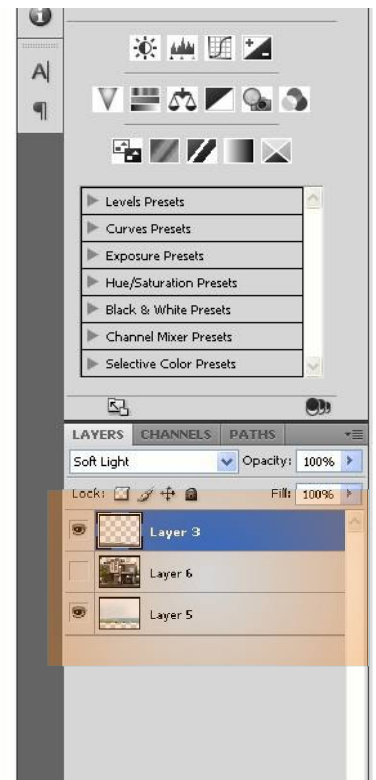


-check brightness and contrast



- finally put Background image and tweaked levels, brightness, color balance to match render image.
- I added a road texture and set blending mode to overlay

Here is the final render is ticke-off to show BG and Road Overlay



That's all for my project, I hope you guys learned something useful. If you have any questions you may free to post at our facebook group Sketchup-Vray Artist.

Thanks and god Bless!

Jonald M. Magistrado, uap

