



# **Far From Here Studio**

## **Showcase: HDRP Environment**

Need Unity version 2023.2+

DX12 Raytracing - need a raytracing-capable device to navigate the demo with the best reflection quality.

Far From Here Studio is happy to present you the HDRP Showcase project used to demonstrate the capabilities of Unity to build a scene from scratch a full scene using AI generated texture and Unity's resources, presented in partnership with the Unity AI team during a Webinar session and at Unite, this project was used for a Live demo and records. In this demo, everything is textured using AI-generated textures using Muse, except for the vegetation.

## Important Disclaimer (AI product):

[Muse Texture and Muse Sprite](#) are out of beta and these Unity AI products are [now available under subscription](#).

Muse Texture and Muse Sprites packages are included in the project, but to access **Muse tools** ( Muse > New Sprite Generator, Muse > New Texture Generator, or Muse > Style Trainer) you will need to create your own account and activate a subscription.

Unity offers a 15-day free trial to use Muse products, so you can give it a shot.

The Demo's textures under "Generated Texture" and "Generated Sprites" folders were generated by Far From Here Studio, note that the Muse's TextureGeneration source assets are not included.

Some of the textures were manually repacked to be used as *Terrain Layer*, as *Decals* or as *MaskMap* in HDRP Lit materials.

Feel free to use all of this already generated content to build your own setup from this template project.



Made in a few days, using Muse Texture and Sprite (beta version) available a few months ago, this Demo project aims to show how powerful the model was during the beta version combined with HDRP capacity, to get fast we used some external assets to create this demo.

Some of the content, mostly Models and Shaders used in this demo are from various sources, isolated and integrated into the project as third party content, follow the installation Guide Video and the 5 step of setup in order to benefits from the full demo :

[https://youtu.be/ENdeZ\\_H2WOA](https://youtu.be/ENdeZ_H2WOA)

5 steps to setup from new 3D project :

1. Import FarFromHereStudio Showcase: HDRP environment
2. Run the HDRP wizard to setup HDRP+DXR (use the HighQuality HDRP asset)
3. Import Terrain Sample Asset Pack (free) from your asset store account  
<https://assetstore.unity.com/packages/3d/environments/landscapes/terrain-sample-asset-pack-145808>
4. Import the Unity Terrain - HDRP Demo Scene (free) from your asset store account  
<https://assetstore.unity.com/packages/3d/environments/unity-terrain-hdrp-demo-scene-213198>
5. Import the UnityPackage in :  
Assets/FarFromHere/SampleEnvironment/UnityPackage/DemoMaterials.unitypackage

## Unity Resources used in the Demo Scene :

- [\*\*Unity Terrain Samples Asset Pack\*\*](#)  
→ Terrains detail vegetation and stamps
- [\*\*Unity Terrain - HDRP Demo Scene\*\*](#)  
→ 2 Rocks models  
→ tri-planar projection ShaderGraph.

Note:

- . The “Seahorse Statue” (sketchfabAsset) from makerting presentation is not included in the demo
- . All of this content was modified using AI generated textures, and using various techniques/HDRP materials like the Vertex Painting using [Polybrush](#) and Layered Lit Tessellated Shader from HDRP.



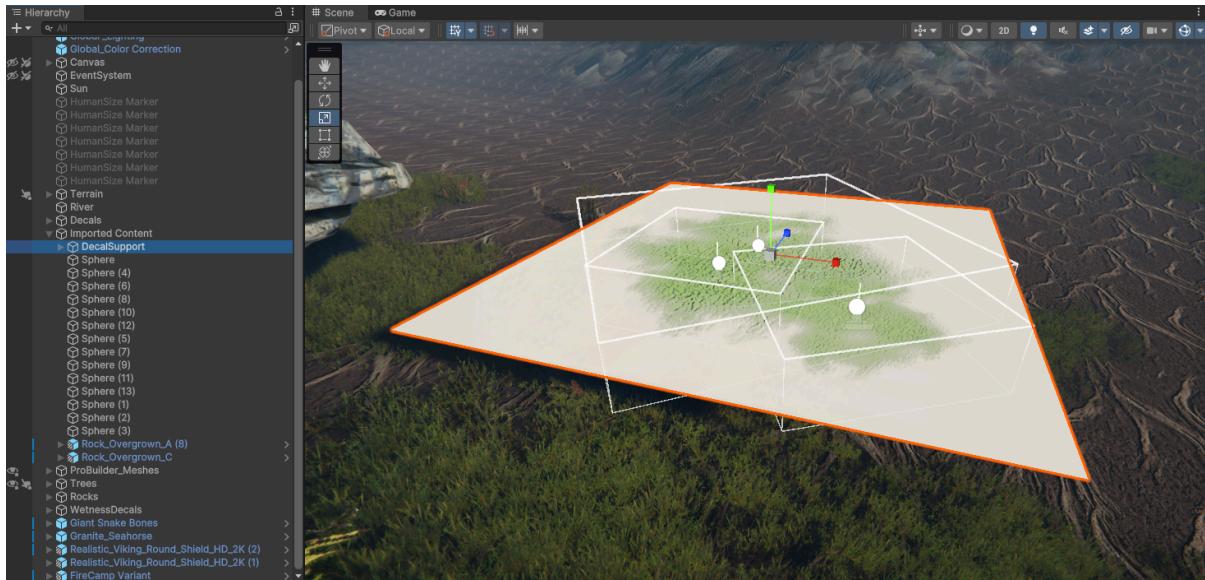
## Demo Scene :

The point of this demo project is to provide learning material to the Unity community while using both AI generated samples used in a world-building context.

The second purpose of this demo is to provide a base template to build futur tutorials and community content.

## Demo Features showcase:

- Decals



Decals allow the application of Moss generated using Muse on any other mesh.  
Decal “mask” (alpha) manually painted in Krita.

- Layered Lit Shader and Vertex Painting

Another way to add Moss to a Mesh is by using Polybrush to paint the vertex of a mesh prepared with a Layered Lit material.

In the scene, you can find two GameObjects that can be painted, the giant snake skeleton and the SeaHorse statue.



To paint these meshes with moss, open Polybrush:

Tool > Polybrush > Polybrush Window

Then select the vertex paint mode, and pick black or white color to add or remove the moss layer.

Vertex Color Tips:

Each 3 first layer are corresponding to RGB color channel and layer0 is the default value, so users can choose to pick Red to paint layer1, Green to paint layer2 and Blue to paint layer3.

In this setup there is the base layer (Bones) and the second layer (Moss) so painting Red should produce the moss to be apply on the meshes too.

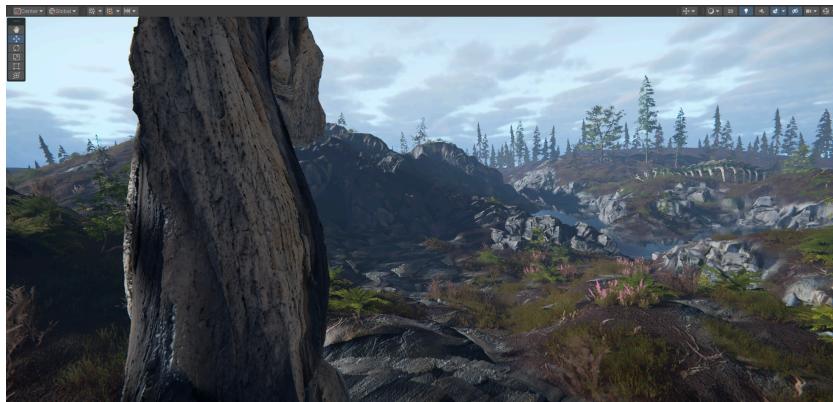
- Triplanar Projection HDRP Lit materials

Muse doesn't generate directly the MaskMap we need for the Lit HDRP shader. In this demo, all the MAOS or MAOHS textures were repacked by Far From Here when it was needed to use the HDRP Lit shader features

MOAHS channel packing:

M = metallic(r)  
 AO=ambiant occlusion(g)  
 H=height(b)  
 S=smoothness(a)

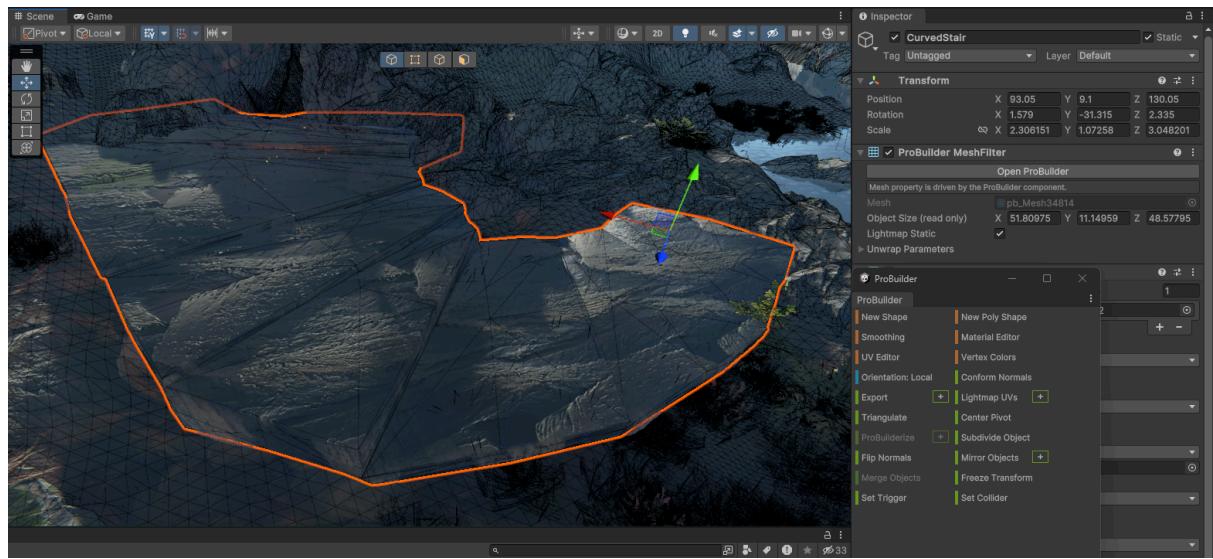
Note: TerrainLayer uses this convention too. An interesting feature in the Lit shader is the tri-planar projection (UV mode), which works great using Muse textures because they are tillable by default. This feature allows to use of a Lit material on pretty much every object like rocks or Probuilder mesh.



Note: The two rock prefabs placed across the entire scene are using a ShaderGraph that use tri-planar (object space) projection and an additional provided LayerMask and Normal map.

- Lit materials using Heightmaps and Tessellation

Lit and Layered Lit can have tessellation feature enabled, which allows, using the generated heightmap from Muse, to have highly detailed-looking object without having complex mesh to support it



In order to have a nice Tessellation effect on our Probuilder meshes, we can use the *Subdivide* and the *Smoothing* function of Probuilder that will set up your mesh to not be “cut” on the edge by the tessellation and with richer detail from the mesh deformation produced by the height map and the tessellation feature.

Navigate the Demo and inspect gameObject materials to find the application behind these explanations.

Hugo - Far From Here founder

## Contact:

For any question or requirement

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