FOOD PLANT ENGINEERING ARCHITECTURE VISUALIZATION

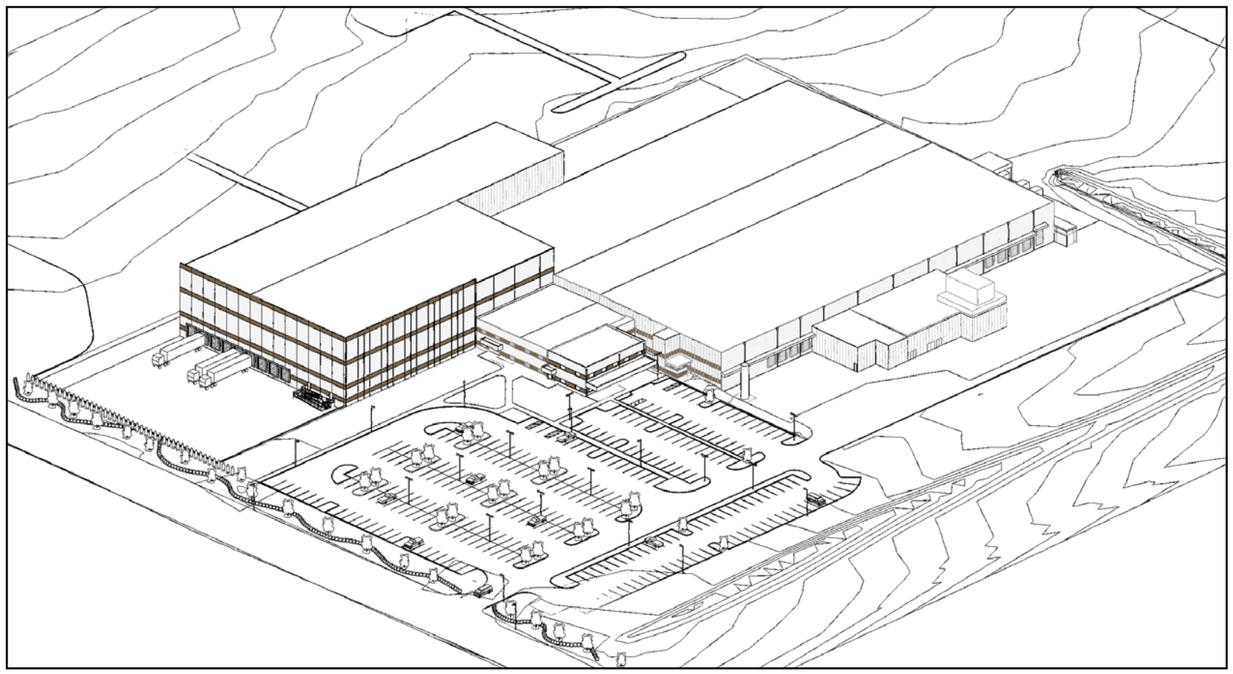
PROCESS DOCUMENTATION

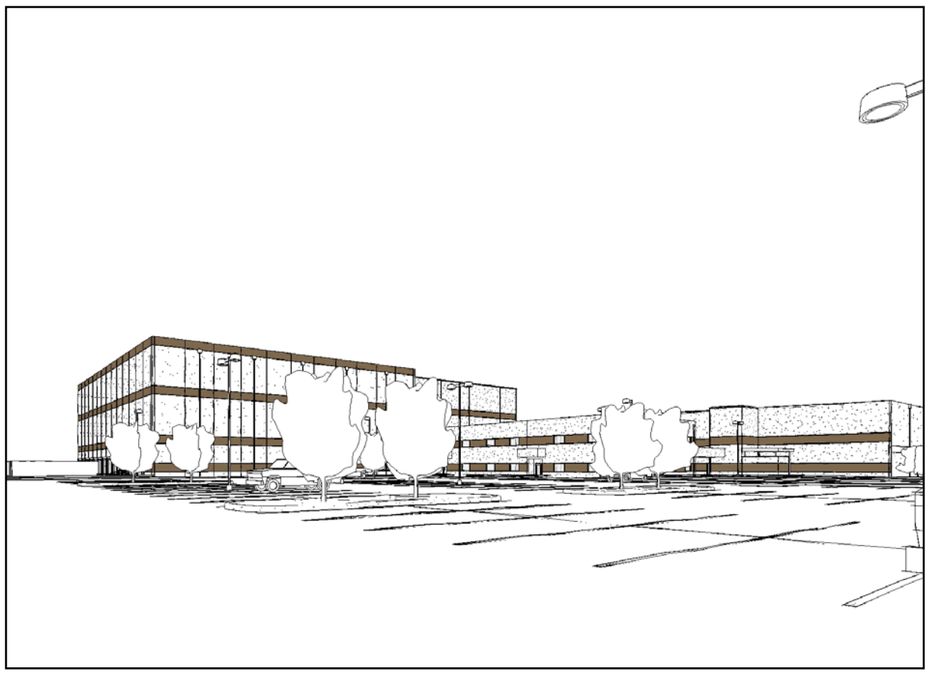
PROJECT STATEMENT

The company Food Plant Engineering, LLC requested a more realistic rendering for the remodeling of a food plant owned by Fresh Express. Building models were obtained from the engineering team, and texturing/lighting work was done with Octane Render in Cinema 4D with the help of Substance Painter.

The visualization appeared at multiple trade shows to showcase the team’s future projects.

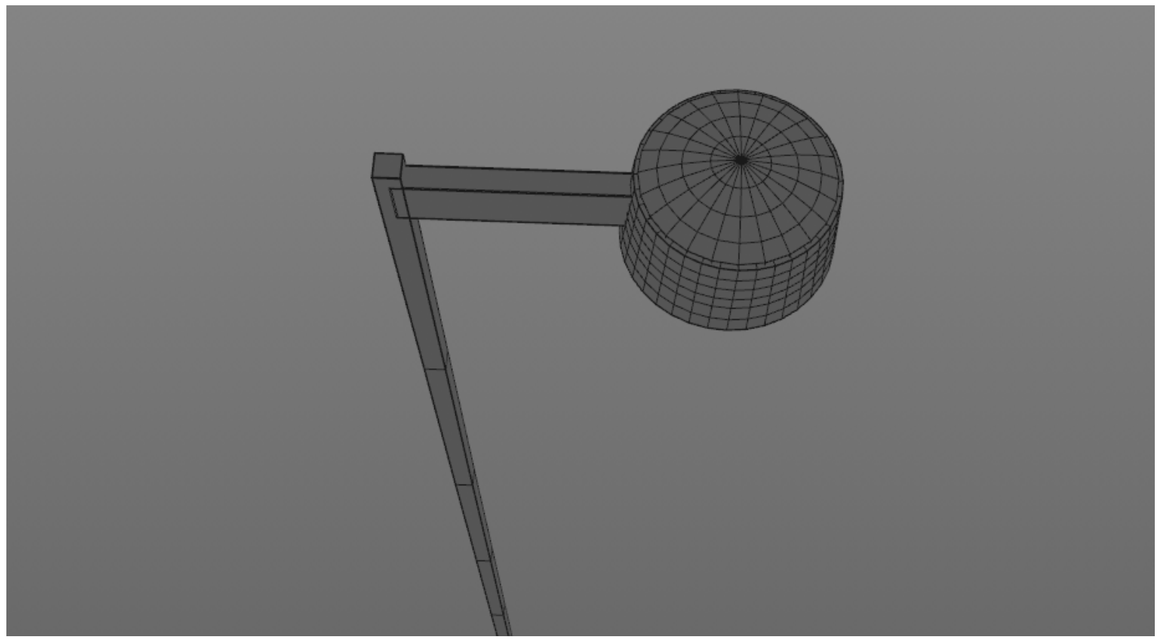
PRELIMINARY RENDERS

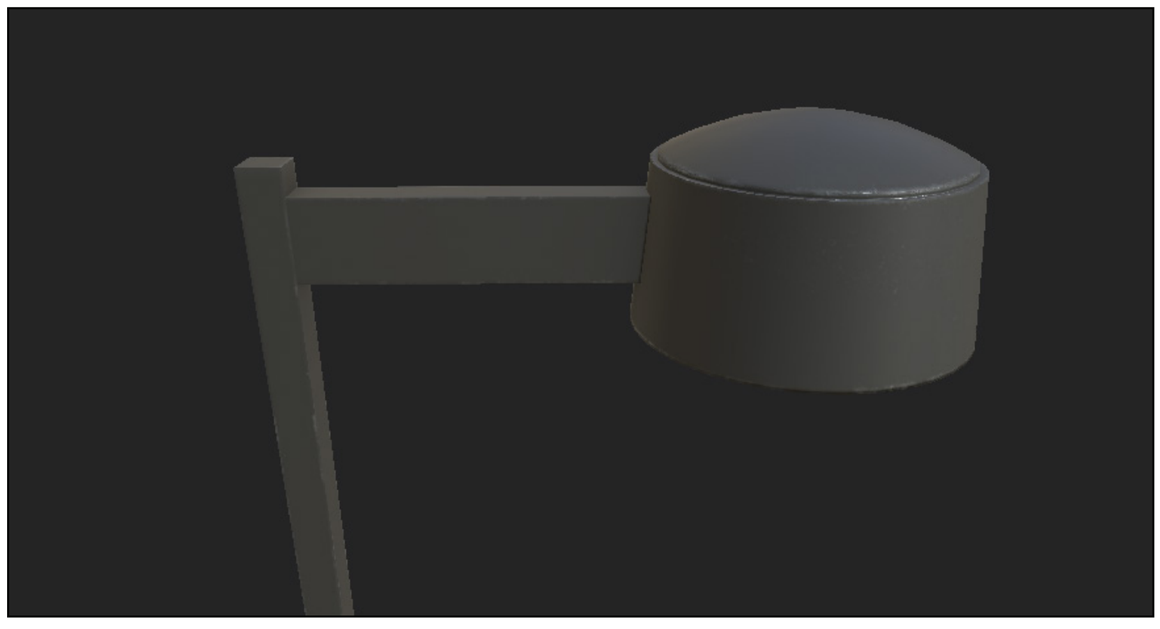


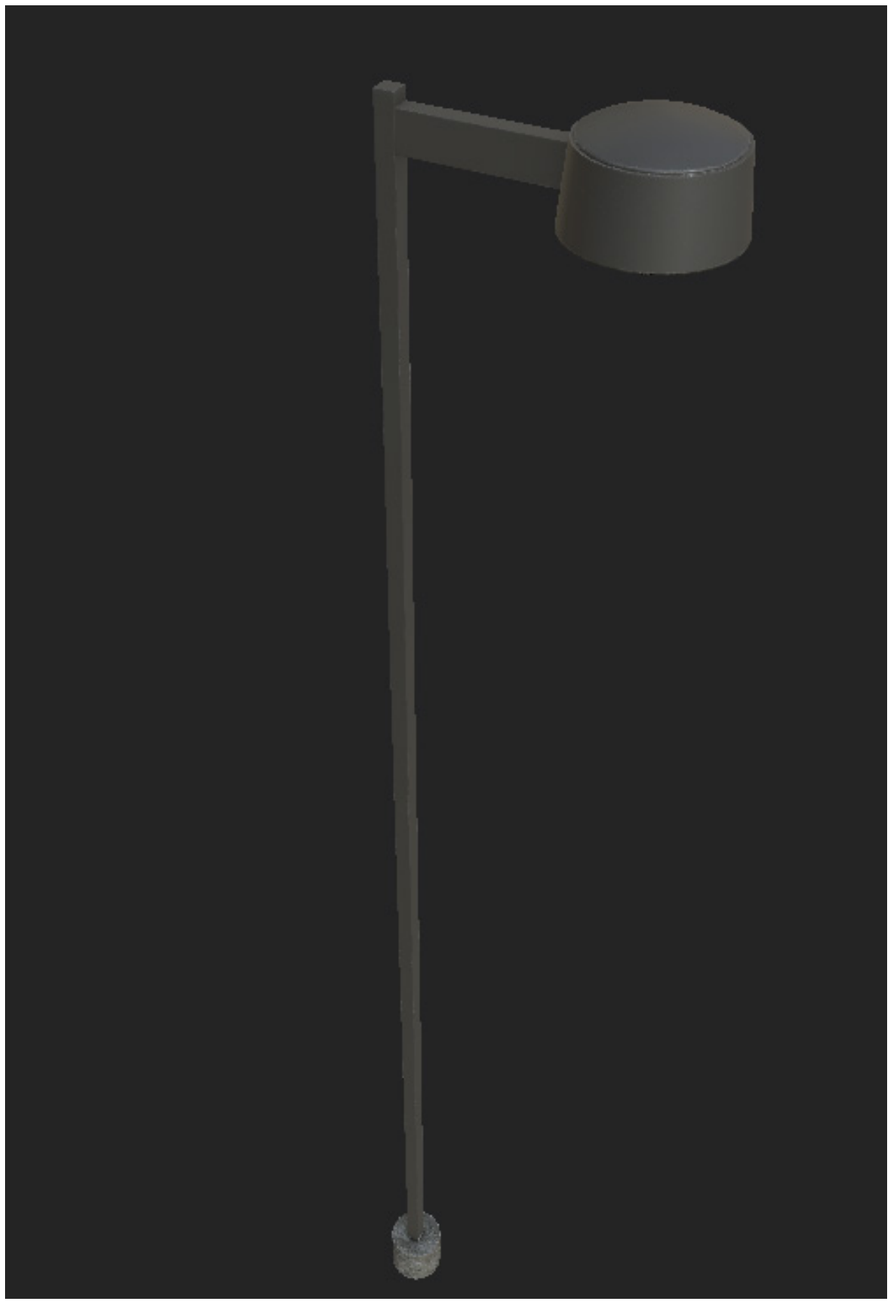


Preliminary renders from Revit were given by the engineering team. Other material information was obtained from the engineering team to help correctly match materials, maintain structural accuracy, and focus on the most important parts of the building.

ASSET CREATION

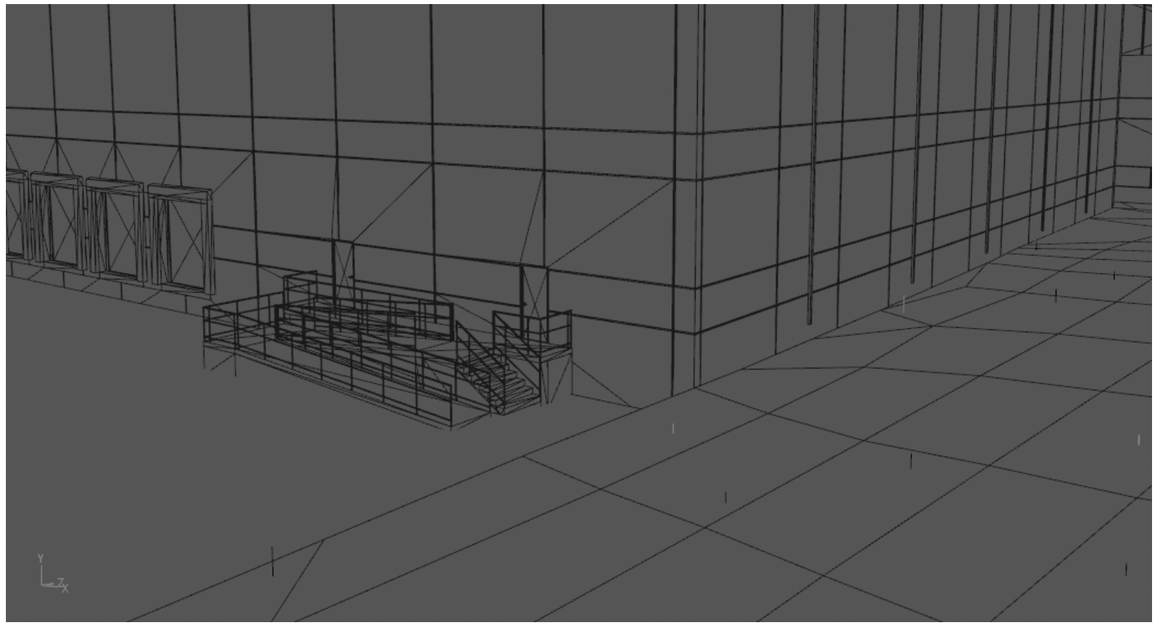


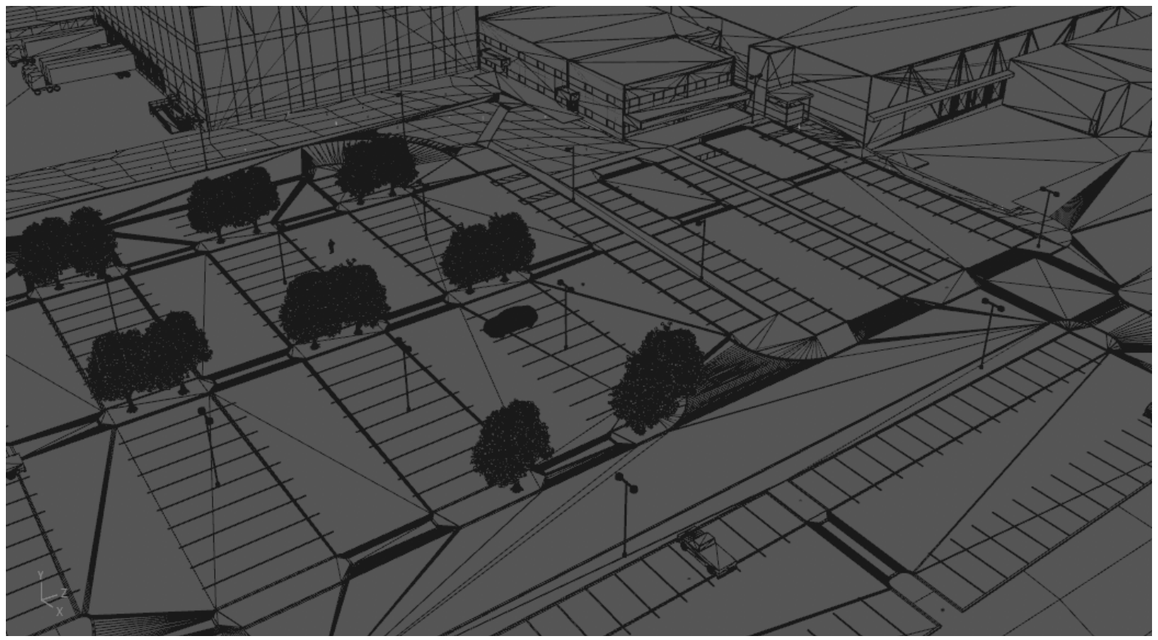


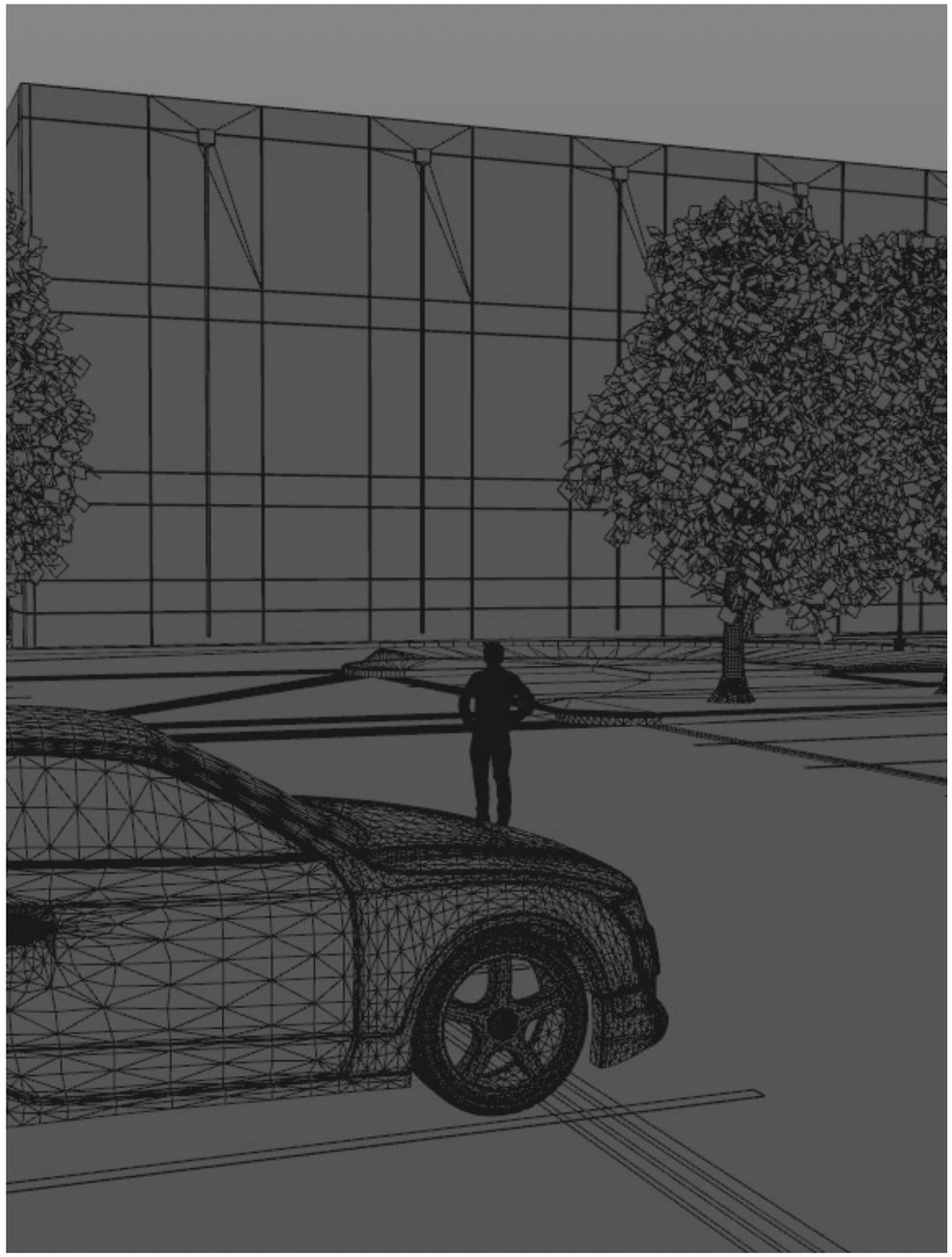


The majority of assets in the scene worked at a distance, but the objects close to the camera needed higher fidelity. A streetlamp was created in C4D and textured in substance painter, and similar techniques were utilized for other assets.

SCENE ASSEMBLY

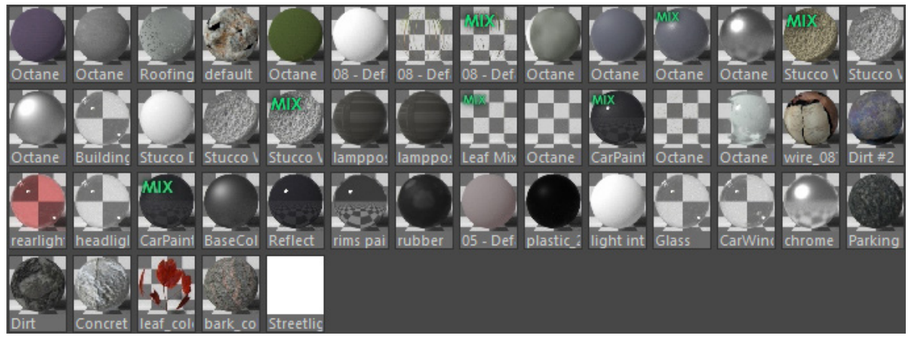


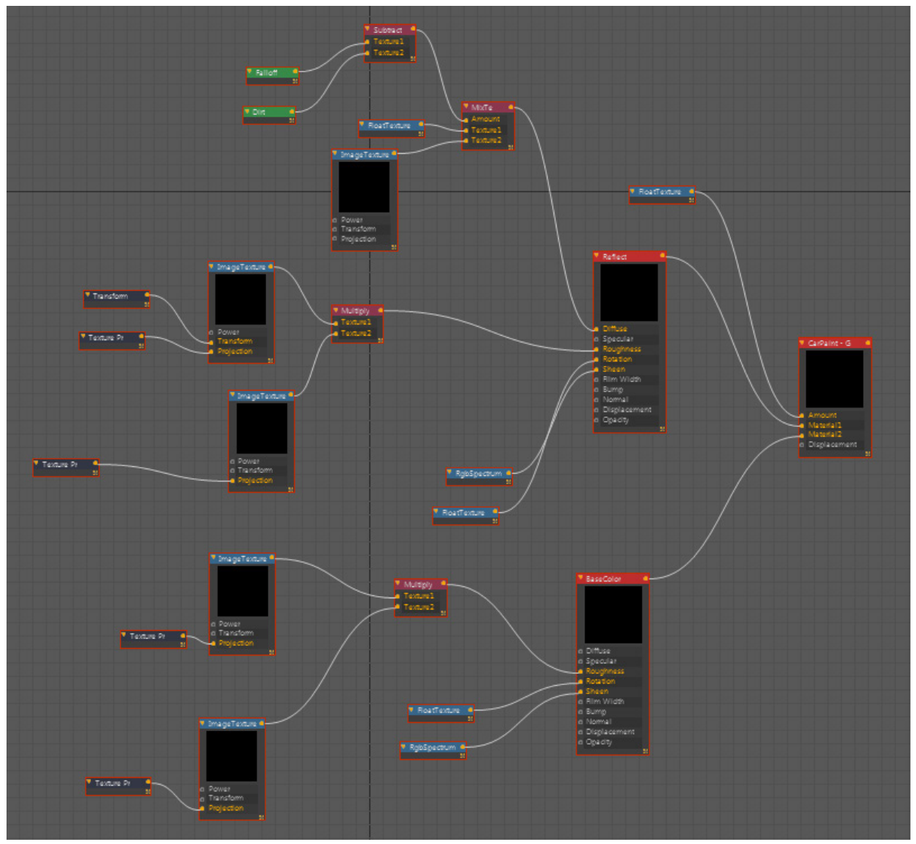




The scene was made more believable with trees, leaves scattered in the lot, grass, and dirt. These assets were obtained from Quixel Megascans and Xfrog, then scattered using Octane scatter.

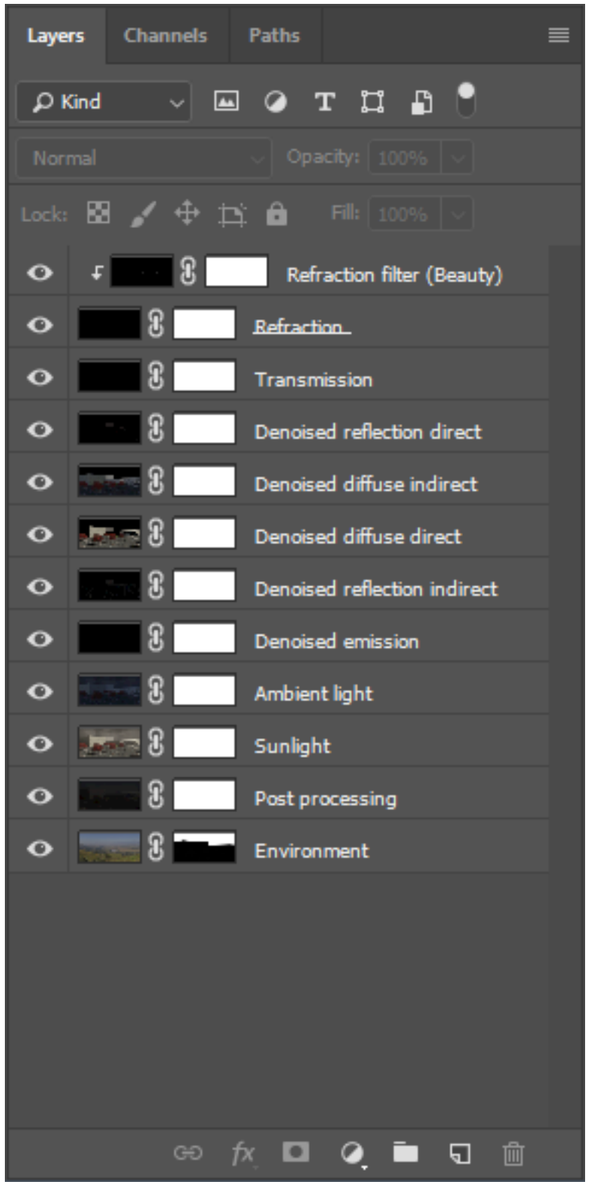
MATERIAL CREATION





Photorealistic materials were created using a variety of techniques,, layering, and tiling to hide patterns on larger surfaces. Texture maps were obtained from Quixel Megascans and Poliigon, and edited within Octane's node-based material system. Custom texturing was done for all objects in the scene.

COMPOSITING AND POST-PROCESSING



Multiple render passes were used to adjust various parts of the image. Sunlight and ambient light was adjusted heavily in post to add realism to the scene without losing highlight details.

FINAL RENDER