



How To Create Material Palettes, Create Materials, Apply Materials To Wireframes, And Ray Trace Rendering

USING MICROSTATION V8

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Locating the Material Palette

The screenshot displays the MicroStation V8 2004 Edition interface. The main window shows a 3D rendering of a road scene with various materials. The **Render** dialog box is open, showing settings for Target (View), Render Mode (Ray Trace), and Shading Type (Antialias). The **Material Editor (Advanced Mode)** dialog box is also open, showing a list of materials in the Palette (rich.pal) and the Material Editor (grass2). The Material Editor settings include Efficiency (170), Color (100), Diffuse (159.5), Translucency (0), Specular (20), Reflect (0), Finish (20), and Transparency (0). The Material Editor also includes options for Refract, Bump, Ambient, Casts Shadows, and Global Illumination. The Material Editor Preview window shows a small preview of the material.

The **View** menu is open, showing options for Manage, AccuDraw, Color Table..., Database, Design File..., Level, Locks, Camera, **Rendering**, Snaps, View Attributes, View Size, Setup, Global Lighting, Source Lighting, **Materials**, Ray Tracing, Radiosity, and Particle Tracing. Red arrows point to the **Rendering** and **Materials** options in the View menu, and to the **Render** dialog box.

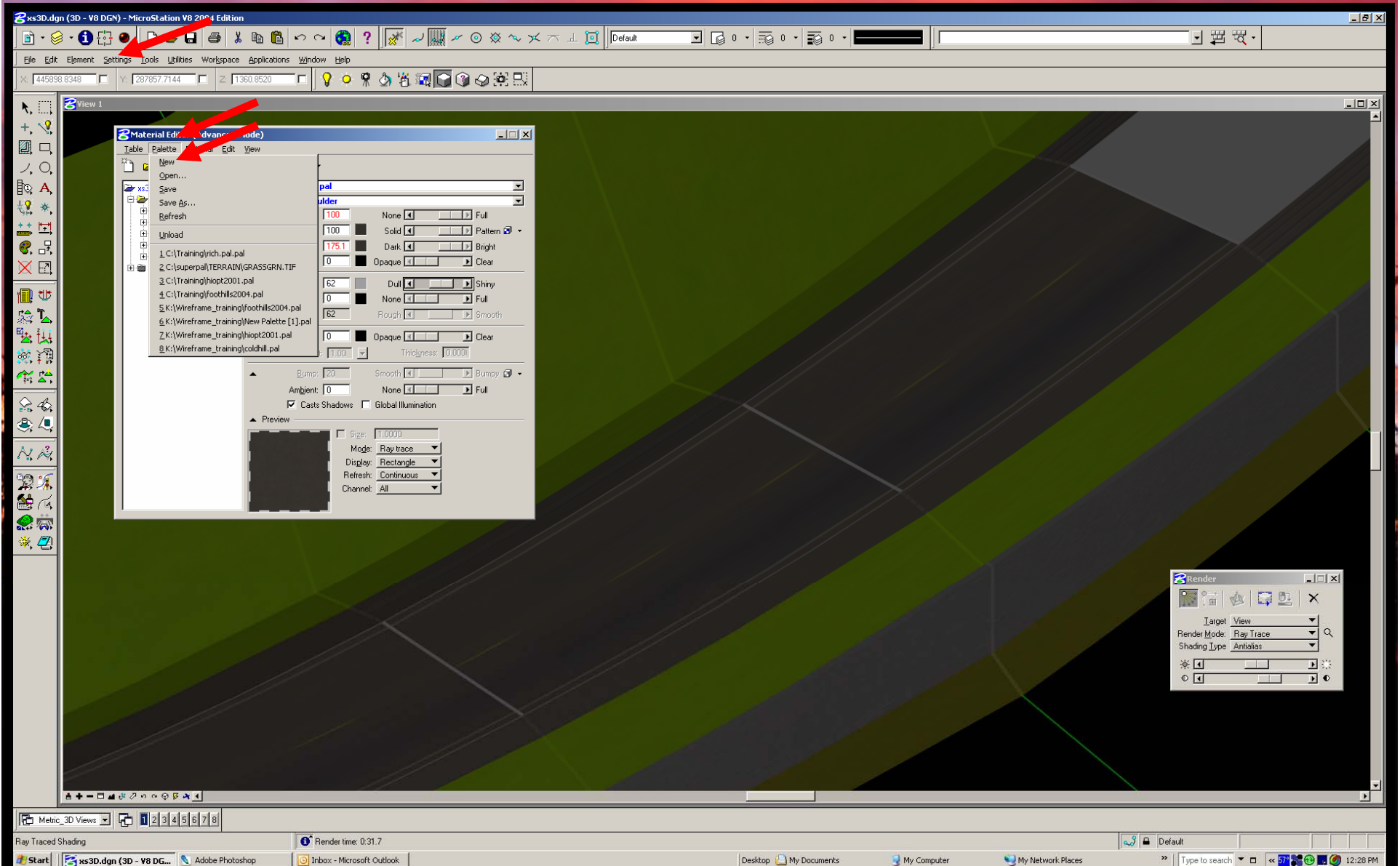
The **Material Editor (Advanced Mode)** dialog box shows the following settings:

- Palette: rich.pal
- Material: grass2
- Efficiency: 170
- Color: 100
- Diffuse: 159.5
- Translucency: 0
- Specular: 20
- Reflect: 0
- Finish: 20
- Transparency: 0
- Refract: 1.000
- Bump: 20
- Ambient: 0
- Casts Shadows:
- Global Illumination:

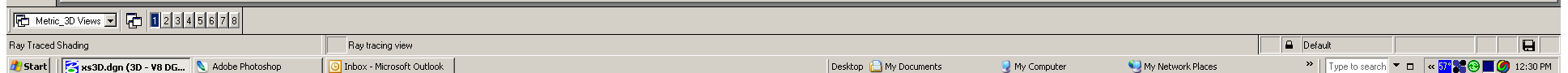
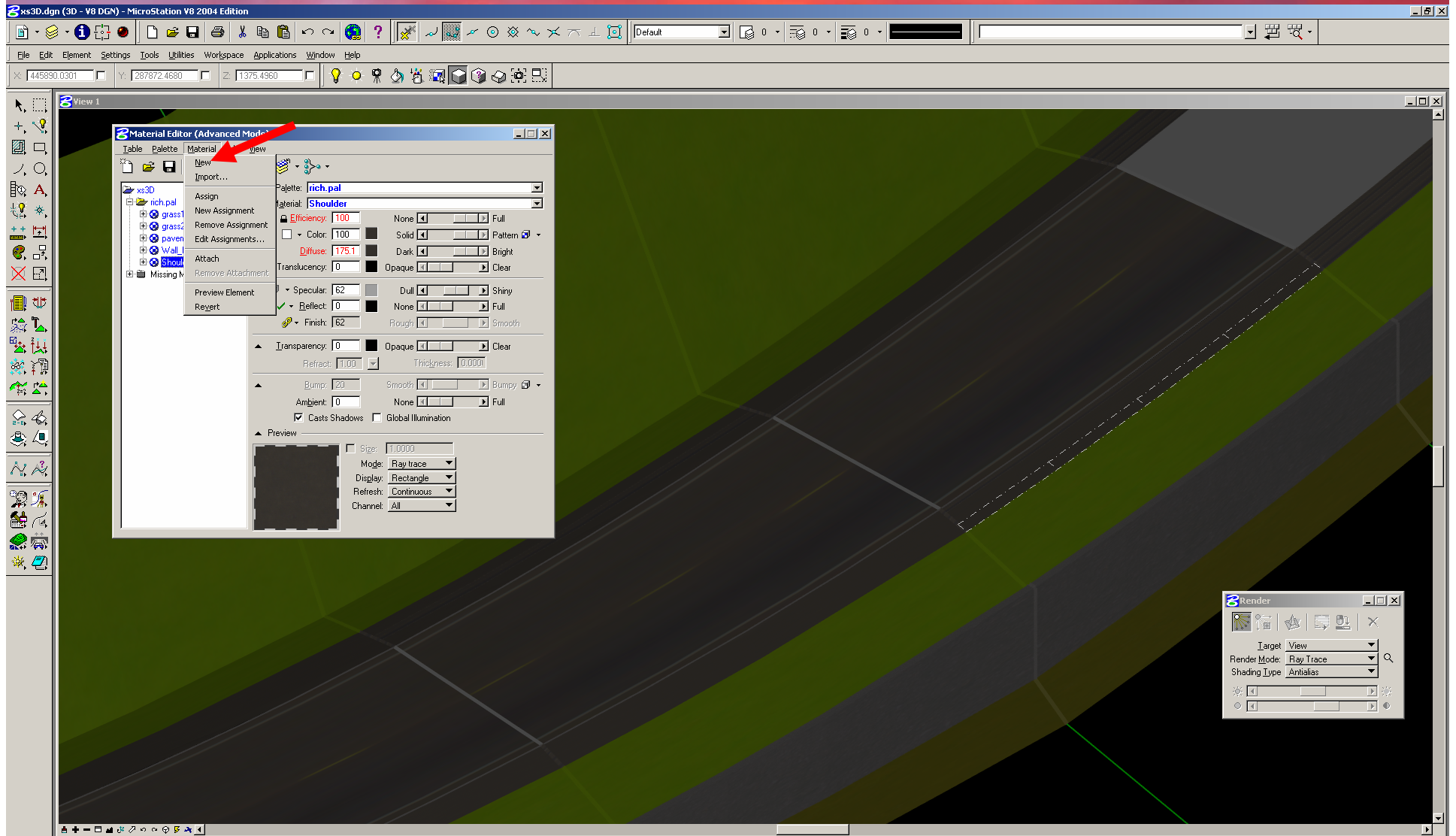
The **Render** dialog box shows the following settings:

- Target: View
- Render Mode: Ray Trace
- Shading Type: Antialias

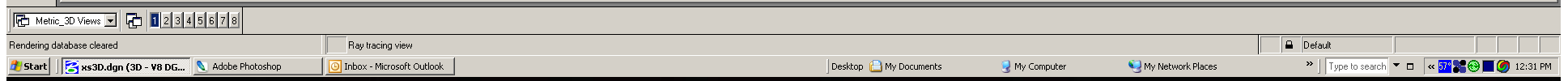
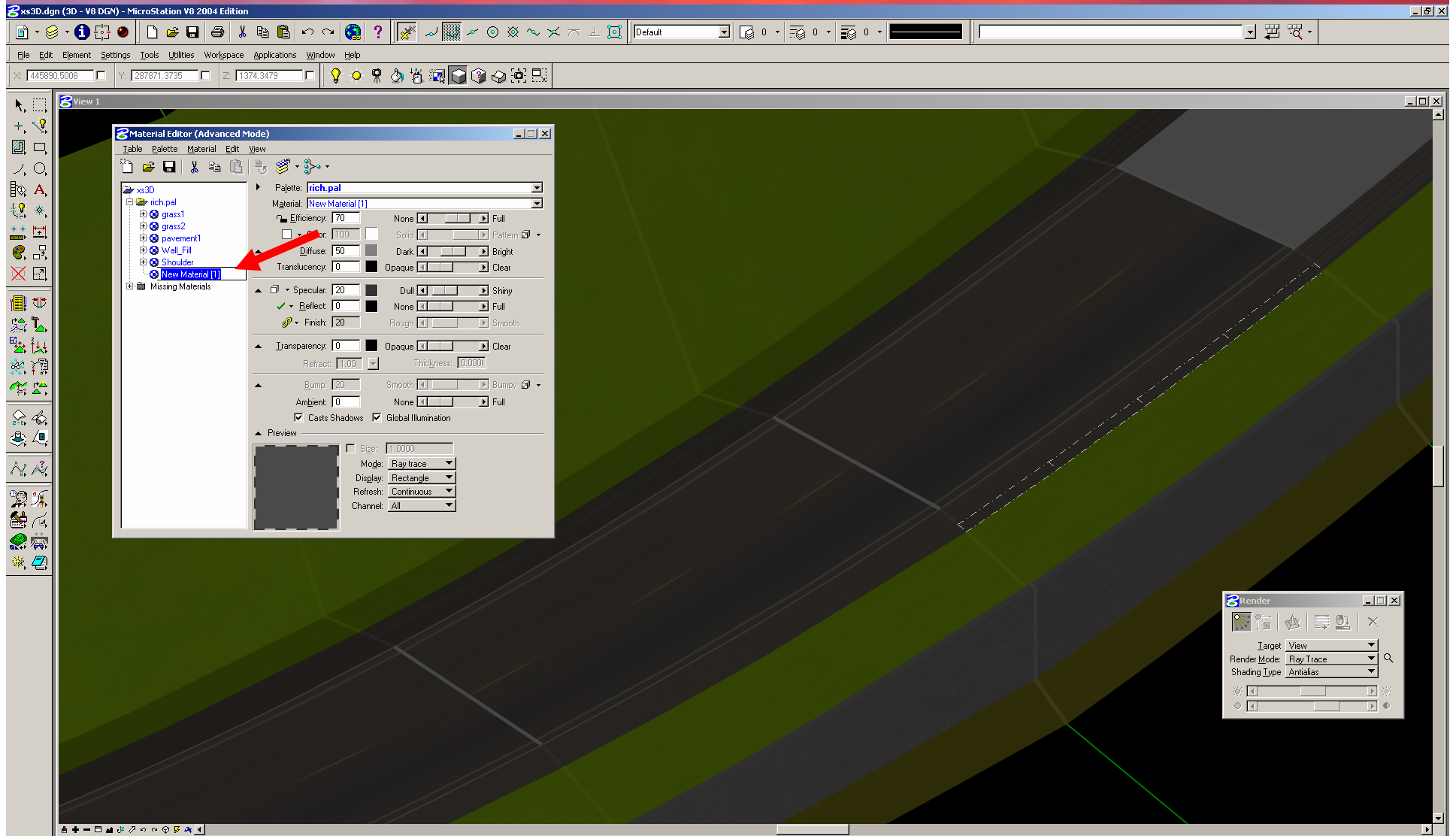
Creating a new Material Palette



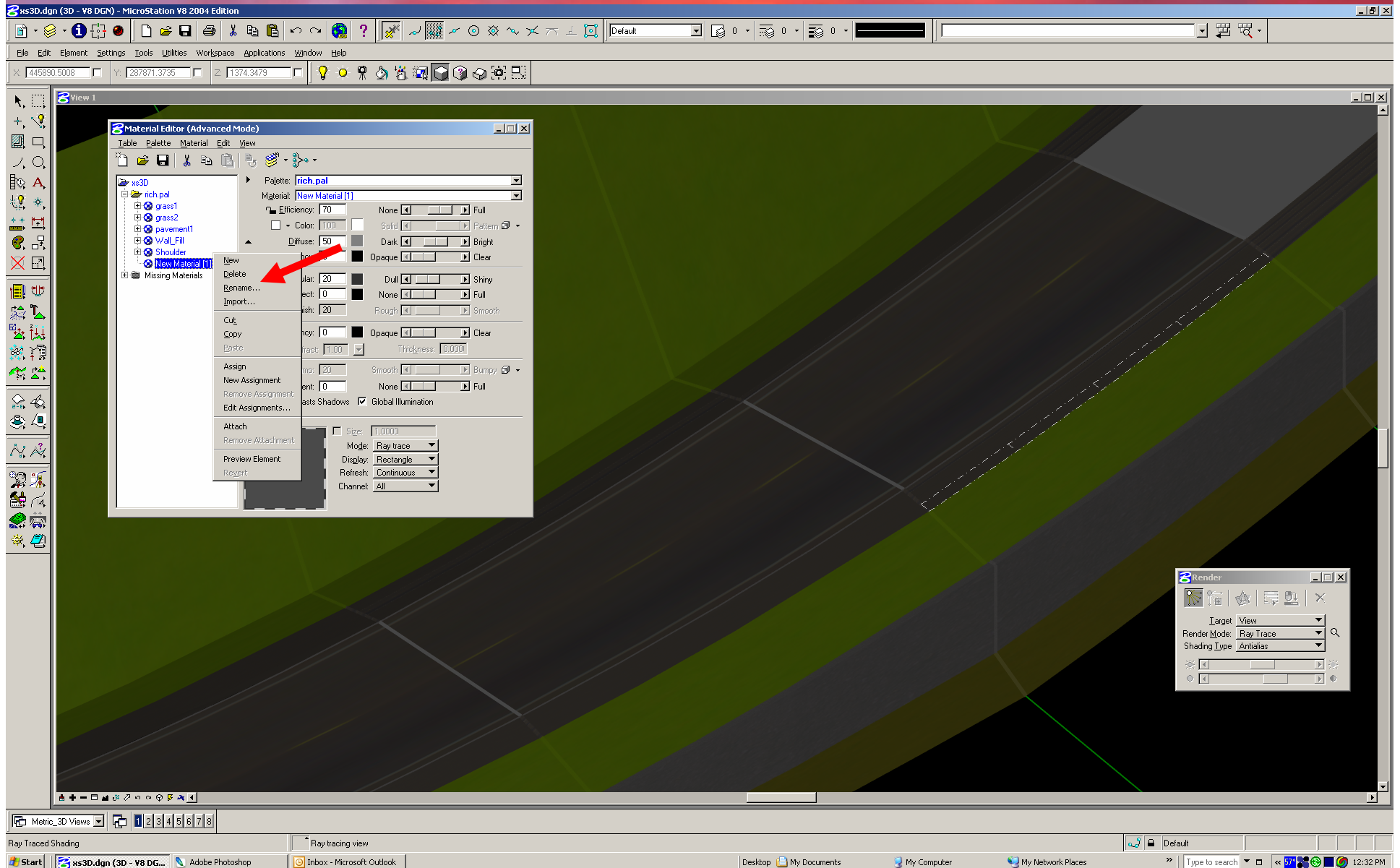
Creating a new Material



Creating a new Material

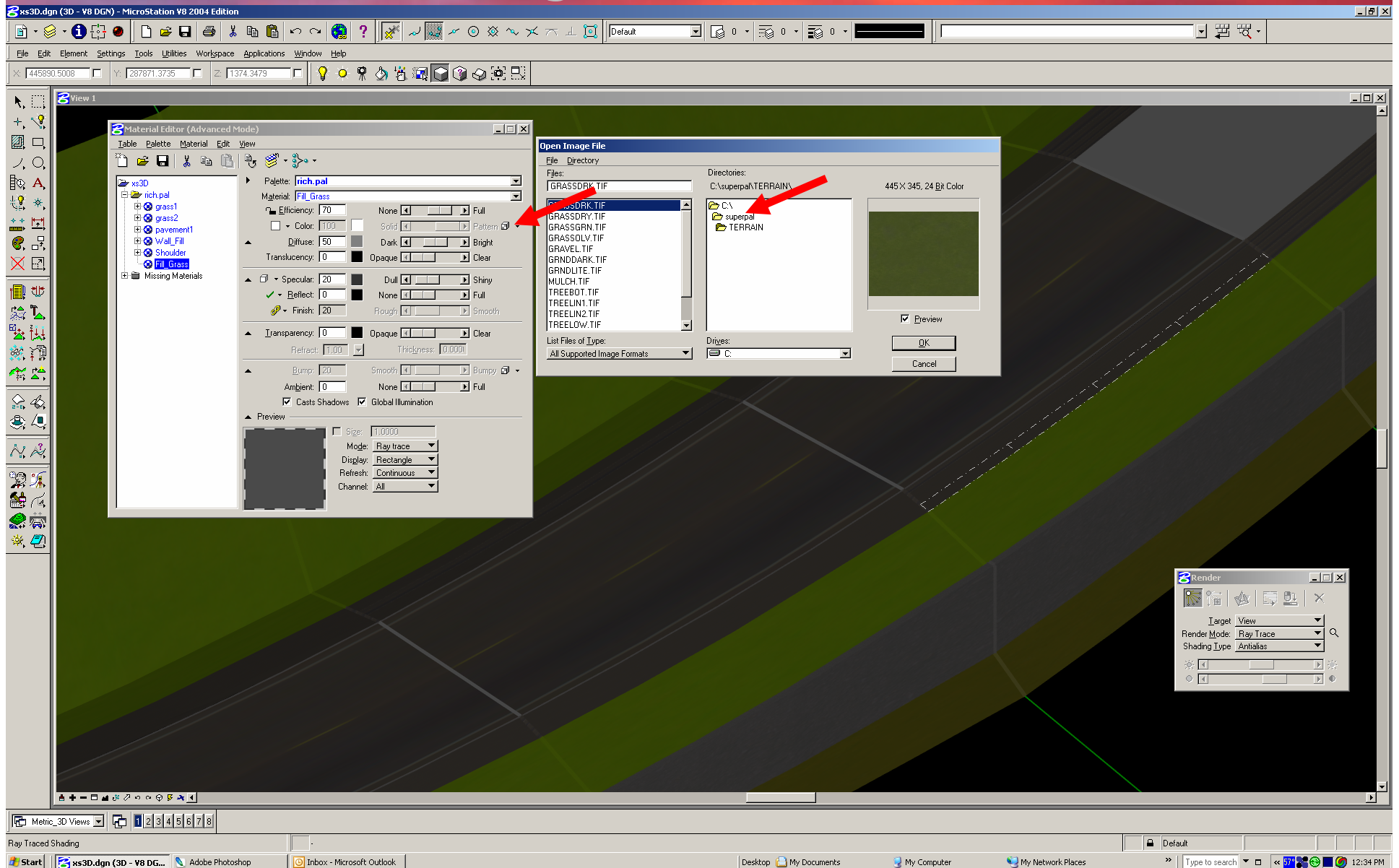


Renaming a new Material



Right Click on New Material to Rename

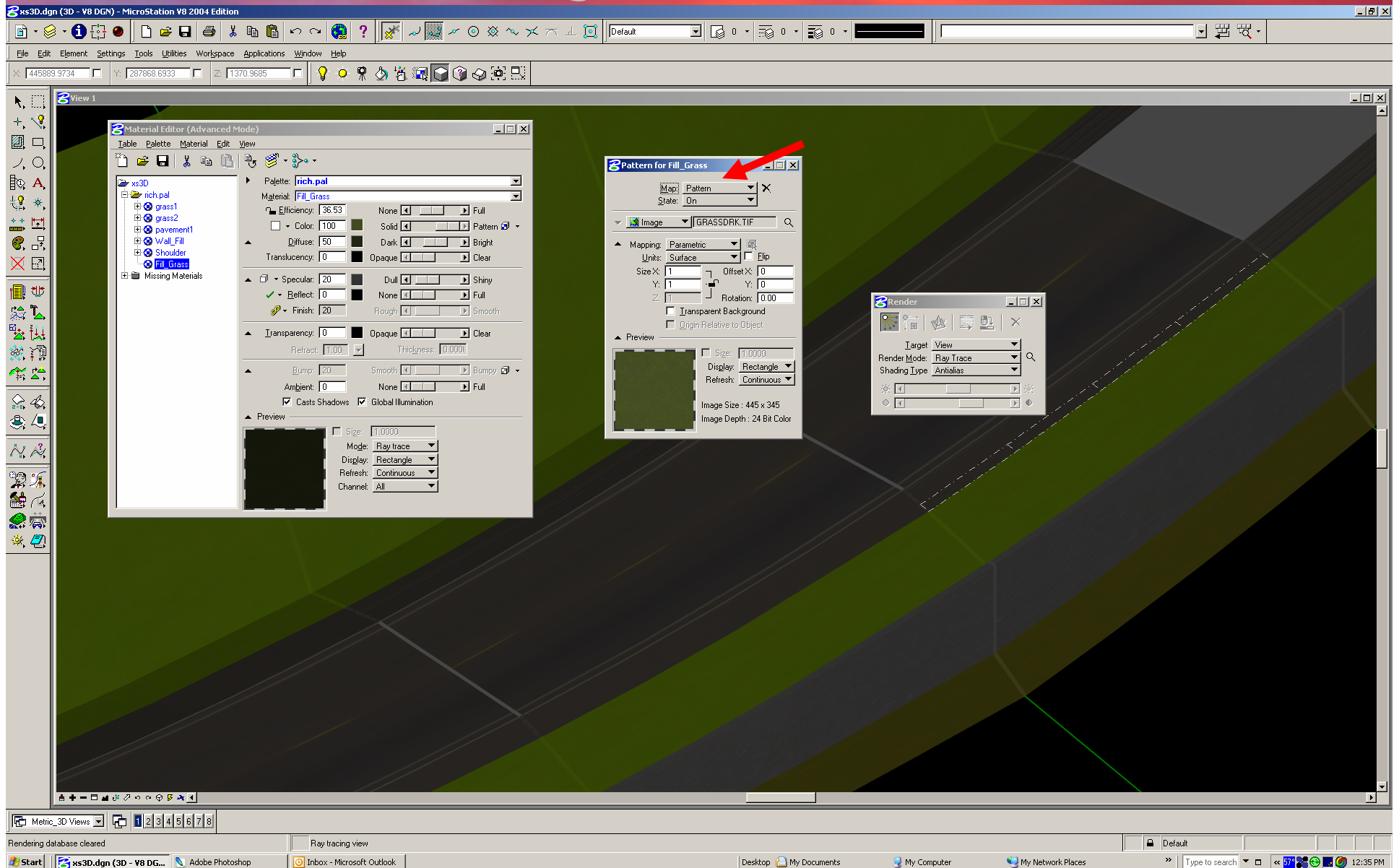
Choosing a new Material



Click on small box next to Pattern

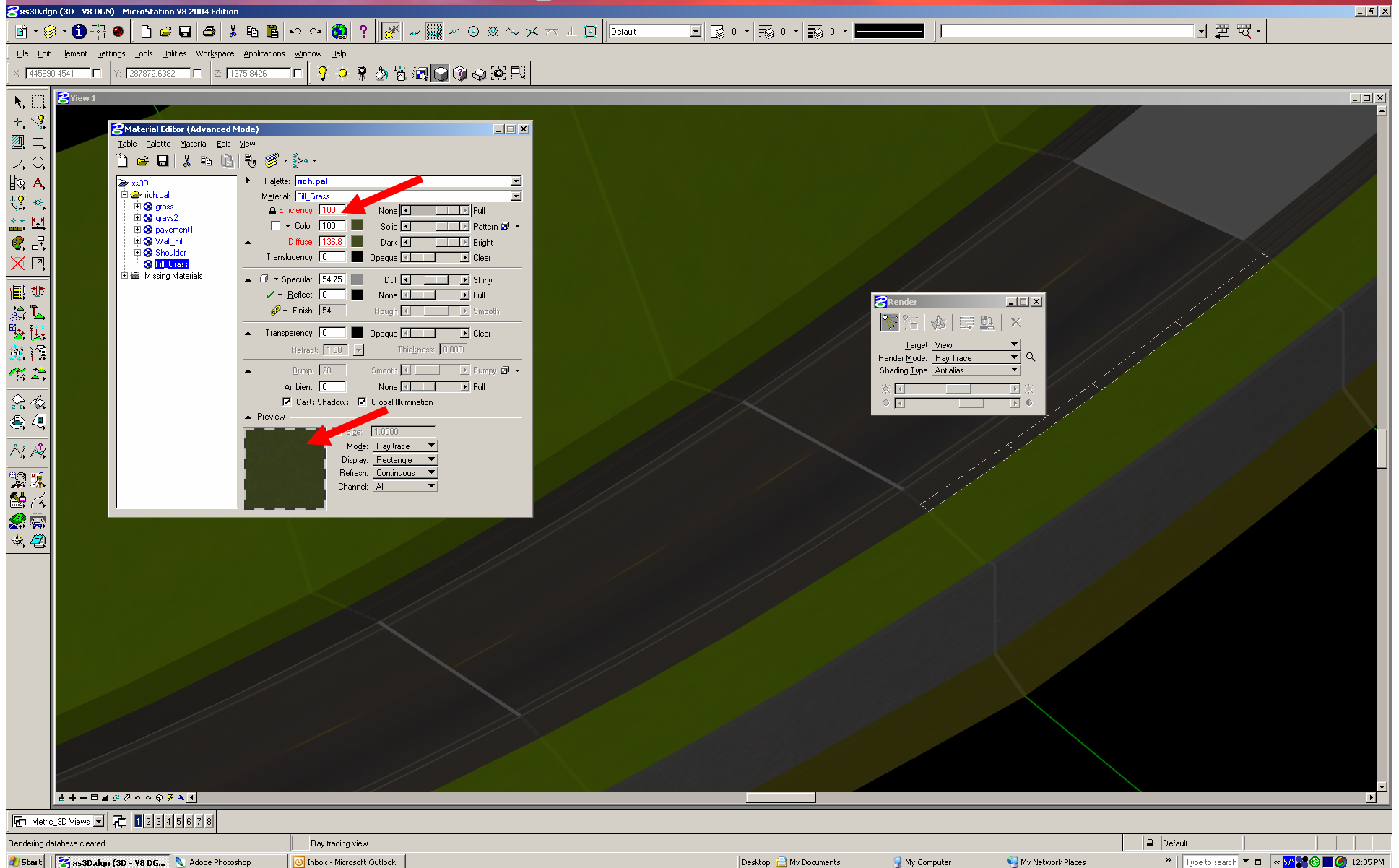
Locate the Directory with your Materials, RPC etc...

Choosing a new Material



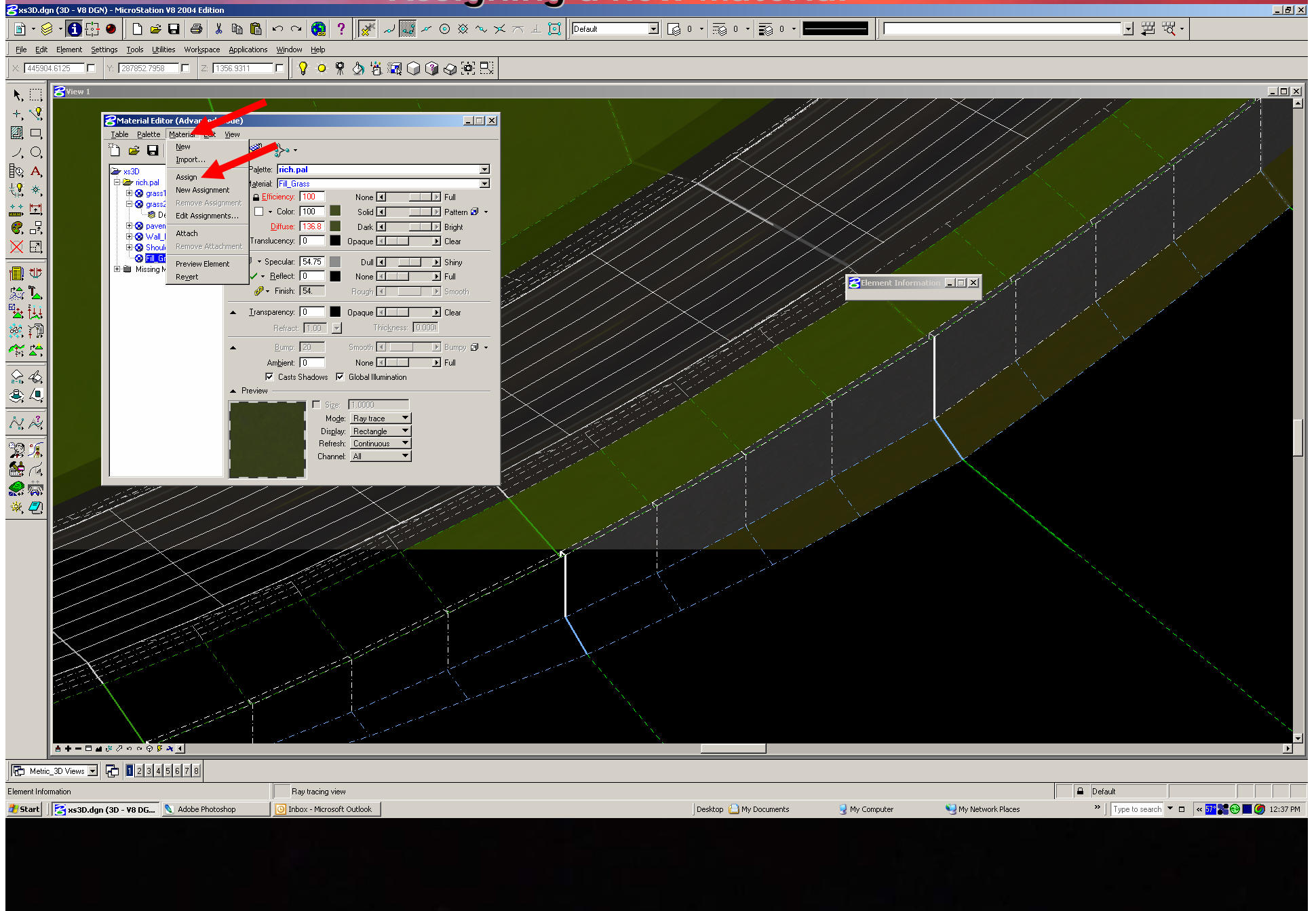
Once you pick your material and click OK, you will get a preview of the Material. You can close this palette.

Choosing a new Material

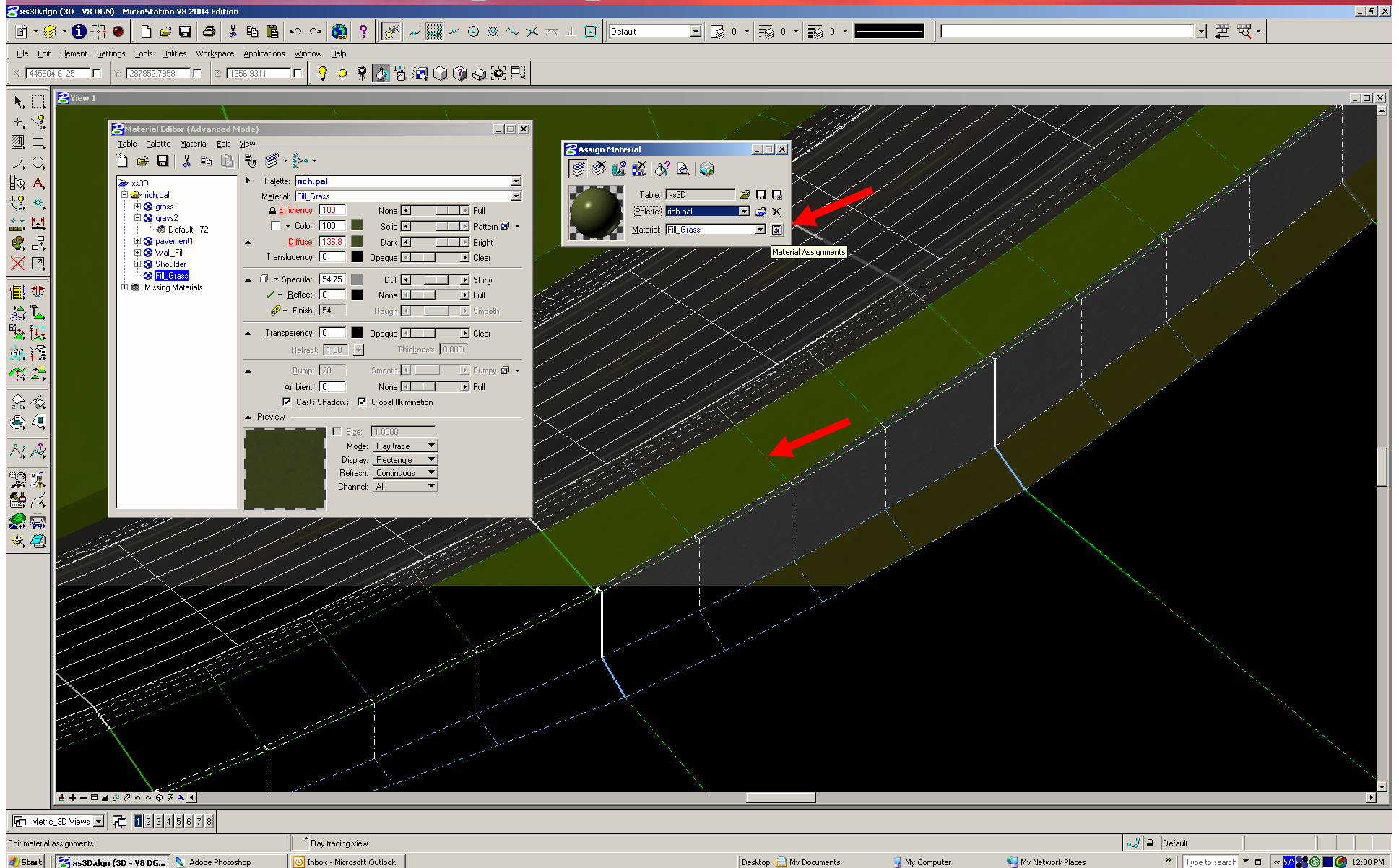


Now you can see your material in the Material Editor, make sure Efficiency is locked and at 100%.

Assigning a new Material



Assigning a new Material



Select wireframes that will have that material color.

Rendering a new Material

The screenshot displays the MicroStation V8 2004 Edition interface. The main window shows a 3D wireframe model of a road and surrounding areas. Two dialog boxes are open:

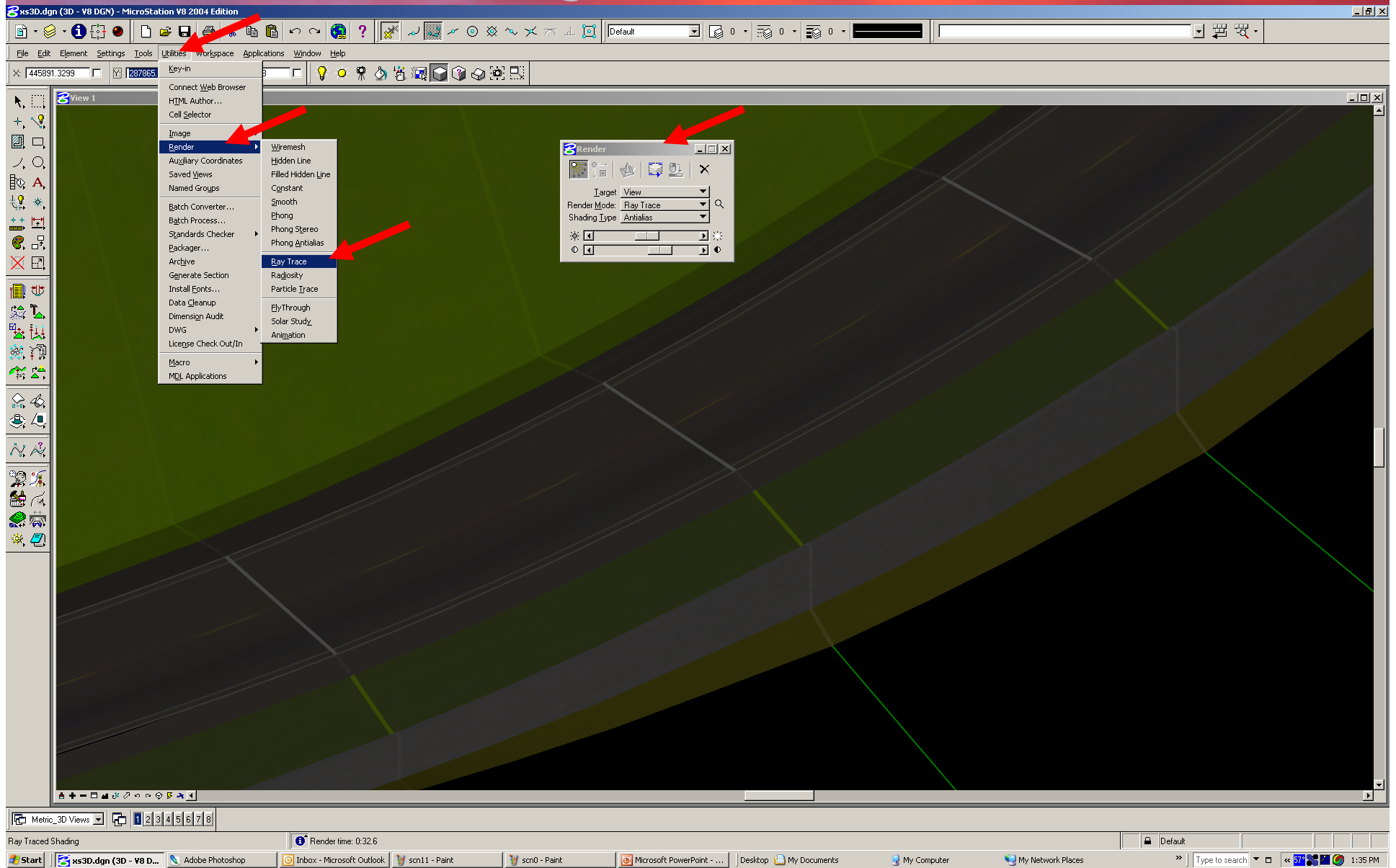
- Material Editor (Advanced Mode):** This dialog is used to define the material properties. It shows the material name as "grass2" and lists various properties such as Efficiency (70), Color (100), Diffuse (159.5), Specular (20), Reflect (0), Finish (20), Transparency (0), Refract (1.00), Bump (20), Ambient (0), and Casts Shadows (checked). A preview window at the bottom shows the material's appearance.
- Render:** This dialog is used to control the rendering process. It shows the Target set to "View", Render Mode set to "Ray Trace", and Shading Type set to "Antialias".

Two red arrows point to the "Render" dialog box and the "Ray Trace" mode selection in the "Render" dialog.

The bottom of the screen shows the Windows taskbar with the Start button, the active window "xs3D.dgn (3D - V8 DGN)", and other open applications like Adobe Photoshop and Microsoft Outlook. The system tray shows the time as 12:40 PM.

Material applied to Wireframe and Render with Ray Trace

Rendering a new Material



Rendering with Ray Trace