Queries:

1) Yes

2) Yes

3) Reference Figure 1 after Definition 4. "... and on the triangle. An illustration of how the non-weighted differential operators increment the parameters (a,b,c) is seen in Figure 1"

4) OK

5) Should be "2020, IMA. J. Numer. Anal., https://doi.org/10.1093/imanum/draa001"

6) Replace the problematic sentence with the following: "Recall that the OPs $\mathbb{H}^{(a,b,c)}$ are orthogonal with respect to the weight $W^{(a,b,c)}$ on Ω, and define the matrix $\Lambda^{(a,b,c)} := \left\langle \mathbb{H}^{(a,b,c)}, \mathbb{H}^{(a,b,c)^\top} \right\rangle_{W^{(a,b,c)}}$"

Typos:

1) In Lemma 1, it should say

$$\alpha_{n,k,1}^{(a,b,c,d)} := \beta_{n-k-1}^{(a,b,c+d+2k+1)}, \qquad \alpha_{n,k,2}^{(a,b,c,d)} := \alpha_{n-k}^{(a,b,c+d+2k+1)}$$

2) At the end of Section 3, we are missing a couple of minus signs. We should have:

$$\eta_j = -\frac{1}{\beta_{n,j-1,9}^{(a,b,c,d)}}\left(\beta_{n,n+j+1,7}^{(a,b,c,d)}\,\eta_{j+2} + \beta_{n,n+j,8}^{(a,b,c,d)}\,\eta_{j+1}\right) \quad \text{for} \quad j = n-1, n-2, \ldots, 1,$$

$$\eta_0 = -\frac{1}{\alpha_{n+1,0,1}^{(a,b,c,d)}}\left(\beta_{n,1,7}^{(a,b,c,d)}\,\eta_2 + \beta_{n,0,8}^{(a,b,c,d)}\,\eta_1\right).$$

3) Near the end of the proof for Theorem 1, it should read: "... nonzero coefficients $c_{m,j}^x$ are when $m = n-3, n-2, n-1$ and $j = k-2, k$" (and not $m = n-3, ..., n$)

4) Near the end of Section 3, it should read: "... for the Laplacian Δ that will take us from the coefficients for expansion in the space $\mathbb{H}^{(0,0,0)}$ to coefficients in the space $\mathbb{H}^{(2,2,2)}$" (and not $\mathbb{H}^{(2,2)}$)

5) Similarly, it should read: "... Laplacian as a map from coefficients in the space $\mathbb{W}^{(2,2,2)}$ to coefficients in the space $\mathbb{H}^{(0,0,0)}$. Note a function expanded in the $\mathbb{W}^{(2,2,2)}$ basis will satisfy ..." (and not $\mathbb{W}^{(2,2)}$)

Additional changes for Figures:

1) Figure 3b will be a new figure, that increases the N value used in the original. We would also then need to update the text in Section 5.1 that reads "N = 200, that is, 20,301 unknowns" to instead be "N = 990, that is, 491,536 unknowns"

2) Figure 5b will be a new figure, that increases the N value used in the original. We would also then need to update the text in Section 5.1 that reads "N = 200, that is, 20,301 unknowns" to instead be "N = 500, that is, 125,751 unknowns" (Note: Depends how high I can go before I run out of memory with the factorization/time)

3) Figure 6b will be a new figure, that increases the N value used in the original. We would also then need to update the text in Section 5.1 that reads "N = 200, that is, 20,301 unknowns" to instead be "N = 500, that is, 125,751 unknowns" (Note: Depends how high I can go before I run out of memory with the factorization/time)