GIG HARBOR

"THE MARITIME CITY"

PUBLIC WORKS DEPARTMENT

Findings, Conclusions and Decision
Public Works Variance EN-22-0049

Site: The Reserve Typical Minor Arterial Roadway Section Variance
Parcel No. 0222323134

Applicant: Aaron Hulst, P.E.
City Engineer
City of Gig Harbor
3510 Grandview St
Gig Harbor, WA 98335

Re: **(EN-22-0049)** The Reserve Typical Minor Arterial Roadway Section Variance - Public Works Variance Request

Dear Darton Riely-Gibbons:

The City of Gig Harbor Public Works Department has reviewed the submitted materials for the Reserve Typical Minor Arterial Roadway Section Public Works Variance and has concluded the following:

I. Findings.

A. Facts. On 4/06/23, Darton Riely-Gibbons, P.E., of CPH Consultants, submitted an application to the City of Gig Harbor requesting a variance from the City of Gig Harbor Public Works Standards (Standards) Section 2B, Figure 2.1 for Typical Minor Arterial Roadway Section Variance. The Applicant's package included a letter addressing the variance criterion and a set of plans showing the proposed design.

The Applicant requests a variance from Public Works Standard Section 2B, Figure 2.1 and the COGH Std. Det. No. 2-03.

The Applicant's submittal included the variance application, payment in the amount of $2,000.00, and letter and pertinent documents addressing the variance criterion (copy attached).

B. Application of Facts to Criteria for Approval. The City Engineer may grant variances from the Standards if the Applicant presents substantial evidence to demonstrate that all of the criteria in Section 1.035(C) of the Standards are satisfied. Following is the City Engineer's analysis of the facts to the criteria for approval based on information supplied by the applicant:

1. *"Strict compliance with the Public Works Standards is undesirable or impractical because of impracticality or undesirable conditions".*

   The Applicant states:

   Strict compliance with the public works standards is undesirable or impractical because of impracticality or undesirable conditions.

   Strict compliance with PWS Standard Detail No. 2-03 will result in an undesirable and impractical condition for the proposed development. The existing topography slopes steeply away from the current asphalt edge of Peacock Hill Avenue at a greater rate than maximum allowable roadway slope of 15% can achieve. This results in a large imbalance in earthwork required, current design shows a required import of approximately 18,000 CY. By extending the Peacock Hill Avenue Section further east into the project area by 5 feet, resulting in pushing the point at which Road A can descend at 15% slope 5-feet further east and increasing the fill required to achieve a grading plan that complies with current Design Review Board Approval and the COGH PWS. This would not only affect Road A increase in fill but would raise the elevation of the building Pads on either side of the internal roadway, the cul-de-sac at the terminus of Road and the Vault Access Tract area. Based on approximate increase in road A height of 9 inches and proposed on-site disturbed area of 3.19 acres, the resulting net fill would be increased 3,900 CY with a resulting import required of 22,200 CY, approximately. Increase in wall height and fill slopes on the east edge of the project would be increased significantly. This increase in earthwork imbalance is an undesirable outcome for both the developer and city. The City Municipal Code has specific requirements to balance earthwork on developments within the city limits. The project is already above the allowable imbalance criteria and strict compliance with this standard section would increase this imbalance further.

   Another undesirable outcome from strict compliance with Standard Detail No. 2-03 is that the wider section will further encroach into the required 25-foot landscape buffer and remove additional trees from site frontage. The City Municipal Code also requires development to preserve as many significant trees as possible, specifically within landscape buffers. This increase in section width would push the corresponding retaining wall along Peacock frontage further east and due to the steep drop off in topography, increase the height of the walls as well. This results in two undesirable results, the first being the increase in tree removal within the 25-foot landscape buffer area and the second being the increase in retaining wall height within the plat.

   The traffic analysis performed by Jake Traffic Engineering, Inc. (dated December 7, 2022) confirmed that a center turn pocket is not required based on existing and proposed traffic volumes for Peacock Hill Avenue. The predicted values of the traffic study were recently validated by current traffic count numbers provided by the City for 96th Street (Vernhardson St) and Peacock Hill Avenue and Borgen Blvd, east of Burnham Drive (see response to item 3 below), further supporting that the center turn pocket/lane is not needed.

The City Engineer's analysis concurs with the Applicant's claim that strict compliance is impractical due to the reasons stated by the applicant.

2. *"The proposed variations are functionally equivalent to and are consistent with the intent of the Public Works Standards, and/or provide compensating benefits to the City and the public".*

The Applicant states the following:

The proposed variance request is consistent with PWS standards and maintains the necessary roadway element features and preferred pedestrian safety considerations including a continuous sidewalk separated from the travelled way by vertical curb and planter strip, typical bike lane, and slightly wider vehicular lane width. The proposed section without center turn lane or median isconsistent with the current section and those of future capital improvement plans for Peacock Hill Avenue.

As a compensating benefit to the city and public, and based on the recommendation by COGH City Engineer, future capital improvements identified in the City's 6-year COGH Transportation Improvement Plan, and available sight distance; the project proposes to install a crosswalk with rectangular rapid flashing beacon (RRFB) at the southwest corner of The Reserve frontage. This crosswalk, RRFB, and associated ADA curb ramps will connect the project's sidewalk/frontage improvements with the nearest existing public sidewalk facilities on the west side of Peacock Hill Avenue. The proposed crossing location was selected based on a collaborative discussion of alternatives with the City Engineer. A review of the safety of the proposed project is provided in section 5 of this letter and included three figures illustrating entering sight distance from the closet intersections north and south of the proposed crosswalk as well as stopping sight distance for the crosswalk along Peacock Hill Avenue. See section 5 for a detailed review and reference to the above-mentioned figures.

The City Engineer's analysis concurs with the Applicant's assessment that the proposed variation is functionally equivalent to and consistent with the intent of the standards and provide compensating benefits to the City and the Public as stated by the Applicant.

3. *"The proposed variation(s) are based on sound engineering judgment".*

The Applicant states:

The project traffic engineer provides an analysis of the need for a turn pocket along Peacock Hill Avenue (Traffic Analysis; December 7, 2022). Per page 6 of the Traffic Analysis, Peacock Hill Avenue anticipates approximately PM peak hour traffic trips of 815 southbound and 329 northbound vehicles, the analysis identifies that many of these trips turn off on side streets as they head to and from the south. Their resulting analysis states that "…using the City data and projected site traffic left turn channelization is not needed for capacity."

The COGH independently provided trip counts for the intersection of Peacock Hill Avenue and 96th St (Vernhardson St) on 3/24/2023. The City also provide average daily trip (ADT) count and PM peak hour volume for Borgen Boulevard east of Burnham Drive, performed on 9/28/22. The Borgen Blvd data contains a PM peak hour volume of 2,308 vehicles per hour (vph) and 28,289 vehicles per day (vpd) which results in a K-factor of 0.082. Given that Boren Boulevard serves Peacock Hill Avenue., this K-factor can be reasonably applied to the traffic counts for Peacock Hill Avenue. The intersection of Peacock Hill Avenue and 96th St has a PM peak volume counts on Peacock Avenue are 584 (329 vph, northbound, and 255 vph, southbound) and using the K-factor, the calculated ADT for Peacock Avenue is approximately 7,121 vpd.

The proposed subdivision will create a total of 14 SFR. Using the 0.94 SFR factor defined by the Institute of Transportation Engineering (ITE), approximately 160 ADT will be created with this project which in total would create 7,281 ADT for Peacock Hill Avenue. Through this analysis, it is evident that this project will have little impact on the current ADT of Peacock Hill Avenue. In summary, the intent of using the Local Access minimum spacing requirements is to provide adequate distance intersections to mediate traffic from adjacent developments that also serve Peacock Hill Avenue.

Using the same analysis and peaking factor applied to the City data on the project traffic engineer analysis, the estimated PM peak hour volume of 1,144 vph and the K-factor of 0.082, the total estimated ADT would be 13,951 vpd. The traffic analysis for the project found that at this volume of traffic, a turn pocket is not necessary to provide adequate traffic capacity along Peacock. Since the city data, which is more recent, produces a lower total volume, the traffic analysis and conclusion that the turn pocket is not needed, remains valid.

The City Engineer's analysis concludes that the requested variance meets sound engineering practice as indicated.

4. *"The proposed variations have not been made necessary by actions of the Applicant or Property Owner".*

The Applicant states the following:

The proposed variation is proposed primarily to compensate for the steep existing topographical conditions of the site. The variance provides for a significant reduction in import fill material to the site and retaining wall heights, which results in less truck traffic during construction. The conditions being mitigated were not created by the applicant or property owner.

The City Engineer's analysis concurs that the variance requested is not a result of actions by the Applicant and is a required due to pre-existing conditions of the site.

5. *"Safety, function, appearance, and economical maintenance requirements are met with the proposed variation".*

The Applicant states the following:

Allowance of the proposed variance results in no reduction in safety for either vehicular or pedestrian traffic. The proposed section provides a separate sidewalk which increases pedestrian safety. Additionally, both the original roadway section and proposed roadway section provide bike lanes and adequate traveled lane width. Eliminating the center turn pocket from the section does not decrease the safety of the existing roadway and the refuge channelization is not necessary to meet anticipated traffic capacity.

A review of the safety related to installing a crosswalk with RRFB is also provided. To assess the safety, Entering Sight Distance (ESD) from the closest intersection north and south of the proposed crosswalk location was established. The attached Figure 6, Road A and Peacock Hill Sight Distance shows the ESD from the closest intersection north of the crosswalk. The ESD is determined based on AASHTO, A Policy on Geometric Design for Highways and Street, 2018, 7th Edition (AASHTO) requirements, specifically, Section 9.5.2.3, Table 9-7, for a left turn from stop, Peacock Hill Avenue. requires an ESD of 445 feet based on a 40 mph design speed, is calculated as the minimum necessary for a vehicle to make a safe decision when turning onto Peacock Hill Avenue. Figure 7 illustrates that the available ESD for the 99th Street and Peacock Hill Avenue intersection exceeds the 445 feet minimum.

Stopping Sight Distance (SSD) standards at the new crosswalk is illustrated in Figure 8, Crosswalk Stopping Sight Distance. The minimum SSD for the downgradient (southbound) vehicle is 333 feet and the upgradient (northbound) is 278 feet per AASHTO, Section 3.2.2, Table 3-2, Stopping Sight Distance on Grades for a 40 mph design seed with a 6% grade (Peacock is approximately 3-4% grade in this area).

The Walk + Bike + Transit (WBT) calculation from the ITE Trip Generation Manual 10th Edition Supplement was used to establish pedestrian trip counts to confirm the basis/warrant for the proposed crosswalk and RRFB. using The ITE Multi-family (Low Rise) 220 land use was used to establish a design rate of 0.03 WBT trip ends/unit AM peak hour and 0.04 WBT trip ends/unit PM peak hour. Based on the proposed 14-unit plat, this would correspond to approximately 12 WBT trip ends per day. These 12 WBT trip ends would not have a continuous sidewalk pathway from the proposed sidewalk and associated frontage improvements to an existing sidewalk without the proposed crosswalk and RRFB. The location of the crosswalk was selected based on discussion with the City Engineer, the current existing sidewalk conditions, and future capital roadway improvements for Peacock Hill Avenue. This location facilitates optimal visibility for the entering and stopping sight distance conditions along the arterial. "No Pedestrian Crossing" signs are also proposed to be installed directly across the street from the Road A intersection at Peacock Hill Avenue as an additional safety measure. These two signs will be installed, located directly across the street from the proposed ADA ramps at this intersection. This combination of additional improvements will provide safer conditions for pedestrians than what currently exists.

The revised section for Peacock Hill Avenue provides comparable function as the standard section as the removal of the turn pocket is not necessary for the projected traffic volumes estimate by a licensed traffic engineer. The Traffic Analysis, see attached to this letter, shows that channelization is not needed to provide adequate capacity for the projected traffic volumes and peak trips. As provided in section 2 of this letter, current traffic analysis confirms the PM peak hour and ADT volumes estimated by the traffic engineer. Therefore, the function of the modified section compared to the typical section will not be adversely affected and should provide a similar function.

The appearance of the typical and proposed sections would be different without turn pocket or median, however, the proposed section would not alter the existing appearance of the roadway. There is currently no turn pocket or median within the vicinity of The Reserve frontage. The entire length of Peacock Hill Avenue has two locations with a center turn pocket or left-hand turn pocket. The first is at the intersection of 144th Street where a four-way stop exists. The other is a turn pocket located between 118th Street Court and 122nd Street Court. Both these sections have center turn lanes but do not have the remainder of the standard section. The intersection at 144th St has no bike lane, sidewalk, or planter. The section between 118th St Ct and 122nd St Ct has sidewalk on west side but no bike lane or planter and no sidewalk, bike lane or planter on east side. There is a section north of The Reserve that is similar to the section proposed. It has travelled lane, bike lane, planter, and sidewalk but no turn pocket. This section provides some of the best atheistic appeal along the length of Peacock Hill Avenue. This location is north of The Reserve from 105th St Ct to the roundabout at Borgen Blvd. Based on the entire length of Peacock in existing conditions, the proposed section without turn pocket or median will provide a consisted and aesthetically pleasing appearance but does not appear out of place.

There is no change in the physical section of the roadway with the proposed variance. Materials and material depths will be in accordance with City standards. Travel lane, bike lane, planter, and sidewalk widths are consistent with Standard Detail 2-03 and therefore there would be no difference or adverse effect on maintenance or that cost with the granting of the requested variance.

The City Engineer's analysis concludes appropriate safety and functional requirements are met. The proposed variation meets safety, function, appearance, and economical maintenance requirements.

I. Decision.

For The Reserve Typical Minor Arterial Roadway Section Variance request, the Gig Harbor City Engineer concludes that the variance satisfies all the Criteria for Approval and therefore approves the variance request. Any modifications to the proposed development may nullify or require re-consideration of this approval, at the sole discretion of the City Engineer.

II. Appeal.

This decision shall be considered the Notice of Decision on the variance and any appeal shall be filed and processed as described in Title 19 GHMC for a Type II application, as provided in Section 1.035E of the City's Public Works Standards. An appeal may be filed with the City of Gig Harbor Engineering Department within fourteen (14) working days of issuance of this decision (GHMC 19.06.004). All other procedures for an appeal of a Type II application shall be followed in the appeal process (GHMC 19.06.005).

Aaron Hulst, P.E.
City Engineer

4/7/2023
Date

C|P|H
CONSULTANTS

Site Planning
Civil Engineering
Landscape Architecture
Project Management
Land Use Consulting

April 6, 2023

Mr. Aaron Hulst, P.E.
City Engineer
City of Gig Harbor
Public Works Department
3510 Grandview Street
Gig Harbor, WA 98335

RE: The Reserve — *CPH Project No. 0228-21-001*
Request for Public Works Standards Variance EN-22-0049
Roadway Section Minor Arterial Residential

Mr. Hulst,

This letter and the attached site plan are provided on behalf of my client, Prospect Development, to request the City's review and approval of a *Public Works Standards Variance* for a revision to Public Works Standard Detail No. 2-03, *Roadway Section Minor Arterial Residential*. The modified section would affect approximately 330 feet of Peacock Hill Avenue as is being improved with the proposed 14-lot single-family residential subdivision known as The Reserve (PL-PPLAT-22-0001). Allowance of the variance would omit the center lane with a turn pocket or median as shown on Detail 2-03 to be consistent with the currently improved section of Peacock Hill Avenue.

The 2018 City of Gig Harbor Public Works Standards (PWS) Section 2B, Figure 2.1 specifies minimum requirements for minor arterial residential roads. This includes reference to Standard Detail No. 2-03 (see Figure 1). This standard specifies half street improvements that include a 6-foot (half) median or turn pocket, 11-foot travel lane, 5-foot bike lane, 1.5-foot curb and gutter, 5-foot planter, 5.5-foot sidewalk, and minimum 1-foot setback to the public right-of-way (ROW). The requested variance would remove 5 feet of the 6-foot median or turn pocket area and result in half-street improvement with a 12-foot travel lane, 5-foot bike lane, 1.5-foot curb and gutter, 5-foot planter, 5.5-foot sidewalk and 1-foot clear area to the new ROW (see enclosed Figure 1). The turn lane is not a necessary road element for Peacock Hill Avenue based on the project traffic analysis. Omitting it will reduce the grading impacts along the east ROW and increase the number of trees preserved within landscape buffers, and it aids in minimizing the amount of fill required which in-turn reduces the overall earthwork imbalance for the project.

The Reserve site has significant topographic relief that under existing conditions slopes away from the right-of-way at grades ranging between approximately 15 to 20 percent grade from the existing edge of pavement approximately 17 feet from the centerline of Peacock Hill Avenue to approximately 500 feet east in the site where steeper slopes as high as 45 percent exist. The modified section for the Peacock Hill Avenue frontage allows the project's access road (Road A) to begin sloping down at a maximum 15 percent slope while maintaining a safe vehicular landing at the intersection (see Figure 2). By sloping down as quickly as possible, the plat grading more mimics the existing topography and reduces the overall earthwork. Maintaining the standard half-street section per Detail No. 2-03 would move the site road intersection another 5 feet east which would result in a significant increase in earthwork and the number of trees requiring removal along the 25-foot-wide setback along the frontage.

The requested Variance to modify Standard Detail No. 2-03 is proposed to reduce the amount of fill and preserve as many frees as possible within The Reserve while staying as close as possible with the intent of PWS Section 2B. Figure 2.1. This Variance complies with the provisions and necessary approval criteria of PWS Section 1.035.(C) and as follows:

1. *Strict compliance with the public works standards is undesirable or impractical because of impracticality or undesirable conditions.*

   Strict compliance with PWS Standard Detail No. 2-03 will result in an undesirable and impractical condition for the proposed development. The existing topography slopes steeply away from the current asphalt edge of Peacock Hill Avenue at a greater rate than maximum allowable roadway slope of 15% can achieve. This results in a large imbalance in earthwork required, current design shows a required import of approximately 18,000 CY. By extending the Peacock Hill Avenue Section further east into the project area by 5 feet, resulting in pushing the point at which Road A can descend at 15% slope 5-feet further east and increasing the fill required to achieve a grading plan that complies with current Design Review Board Approval and the COGH PWS. This would not only affect Road A increase in fill but would raise the elevation of the building Pads on either side of the internal roadway, the cul-de-sac at the terminus of Road and the Vault Access Tract area. Based on approximate increase in road A height of 9 inches and proposed on-site disturbed area of 3.19 acres, the resulting net fill would be increased 3,900 CY with a resulting import required of 22,200 CY, approximately. Increase in wall height and fill slopes on the east edge of the project would be increased significantly. This increase in earthwork imbalance is an undesirable outcome for both the developer and city. The City Municipal Code has specific requirements to balance earthwork on developments within the city limits. The project is already above the allowable imbalance criteria and strict compliance with this standard section would increase this imbalance further.

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2. *The proposed variation is functionally equivalent to and is consistent with the intent of the Public Works Standards, and/or provides compensating benefit to the city and the public.*

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consistent with the current section and those of future capital improvement plans for Peacock Hill Avenue.

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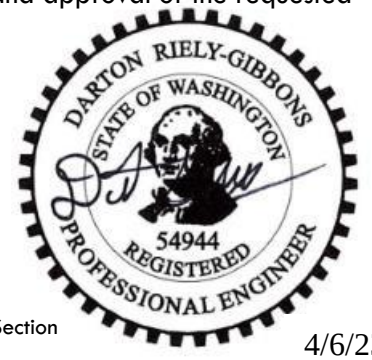
There is no change in the physical section of the roadway with the proposed variance. Materials and material depths will be in accordance with City standards. Travel lane, bike lane, planter, and sidewalk widths are consistent with Standard Detail 2-03 and therefore there would be no difference or adverse effect on maintenance or that cost with the granting of the requested variance.

Please contact me directly at (425) 285-2391 or by e-mail at darton@cphconsultants.com if you have questions or need any additional information to complete your review and approval of the requested Variance. Your prompt response is appreciated. Thank you.

Sincerely,
CPH Consultants

Darton Riely-Gibbons, PE
Project Manager

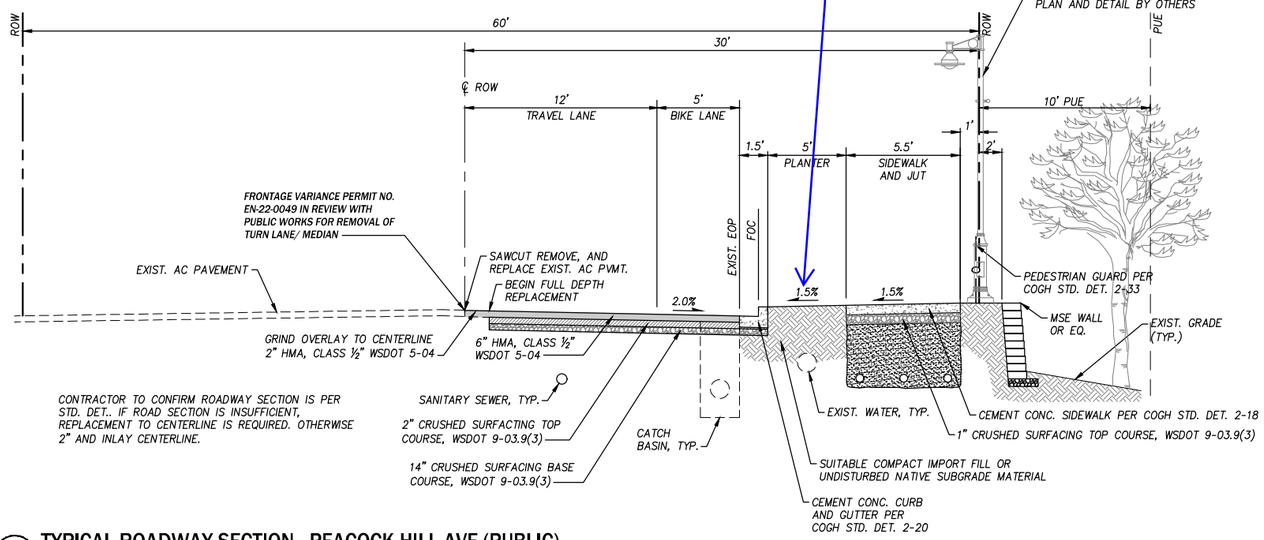


4/6/23

Enclosures: Figure 1 – COGH Std. Det. No. 2-03 & Peacock Hill Avenue Proposed Section
Figure 2 – Road A Plan and Profile
Figure 3 – Frontage Improvements Paving
Figure 4 – Preliminary Site Plan
Figure 5 – Crosswalk & RRFB Detail
Figure 6 – Road A & Peacock Hill Avenue ESD
Figure 7 – 99th St & Peacock Hill Avenue ESD
Figure 8 – Crosswalk Stopping Sight Distance

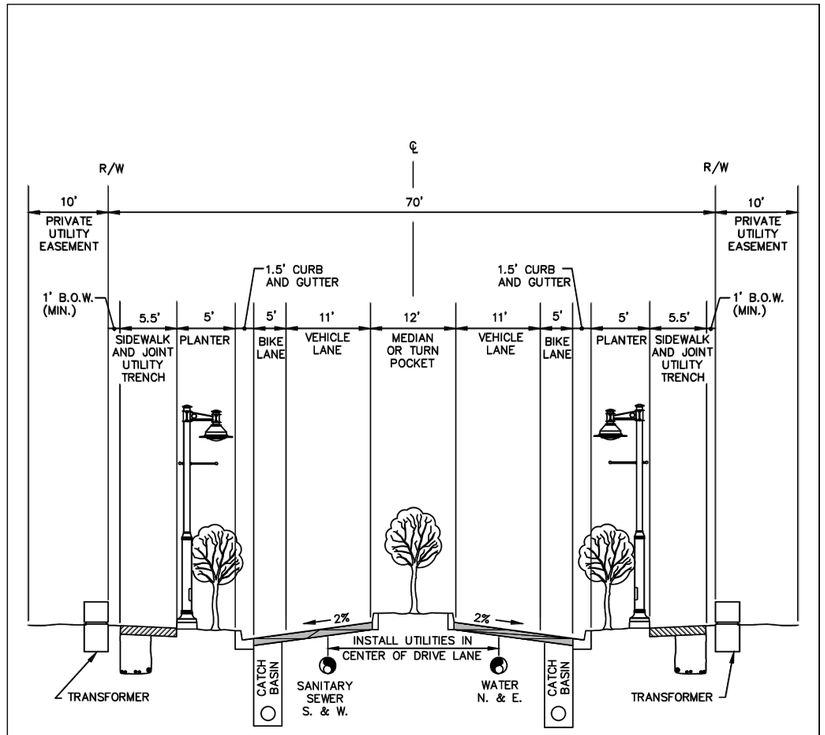
Cc: Prospect Development, LLC
copy to file

Applicant is not requesting a variance from illumination location. Current PW Standards call for illumination in the planter strip.



A
TYPICAL ROADWAY SECTION - PEACOCK HILL AVE (PUBLIC)
NOT TO SCALE

MINOR ARTERIAL



NOTES:

1. ON-STREET PARKING PROHIBITED.
2. SEE DETAIL 2-13 FOR PAVEMENT DESIGN CONSTANTS.
3. MANHOLE LIDS AND WATER VALVE BOXES SHALL BE LOCATED IN THE MIDDLE OF THE OUTSIDE VEHICLE TRAVEL LANES.
4. STREET TREES IN THE PLANTER AND/OR MEDIAN SHALL BE CENTERED.
5. DESIGN SPEED SHALL BE CONSISTENT WITH ADJACENT LAND USE.

CITY OF GIG HARBOR
ENGINEERING DIVISION

ROADWAY SECTION
MINOR ARTERIAL
REDISENTIAL

DETAIL NO. 2-03

APPROVED FOR PUBLICATION
CITY ENGINEER _____ DATE JULY, 2018

NO.	DATE	REVISION	BY	CK.
1	1/9/23	PUBLIC WORKS STANDARD VARIANCE	MRL	DRG

DARTON RIELY-GIBBONS STATE OF WASHINGTON 44 REGISTERED PROFESSIONAL ENGINEER

THE RESERVE

PUBLIC WORKS STANDARD VARIANCE
STANDARD DETAIL NO. 2-03

COGH STD. DET. NO. 2-03 & PEACOCK HILL AVE PROPOSED SECTION

CITY OF GIG HARBOR PIERCE COUNTY, WASHINGTON

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PROJECT NO. 0228-21-001

DRAWING FIGURE 1

SHEET 1 OF 4

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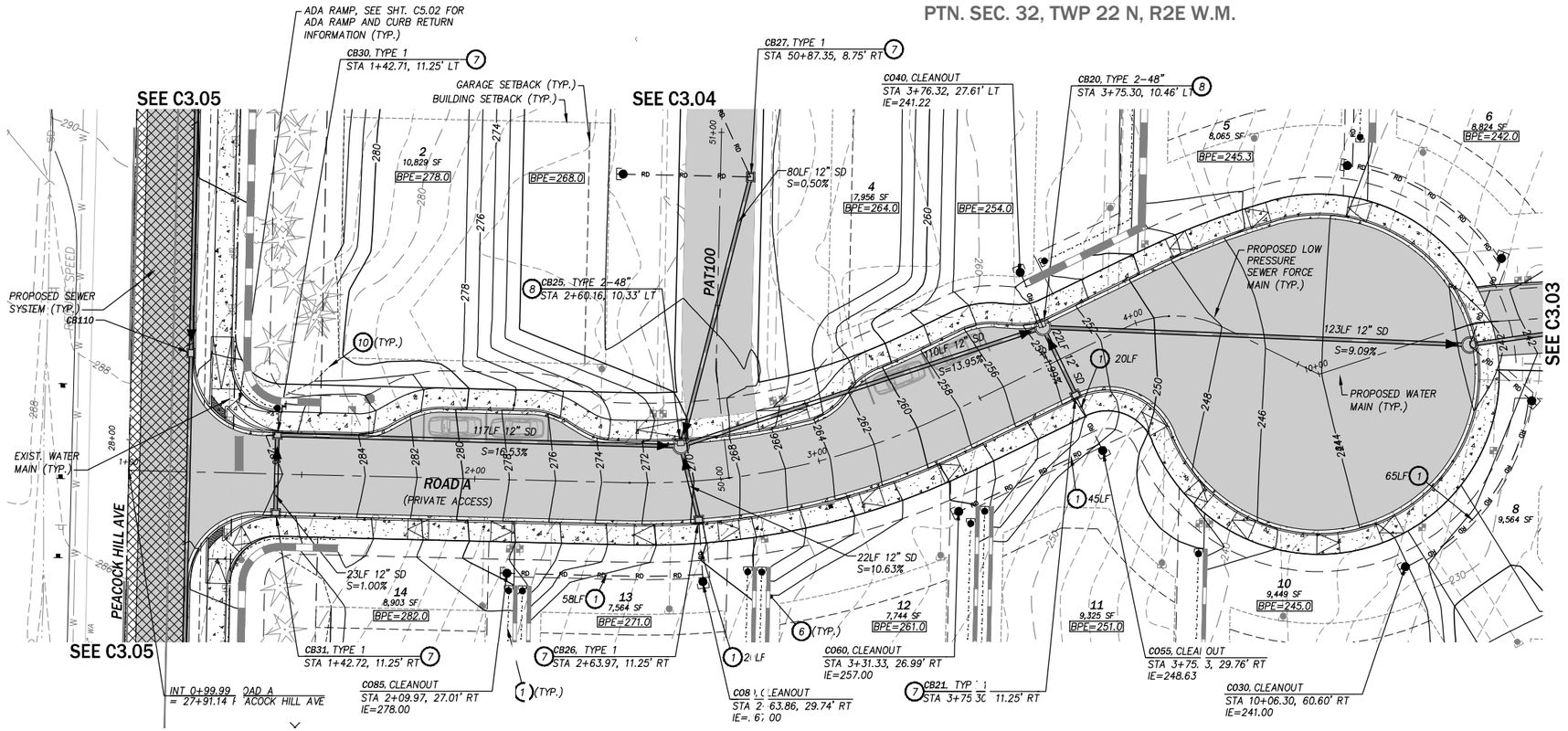
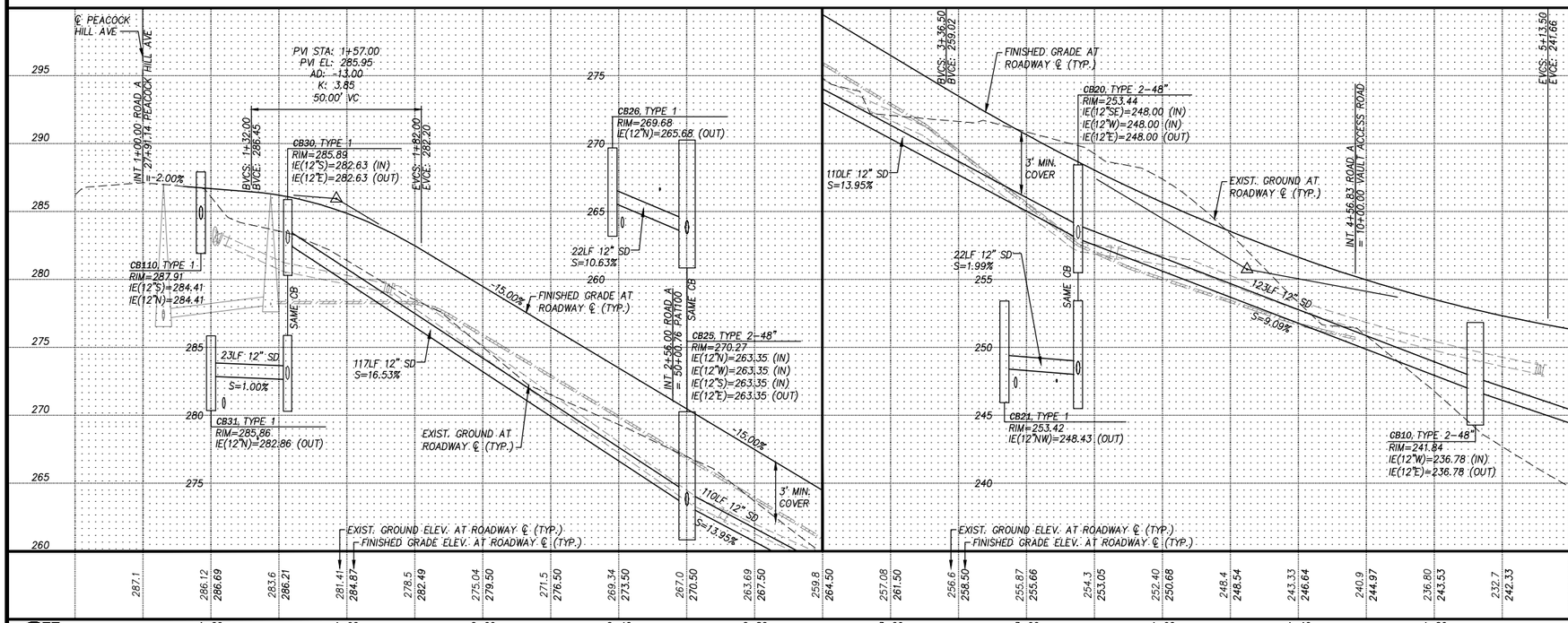
811 Know what's below. Call before you dig.

P:\project\0228_Prospect Development\21001_The Reserve\Dwg\Exhibits\Figure 1 - Roadway Sections.dwg
3/30/2023 8:52 AM DARTON RIELY-GIBBONS

PTN. SEC. 32, TWP 22 N, R2E W.M.





811 Know what's below. Call before you dig.

P:\project\0228_Prospect Development\21001_The Reserve\Dwg\Exhibits\Figure 2 - Road A Plan & Profile.dwg
3/30/2023 8:59 AM DARTON RIELY-GIBBONS

CONSTRUCTION NOTES

1. PVC FOR BLDG. DRAIN CONN., SEE DET. SHT. C3.101 FOR MIN. SLOPE AND DIAMETER; LENGTH PER PLAN
2. GABION OUTFALL PER DETAIL ON SHEET C3.101
3. HDPE PIPE CONNECTION-UPHILL SDCB PER DETAIL ON SHEET C3.101
4. CONC. BLOCK PIPE ANCHOR PER DETAIL ON SHEET C3.101
5. STRAP-FOOTING PIPE ANCHOR PER DETAIL ON SHEET C3.101
6. MSE RETAINING WALL, SEE C3.00 FOR WALL SCHEDULE
7. CATCH BASIN TYPE 1 PER WSDOT STD. PLAN B-5.20-01
8. CATCH BASIN, TYPE II PER WSDOT STD. PLAN B-10.20-01
9. CONN. EXIST. STORM DRAIN CATCH BASIN
10. LIMITS OF GRADING
11. RETAINING WALL FOOTING DRAIN, SEE GEOTCHNICAL REPORT AND WALL ANALYSIS BY OTHERS
12. REMOVABLE BOLLARDS

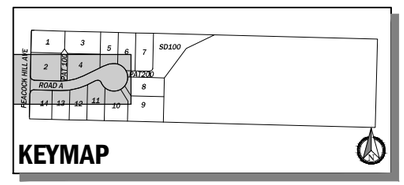
LEGEND

- STORM DRAIN
- SD CATCH BASIN
- FM — SANITARY SEWER FORCED MAIN
- SS — SANITARY SEWER MAIN
- STANDARD PRECAST MANHOLE
- SIDE SEWER SERVICE
- SIDE SEWER CLEANOUT
- W — WATER MAIN
- WATER SERVICE
- PUBLIC UTILITY ESMT.
- WATER METER (SIZE PER PLAN)
- FIRE HYDRANT (FH)
- TREE TO BE REMOVED

NOTES:

1. ALL DRAINAGE (SD) CONVEYANCE PIPE SHALL BE LINED CORRUGATED POLYETHYLENE (LCPE), UNLESS NOTED OTHERWISE.
2. HOMEOWNER'S ASSOCIATION TO MAINTAIN PRIVATE STORMWATER OUTFALL PIPE, GABION OUTFALL, AND DISPERSION TRENCHES.
3. ALL RETAINING WALLS OVER FOUR FEET IN HEIGHT, FROM BOTTOM OF FOOTING, SHALL BE CONSTRUCTED UNDER A SEPARATE BUILDING PERMIT.
4. BOTH SIDES OF THE ROADWAY THROUGHOUT THE PLAT ARE TO BE MARKED AND SIGNED AS FIRE LANES PER CITY STANDARDS. DESIGNATED ON-STREET PARKING SPOT SHALL NOT BE MARKED FIRE LANE.
5. THE CLEARING AND GRADING SHOWN AND ANY IMPROVEMENTS WITHIN THE 10-FOOT NO CONSTRUCTION ZONE SHALL BE ALLOWED ONLY UPON INSPECTION AND CERTIFICATION BY THE PROJECT ARBORIST THAT SUCH WORK WILL NOT ADVERSELY AFFECT THE LONG-TERM VABILITY OF THE TREES WITHIN THE DESIGNATED

A VARIANCE IS IN REVIEW WITH PUBLIC WORKS (EN-22-0014) FOR THE PROPOSED LENGTH OF THE ROAD A ACCESS LANDING



KEYMAP

N

0 5 10
VERT. IN FEET
0 20 40
HORIZ. IN FEET

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NO.	DATE	REVISION	BY	CK.
1	1/9/23	PUBLIC WORKS STANDARD VARIANCE	MRL	DRG

DARTON RIELY-GIBBONS STATE OF WASHINGTON 44 REGISTERED PROFESSIONAL ENGINEER

THE RESERVE

PUBLIC WORKS STANDARD VARIANCE STANDARD DETAIL NO. 2-03

ROAD A PLAN AND PROFILE

CITY OF GIG HARBOR — PIERCE COUNTY, WASHINGTON

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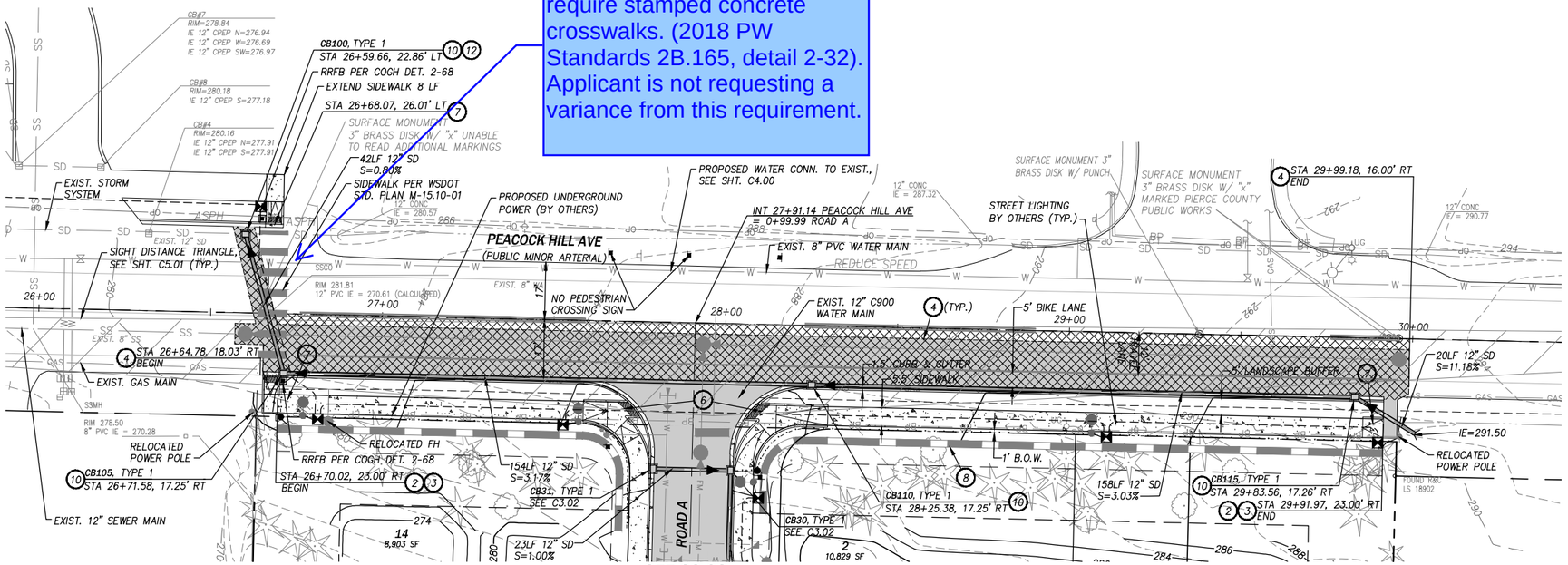
PROJECT NO.
0228-21-001

DRAWING
FIGURE 2

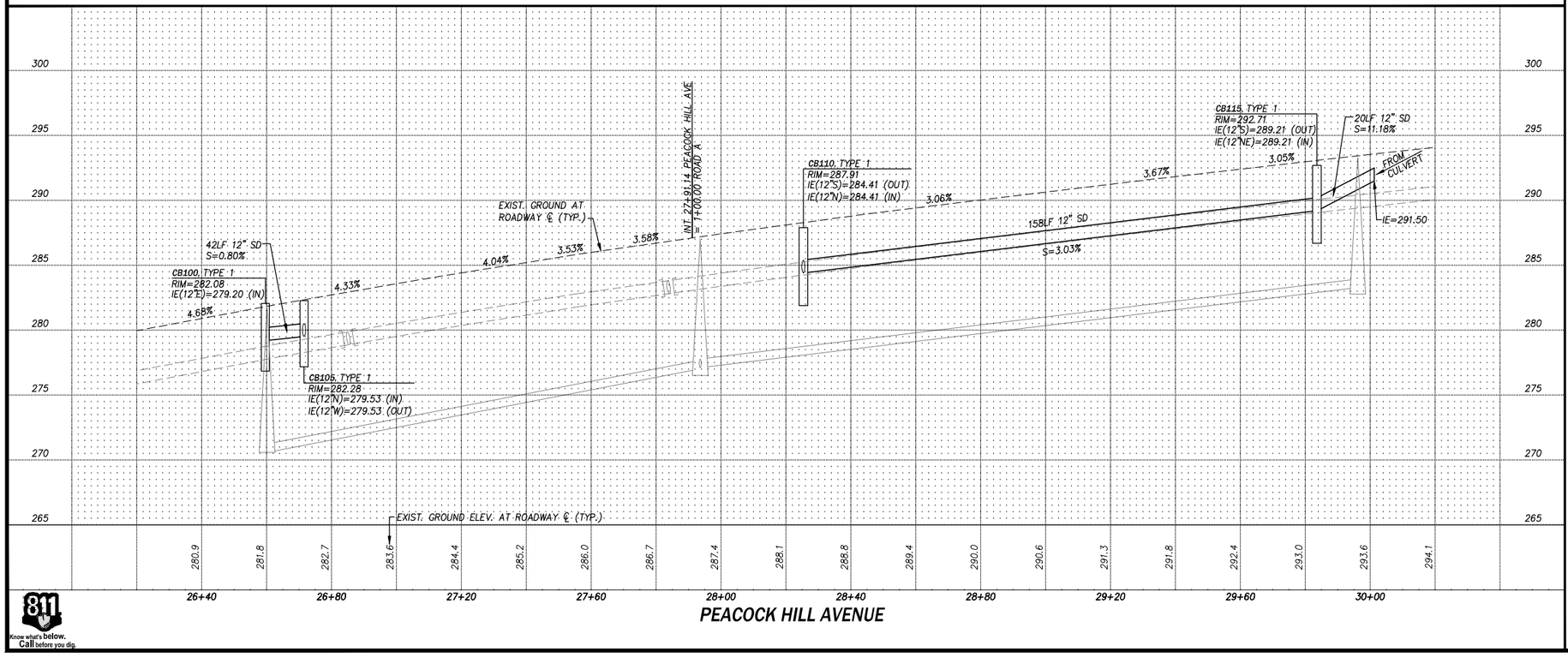
SHEET 2 OF 4

PTN. SEC. 32, TWP 22 N, R2E W.M.

Current PW standards call out that all classified roadways require stamped concrete crosswalks. (2018 PW Standards 2B.165, detail 2-32). Applicant is not requesting a variance from this requirement.



SEE C3.02



CONSTRUCTION NOTES

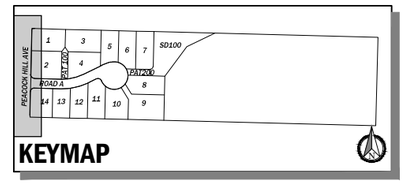
1. PERPENDICULAR TRENCH RESTORATION PER COGH STD. DET. NO. 2-14
2. CEMENT CONC. SIDEWALK PER COGH STD. DET. NO. 2-18
3. CEMENT CONC. CURB AND GUTTER PAN PER COGH STD. DET. NO. 2-20
4. SAWCUT, REMOVE, AND REPLACE EXIST. HMA PVMT.
5. TYP. HMA PVMT. WIDENING PER SEC. B ON SHT. C3.100
6. SINGLE DIRECTION CURB RAMP, TYPE B PER WSDOT STD. PLAN F-40.16-03, SEE DET. SHT. C5.02 FOR GRADING
7. SINGLE DIRECTION CURB RAMP, TYPE A PER WSDOT STD. PLAN F-40.16-02 WITH HMA LANDING AT SHOULDER, SEE DET. SHT. C5.02 FOR GRADING
8. TYP. MSE RETAINING WALL PER SEC. ON C3.00
9. PEDESTRIAN GUARD PER COGH STD. DET. NO. 2-66 (AT TOP OF WALL)
10. CATCH BASIN TYPE 1 PER WSDOT STD. PLAN B-5.20-01
11. CATCH BASIN, TYPE II PER WSDOT STD. PLAN B-10.20-01
12. CONN. TO EXIST. STORM
13. LIMITS OF GRADING

LEGEND

- STORM DRAIN
- SD CATCH BASIN
- FM SANITARY SEWER FORCED MAIN
- SS SANITARY SEWER MAIN
- STANDARD PRECAST MANHOLE
- SIDE SEWER SERVICE
- SIDE SEWER CLEANOUT
- W WATER MAIN
- WATER SERVICE
- PUBLIC UTILITY ESMT.
- WATER METER (SIZE PER PLAN)
- FIRE HYDRANT (FH)
- TREE TO BE REMOVED

NOTES:

1. CATCH BASIN LOCATIONS SHOWN ON PLAN REPRESENT CENTER OF STRUCTURE. SEE STRUCTURE PLACEMENT DETAIL ON SHEET C3.100.
2. ALL STORM DRAINAGE (SD) CONVEYANCE PIPE SHALL BE LINED CORRUGATED POLYETHYLENE (LCPE), UNLESS NOTED OTHERWISE.
3. TYPICAL CATCH BASIN INLETS SHALL BE STANDARD RECTANGULAR FRAMES WITH VANED GRATES (18"x24") PER KCRS FIG. 7-014 AND 7-018 WITH EMBOSSING PER SCPW STD. DETAIL 5-180 RESPECTIVELY. SOLID LIDS FOR TYPE 2 CATCH BASINS SHALL BE CIRCULAR FRAME AND COVER PER SCPW STD. DETAIL 5-230 AND SOLID LIDS FOR TYPE 1 STRUCTURES SHALL BE RECTANGULAR (18"x24") PER KCRS FIG. 7-015 UNLESS OTHERWISE NOTED.



KEYMAP

0 5 10 VERT. IN FEET
0 20 40 HORIZ. IN FEET

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NO.	DATE	REVISION	BY	CK.
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DARTON RIELY-GIBBONS STATE OF WASHINGTON 34 REGISTERED PROFESSIONAL ENGINEER

THE RESERVE

PUBLIC WORKS STANDARD VARIANCE
STANDARD DETAIL NO. 2-03
PEACOCK HILL AVE FRONTAGE IMPROVEMENTS

CITY OF GIG HARBOR PIERCE COUNTY, WASHINGTON

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PROJECT NO. 0228-21-001

DRAWING FIGURE 3

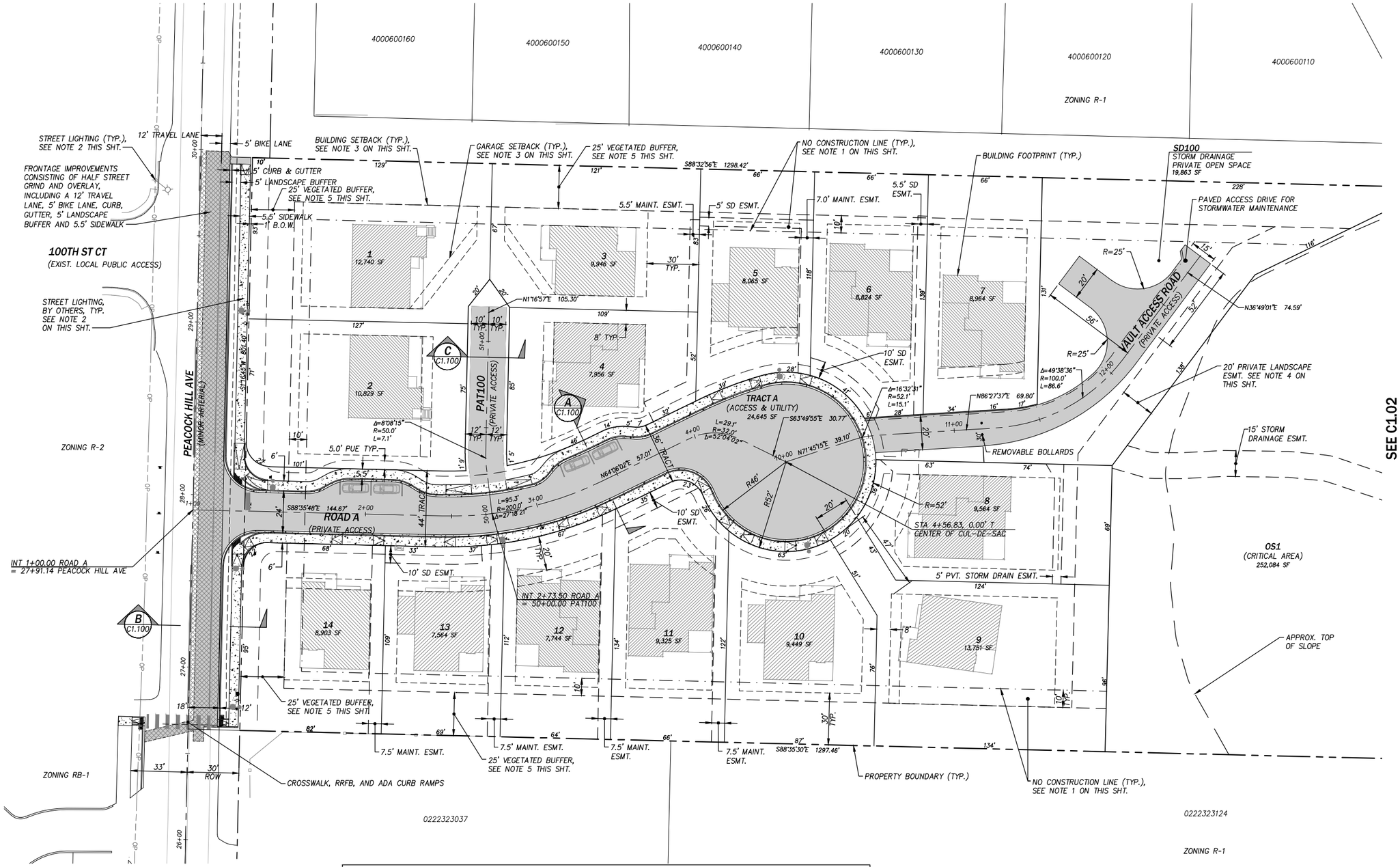
SHEET 3 OF 4

811 Know what's below. Call before you dig.

P:\project\0228_Prospect Development\21001_The Reserve\Dwg\Exhibits\Figure 3 - Frontage Paving Plan.dwg
3/30/2023 9:15 AM DARTON RIELY-GIBBONS

PRELIMINARY PLAT (PL-PPLAT22-0001)

PTN. SEC. 32, TWP 22 N, R2E W.M.



NOTES:

1. THE CLEARING AND GRADING SHOWN WITH THIS CIVIL CONSTRUCTION PERMIT AND ANY OTHER IMPROVEMENTS THAT MAY BE PROPOSED WITHIN THE 10-FOOT NO CONSTRUCTION ZONE WITH SUBSEQUENT PERMITS WILL BE ALLOWED ONLY AFTER APPROVAL BY THE CITY OF A WRITTEN STATEMENT FROM A QUALIFIED ARBORIST ACKNOWLEDGING THAT THE PROPOSED CONSTRUCTION ACTIVITY WITHIN THE 10-FOOT SETBACK WILL NOT HARM EXISTING VEGETATION WITHIN THE DESIGNATED LANDSCAPE OR BUFFER AREA.
2. A STREET LIGHTING PLAN IS PROVIDED BY OTHERS BUT INCLUDED IN THIS PLAN SET.
3. THE BSBL AND GSBL FOR EACH LOT SHALL BE SHOWN ON THE FINAL PLAT AS DEPICTED ON THIS PLAN.
4. THE PRIVATE LANDSCAPE EASEMENT SHOWN OVER LOTS 8 AND 9 AND TRACT SD100 SHALL BE MAINTAINED BY THE HOA. A NOTE SPECIFYING MAINTENANCE RESPONSIBILITIES SHALL BE PROVIDED ON THE FACE OF THE FINAL PLAT AND ACCOMPANYING COVENANTS, CONDITIONS, AND RESTRICTIONS FOR THE PROJECT.
5. THE 25' VEGETATED BUFFER SHALL BE RECORDED AS A PRIVATE ESMT. AND SHALL BE MAINTAINED BY THE HOA, A NOTE SPECIFYING MAINTENANCE RESPONSIBILITIES SHALL BE PROVIDED ON THE FACE OF THE FINAL PLAT AND ACCOMPANYING A COVENANTS, CONDITIONS AND RESTRICTIONS FOR THE PROJECT.
6. A VARIANCE IS APPROVED BY PUBLIC WORKS (EN-22-0014) FOR THE PROPOSED LENGTH OF THE ROAD A ACCESS LANDING.
7. A VARIANCE IS APPROVED BY PUBLIC WORKS (EN-22-0015) FOR THE JOINT USE DRIVEWAY, PAT100.
8. A VARIANCE IS IN REVIEW WITH PUBLIC WORKS (EN-22-0049) FOR THE MINOR ARTERIAL ROADWAY SECTION FOR PEACOCK HILL AVE.
9. A VARIANCE IS APPROVED BY PUBLIC WORKS (EN-22-0050) FOR THE CUL-DE-SACE AT THE EAST END OF ROAD A.
10. A VARIANCE IS APPROVED BY PUBLIC WORKS (EN-23-0010) FOR THE VAULT SETBACK FROM 20 PERCENT SLOPES IN SD100.
11. A VARIANCE IS IN REVIEW WITH PUBLIC WORKS (EN-23-0011) FOR THE LOCAL ACCESS SPACING ON PEACOCK HILL AVENUE.

0 30 60
PLAN IN FEET

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STATE OF WASHINGTON
44
REGISTERED
PROFESSIONAL ENGINEER

THE RESERVE

PUBLIC WORKS STANDARD VARIANCE
STANDARD DETAIL NO. 2-03

SITE PLAN - WEST

CITY OF GIG HARBOR — PIERCE COUNTY, WASHINGTON

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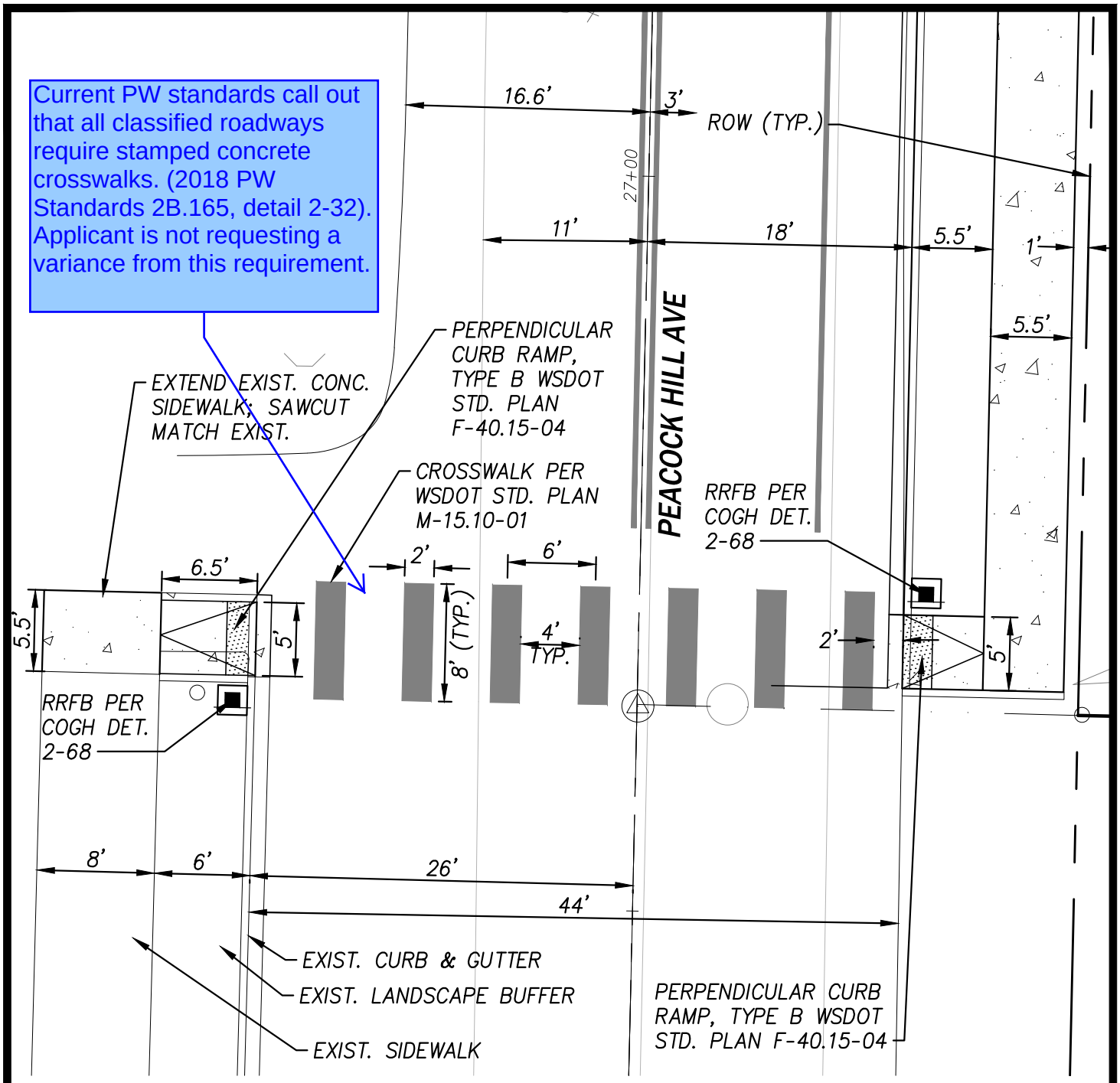
DRAWING
FIGURE 4

SHEET 4 OF 4



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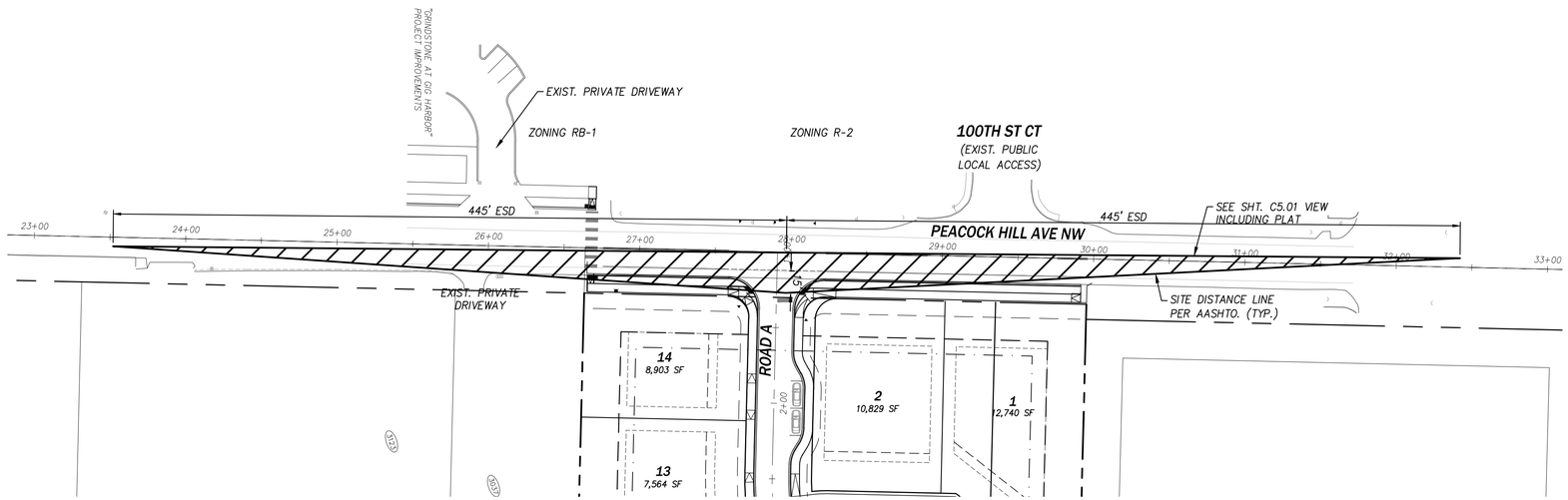
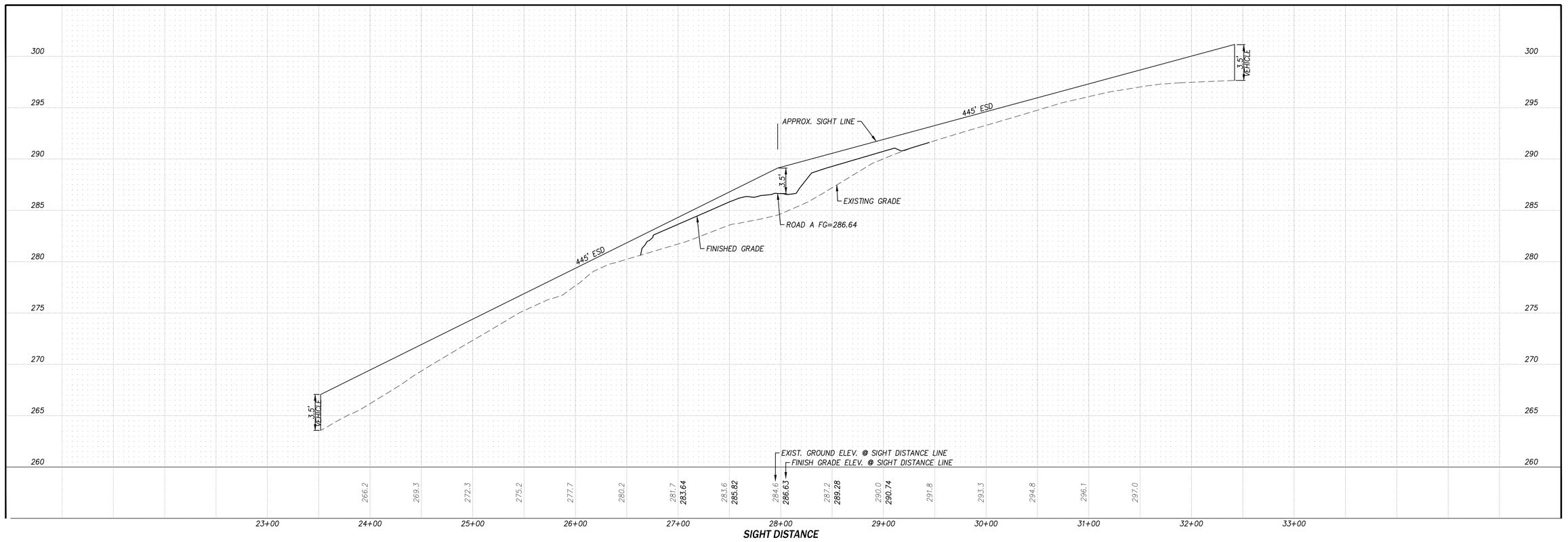
N

0 10 20
PLAN IN FEET

FIGURE 5
CROSSWALK AND RAMP DETAIL





SIGHT DISTANCE

SIGHT DISTANCE

EYE HEIGHT: 3.5 FT

VEHICLE OBJECT HEIGHT: 3.5 FT

POSTED SPEED: 35 MPH

DESIGN SPEED: 40 MPH

REQ'D ESD FOR LEFT TURN FROM STOP: 445 FT
(AASHTO TABLE 9-6)

NOTE: NO ADJUSTMENT OF SIGHT DISTANCE IS RECOMMENDED SINCE BOTH VEHICLES WILL BE AT NEARLY THE SAME GRADE. PASSENGER CARS ASSUMED BASED RESIDENTIAL USE OF MINOR ROAD, WITH WORST CASE LEFT TURN ESD

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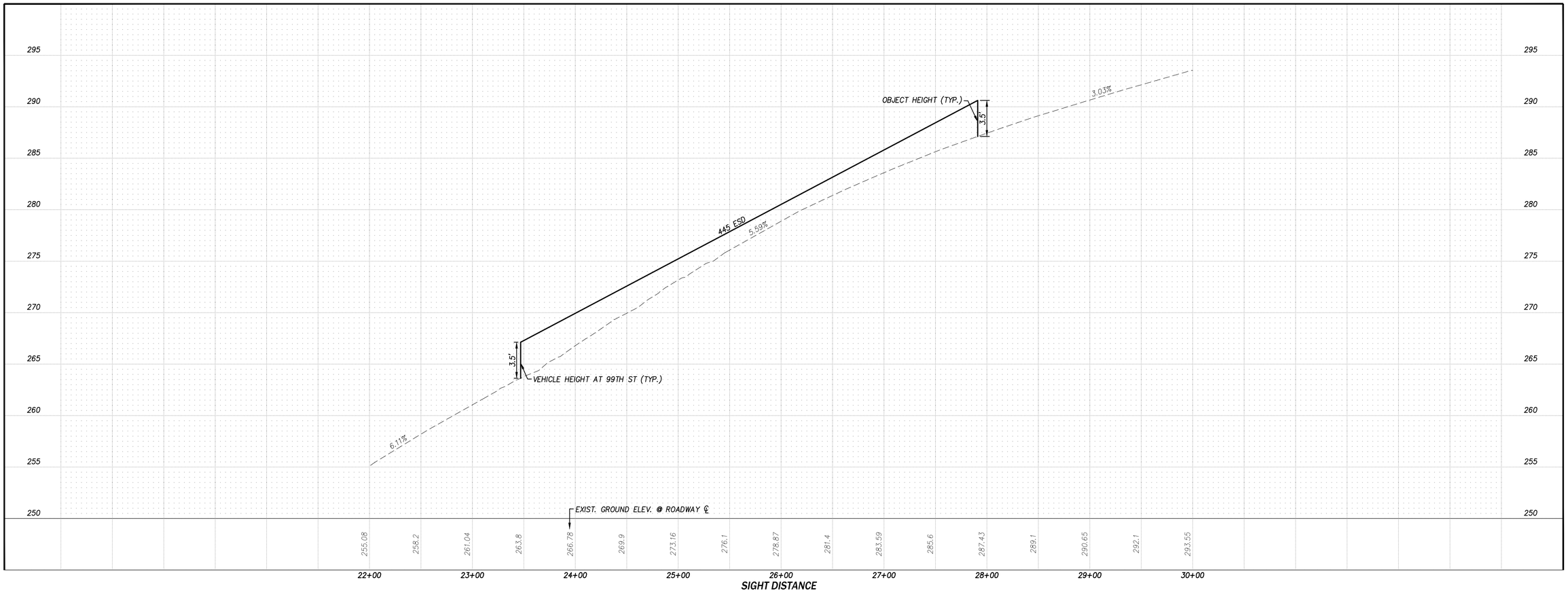
N

0 5 10
VERT. IN FEET
0 50 100
HORIZ. IN FEET

March 29, 2023

FIGURE 6
ROAD A SIGHT DISTANCE

P:\project\0228 Prospect Development\21001_The Reserve\Dwg\Sheets\Final Engineering\C5.101.dwg
3/29/2023 1:43 PM MONTANA SAYSANASY



SIGHT DISTANCE

SIGHT DISTANCE

EYE HEIGHT:	3.5 FT
VEHICLE OBJECT HEIGHT:	3.5 FT
POSTED SPEED:	35 MPH
DESIGN SPEED:	40 MPH
REQ'D ESD FOR LEFT TURN FROM STOP: (AASHTO TABLE 9-6)	445 FT

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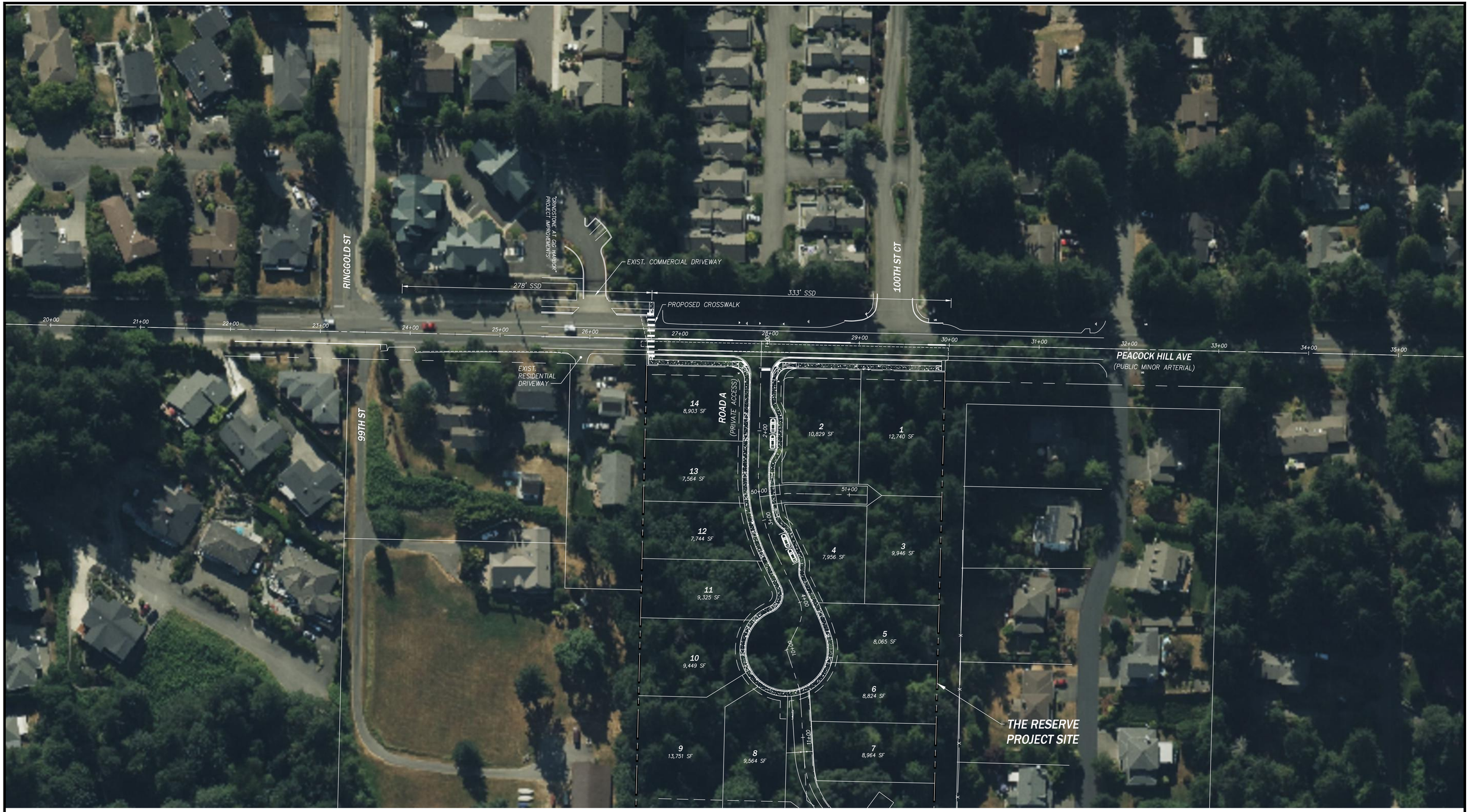
0 5 10
VERT. IN FEET
0 50 100
HORIZ. IN FEET

April 6, 2023

Figure 7
99th Street Sight Distance

P:\projects\0228_Prospect Development\21001_The Reserve\Dwg\Exhibits\Figure 7- 99th ST SIGHT DISTANCE.dwg
4/6/2023 10:43 AM MONTANA SKYSANAS1



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N

0 50 100
PLAN IN FEET

April 6, 2023

Figure 8
Crosswalk Stopping Sight Distance

P:\project\0228_Prospect Development\21001_The Reserve\Dwg\Exhibits\Figure 8- Aerial crosswalk location and sight distance exhibit.dwg
4/6/2023 10:46 AM MONTANA SANTSANASY