



*Excellence Delivered **As Promised***

Date: February 24, 2021

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Eagle and Radnor Roads

Date Accepted: 10/06/2020
90 Day Review: 01/04/2021 extended to 03/31/2021

Gannett Fleming, Inc. has completed a review of the Preliminary Land Development Plan for the above referenced project for compliance with the Radnor Township Code. We have reviewed the plans based on a proposed zoning map revision that would convert this Parcel to R-2 from the current zoning designation of R-1 and PI. The map revision must be approved by the Board of Commissioners prior to this plan moving forward in the approval process. The applicant is proposing to construct 20 single family homes on individual lots. The Plan was reviewed for conformance with Subdivision and Land Development, Zoning and other applicable codes of the Township of Radnor.

The applicant has indicated in a January 15, 2021 letter that the following waivers are being requested:

1. §255-12.A – To permit the land development application to proceed and be reviewed as a single preliminary/final land development plan.
2. §255-21.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. A partial waiver is being requested to not provide the items which are not visible on aerial imagery (sewer lines, storm drains, easements, etc.)

Eagle and Radnor Roads

Plans Prepared By: Site Engineering Concepts, LLC
Dated: 09/15/2020 and last revised 02/16/2021

Gannett Fleming, Inc.

Sewage Facilities Planning

1. Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP. The applicant has submitted the planning module application to the Township on January 13, 2021 for review. The note on the plans that indicates the applicant requests final plan approval conditioned on received planning module approval prior to the construction of the final six homes. We note that the plans may not be recorded, and construction may not commence until planning approval for the entire project is received from the PA DEP. This statement must be revised.

Zoning

1. §280-112 – There appears to be portion of the home on lot #1 located in the steep slope areas of greater than 20%. The applicant has indicated that these steep slope areas are man-made. Verification of the steep slopes being created by an approved Land Development Plan or Grading Permit must be provided. The applicant has submitted a slope determination memo to the Township for approval.

Subdivision and Land Development

1. §255-20-B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans. The applicant has requested a partial waiver from this requirement.
2. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. Radnor Street Road is a Minor Collector, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 33 feet. Walnut Avenue is a local Road, with a right-of-way requirement is 60 feet. The applicant has indicated on the plans that the existing right-of-way is 50 feet. A 25-foot half right-of-way from the existing cartway centerline is being provided along Radnor Street Road. The existing Walnut Ave right-of-way is currently sufficient for the type and usage of roadway.
3. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

4. §255-49 – Where appropriate, the developer shall install or cause to be installed, at the developer’s expense, metal or fiberglass pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the developer’s engineer and approved by the Board of Commissioners. Three streetlights are being provided.
5. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. A fire hydrant is being provided at the end of the cul-de-sac per discussions with the fire department. The applicant is preparing a water extension plan for review and approval by Aqua and Township.

Stormwater

1. The proposed drainage area map on Sheet 15 of the plan set has several instances where the drainage boundaries and the drainage area hatches do not align. Additionally, some of the drainage areas are indicated as Captured Post-Dev Area but they should actually be Post-Dev Bypass Area, and vice versa. Revise the drainage areas to accurately reflect the conditions shown and ensure that drainage boundaries and hatches are consistent.
2. The drainage areas on the plans do not appear to match the areas used in the hydrographs for Outfall A3, Outfall A6, and Post-Bypass. Revise these inconsistencies.
3. Please revise the Basin Volumes & Dewater Times per bed in the PCSM report to indicate that the infiltration rate for Lot #1 Infiltration Bed will be retested and provided with the grading permit application.
4. The Lot 17 & 18 Storm Main Profile on Sheet 9 of the plan set indicates utility crossings in the following order (Lot 17 water, Lot 17 gas, Electric, Communications) but it appears that it should be Communications, Electric, Lot 17 gas, Lot 17 water. Please revise the profile to reflect the conditions shown on the plans. Additionally, it appears that several of the utilities do not provide adequate vertical separation. Revise the plans to provide a minimum of 18” vertical separation between the storm pipe and other utilities.
5. The Walnut Storm Main Profile on Sheet 9 of the plan set was revised to show utility crossings at PP-R7 but they do not appear to be entirely correct. The Lot 1 Gas Service appears to be improperly located and the crossing for the existing 8” DIP sanitary main is not shown. Revise the profile accordingly.

6. Revise the Radnor St Rd – Ex Inlet Profile to show the utility crossings.

Sanitary Sewer

1. The sanitary sewer profile indicates two separate Lot 17 lateral connections. This must be revised.
2. Please use the attached detail for standard Manhole Frames and Covers. The Detail provided on the plans are for the watertight covers in non-paved areas only.

General

1. The applicant has indicated that all retaining walls will be less than 4 feet high. Any revisions to the size or locations of the individual structures will be addressed with the grading permits.
2. The applicant must appear before the Shade Tree Commission and gain approval prior to this plan being presented to the Board or Commissioners. The applicant was before the Shade Tree Commission on January 20, 2021 and gained approval.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager

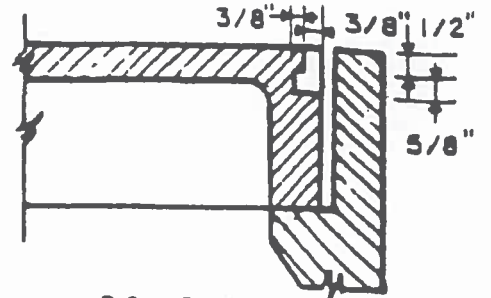
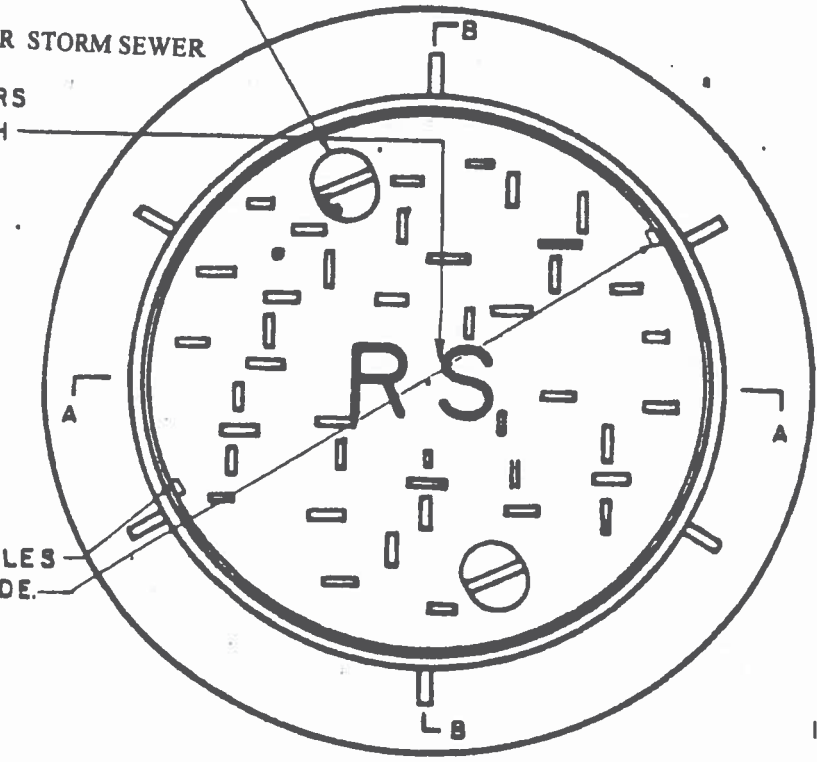
R S FOR SANITARY

STORM FOR STORM SEWER

4" LETTERS
1/4" HIGH

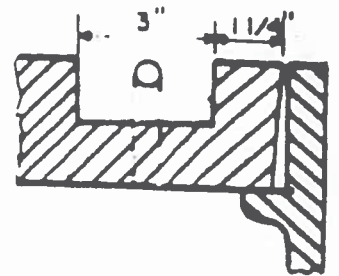
PICK HOLES
1 1/2" WIDE.

LIFTING RING (2 REQUIRED)
SEE SKETCH

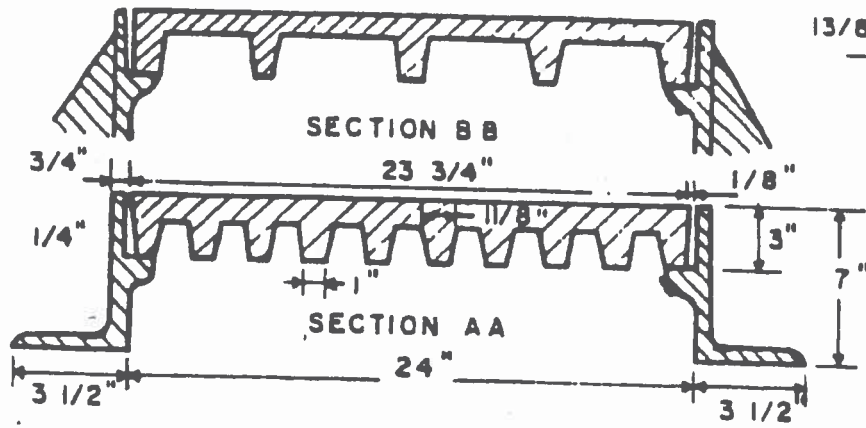


PICKHOLE DETAIL

FRAME 240 LB. MIN.
COVER 200 LB. MIN.



1 1/2" LIFTING RING



DETAIL OF MANHOLE COVER

RADNOR TOWNSHIP	DATE
SITE DESIGN & CONSTRUCTION STANDARDS	JUNE 1995
MANHOLE FRAME AND COVER	DRAWING NO.
	C-10