

Record Date: 8/4/2023 8:05 AM

Electronically Recorded King County, WA

After Recording Return To:
Jing Song
Toxics Cleanup Program
Department of Ecology
Northwest Regional Office
15700 Dayton Avenue North
Shoreline, Washington 98133

ENVIRONMENTAL COVENANT

Grantor: NE 8th Street Development, LLC

Grantee: State of Washington, Department of Ecology (hereafter "Ecology")

Legal description:

The Land referred to herein below is situated in the County of King, State of Washington, and is described as follows:

PARCEL A, BOUNDARY LINE ADJUSTMENT: MODERA RIVER TRAIL, CITY OF REDMOND FILE NO. LAND-2019-00505, RECORDED DECEMBER 20, 2019 UNDER KING COUNTY RECORDING NO. 20191220900001, IN KING COUNTY, WASHINGTON.

Tax Parcel No.: King County Parcel No. 719890-0170

**I AM REQUESTING AN EMERGENCY NONSTANDARD RECORDING
FOR AN ADDITIONAL FEE AS PROVIDED IN RCW 36.18.010.**

**I UNDERSTAND THAT THE RECORDING PROCESSING
REQUIREMENTS MAY COVER UP OR OTHERWISE OBSCURE
SOME PART OF THE TEXT OF THE ORIGINAL DOCUMENT.**

Lori C. Savage, Paralegal
McCullough Hill PLLC

RECITALS

- a. This document is an environmental (restrictive) covenant (hereafter “Covenant”) executed pursuant to the Model Toxics Control Act (“MTCA”), Chapter 70A.305 RCW, and Uniform Environmental Covenants Act (“UECA”), Chapter 64.70 RCW.
- b. The Property that is the subject of this Covenant is part of a site commonly known as **Modera River Trail**, Cleanup Site ID No. 15281, Facility Site ID No. 75292. The Property is currently occupied by the Modera River Trail apartment complex located at 15881 NE 85th Street in Redmond, Washington. The Property is legally described in Exhibit A and illustrated in Exhibit B, all of which are attached (hereafter “Property”). If there are differences between the two Exhibits, the legal description in Exhibit A shall prevail.
- c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on the Property after completion of remedial actions. Specifically, the following principal contaminants remain on the Property:

Medium	Principal Contaminants Present
Soil	Total naphthalenes and carcinogenic polycyclic aromatic hydrocarbons (cPAHs)
Groundwater	N/A
Soil Vapor	Total naphthalenes

- d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site.

Records describing the extent of residual contamination and remedial actions conducted are available through Ecology, including the following documents:

- *Remedial Investigation, Feasibility Study, and Interim Remedial Action Report*, August 12, 2020
- *Well Installation and Monitoring Report*, dated October 11, 2021
- *Indoor Air Monitoring Report*, dated June 1, 2022

- *2022 Annual Groundwater Monitoring Report*, dated August 17, 2022
- *Indoor Air Monitoring Report – August 2022*, dated September 1, 2022
- *Cleanup Action Summary Report*, dated November 4, 2022

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property; however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 et seq. The rights of Ecology as an “agency” under UECA, other than its right as a Holder, are not an interest in real property.

COVENANT

NE 85th Street Development, LLC, as the Grantor and fee simple owner of the Property, hereby grants to Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the Grantor has in the Property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

- Interference with Remedial Action.** The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection, or monitoring of that remedial action without prior written approval from Ecology.
- Protection of Human Health and the Environment.** The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.
- Continued Compliance Required.** The Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance, and monitoring of remedial actions and continued compliance with this Covenant.
- Leases.** The Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant, and notify all lessees of the restrictions on the

use of the Property.

e. Preservation of Reference Monuments. The Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, the Grantor shall have it replaced by a licensed professional surveyor within 30 days of discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property:

a. Containment of Soil. The remedial action for the Property is based on containing contaminated soil and timber piles under a cap located as illustrated in Exhibit C. The cap consists of the existing building structure, a vapor barrier, and concrete floor. The primary purpose of this cap is to minimize the potential for contacting contaminated soil and timber piles, minimize leaching of contaminants to groundwater, prevent runoff from contacting contaminated soil, and to prevent the intrusion of soil vapor into the structure.

The following restrictions shall apply only within the "Restricted Area" illustrated in Exhibit C:

The Grantor shall not alter or remove the existing structure, concrete floor, or vapor barrier (collectively the cap) within the Restricted Area of the Property illustrated in Exhibit C in any manner that would expose contaminated soil and timber piles, result in a release to human health or the environment, or create a new exposure pathway, without prior written approval of Ecology. Should the Grantor propose to remove all or a portion of the cap in the Restricted Area illustrated in Exhibit C on the Property so that access to the underlying contamination is feasible, Ecology may require treatment or removal of the underlying contaminated soil and timber piles. Any intrusive subsurface soil work within or beneath the Property must be implemented by Hazardous Waste Operations and Emergency Response (HAZWOPER) trained workers in accordance with a health and safety plan.

b. Stormwater Facilities. To minimize the potential for mobilization of contaminants remaining in soil on the site, no stormwater infiltration facilities or ponds shall be constructed within the Restricted Area of the Property illustrated in Exhibit C. All stormwater catch basins, conveyance systems, and other appurtenances located within this area shall be of water-tight construction.

c. Groundwater Use. The groundwater beneath the Property has not been identified to be contaminated. However, the soil contamination on the Property presents a potential risk to perched groundwater (if present) or deeper groundwater. Therefore, groundwater

beneath the Property shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring, or remediation. Any temporary construction dewatering must comply with Redmond Municipal Code 13.25¹. Drilling of a well for any water supply purpose is strictly prohibited. Groundwater extracted from the Property for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

d. **Vapor/gas controls.** The residual contamination on the Property includes naphthalenes in soil and soil vapor. The existing building includes a vapor barrier. This barrier, combined with the concrete floor of the structure, prevents the migration of vapors into the building. No alterations of the existing garage floor of the structure or new construction that has the potential to affect the vapor intrusion pathway shall be performed unless first approved by Ecology.

e. **Cap Monitoring Plan.** The Grantor shall comply with and implement the requirements of the Cap Monitoring Plan until such time that Ecology confirms in writing that the obligations of the Cap Monitoring Plan are no longer necessary.

f. **Groundwater Monitoring.** Two groundwater monitoring wells are located on the Property to monitor the performance of the remedial action. The Confirmational Groundwater Monitoring Plan for the remedial action is attached as Exhibit F. While monitoring is ongoing, the Grantor shall maintain clear access to monitoring wells and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring well. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

Section 3. Access.

a. The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor, and maintain the remedial action.

b. The Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, to inspect any remedial actions conducted on the Property, and to inspect related records.

c. No right of access or use by a third party to any portion of the Property is conveyed

¹ Ch. 13.25 Temporary Construction Dewatering | Redmond Municipal Code

by this instrument.

Section 4. Notice Requirements.

a. Conveyance of Any Interest. The Grantor, when conveying any interest in the area of the Property legally described in Exhibit A and illustrated in Exhibit B, including but not limited to title, easement, leases, and security or other interests, must:

- i. Provide written notice to Ecology of the intended conveyance at least 30 days in advance of the conveyance. This notice requirement does not apply to the sale or lease of individual residential units on the Property. Waiver of this advance notice to Ecology for these transactions does not constitute waiver of this notice for the entire Property nor a waiver of the requirement in Section 4.a.ii. to include a notice in any document conveying interest in the Property.
- ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON _____, 2023 AND RECORDED WITH THE KING COUNTY AUDITOR UNDER RECORDING NUMBER _____. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.

- iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within 30 days of the date of execution of such document.
- b. Reporting Violations.** Should the Grantor become aware of any violation of this Covenant, the Grantor shall promptly report such violation in writing to Ecology.
- c. Emergencies.** For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within 24 hours of the discovery of the event.
- d. Notification Procedure.** Any required written notice, approval, reporting, or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to

personal delivery, first class mail, or e-mail, such as other electronic means, may be used for these communications.

NE 85 th Street Development, LLC c/o Steve Yoon SENIOR MANAGING DIRECTOR Mill Creek Residential 1417 116 th Ave NE, Suite 208 Bellevue, WA 98004 425.739.1144 Syoon@MCRTrust.com	Washington State Department of Ecology Attn: Environmental Covenants Coordinator Toxics Cleanup Program P.O. Box 47600 Olympia, WA 98504-7600 360-407-6000 ToxicsCleanupProgramHQ@ecy.wa.gov
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Section 5. Modification or Termination.

a. The Grantor must provide written notice and obtain approval from Ecology at least 60 days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site:

- i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and
- ii. If Ecology approves the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

c. By signing this agreement, per RCW 64.70.100, the original signatories to this agreement, other than Ecology, agree to waive all rights to sign amendments to and termination of this Covenant.

Section 6. Enforcement and Construction.

a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within 20 days of execution of this Covenant, the Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

- c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay, or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.
- d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request by Grantor for any modification or termination of this Covenant and any approval required by this Covenant.
- e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.
- f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.
- g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

The undersigned Grantor warrants he/she holds the title to the Property and has authority to execute this Covenant.

EXECUTED this 21st day of June, 2023.

NE 85th Street Development, LLC, a Delaware
limited liability company

By: MCRT River Trail LLC, a Delaware limited
liability company, Operating Member

By: 

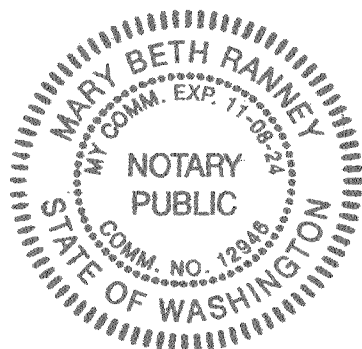
Name: Jaeho Steven Yoon

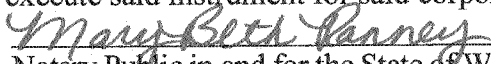
Title: Senior Managing Director

CORPORATE ACKNOWLEDGMENT

STATE OF WASHINGTON
COUNTY OF KING

On this 21st day of June, 2023 I certify that Jaeho Steven Yoon personally appeared before me, acknowledged that he/she is the Senior Managing Director of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument for said corporation.




Notary Public in and for the State of Washington ¹⁶
Residing at Redmond, WA
My appointment expires Nov. 8, 2024

The Department of Ecology, hereby accepts the status as GRANTEE and
HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



by: Robert W. Warren,

Title: Section Manager
Toxics Cleanup Program
Northwest Regional Office

Dated: 7-17-23

Exhibit A

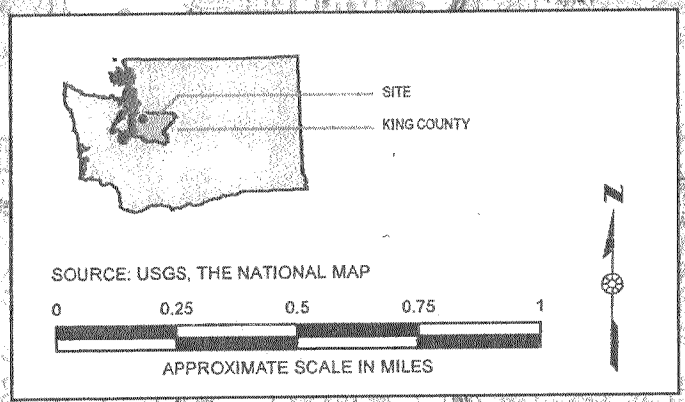
LEGAL DESCRIPTION

The Land referred to herein below is situated in the County of King, State of Washington, and is described as follows:

PARCEL A, BOUNDARY LINE ADJUSTMENT: MODERA RIVER TRAIL CITY OF REDMOND FILE NO. LAND-2019-00505, RECORDED DECEMBER 20, 2019 UNDER KING COUNTY RECORDING NO. 20191220900001, IN KING COUNTY, WASHINGTON.

Exhibit B

PROPERTY MAP



1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
425.395.0010
WWW.TRCCOMPANIES.COM

FIGURE 1
GENERAL VICINITY MAP

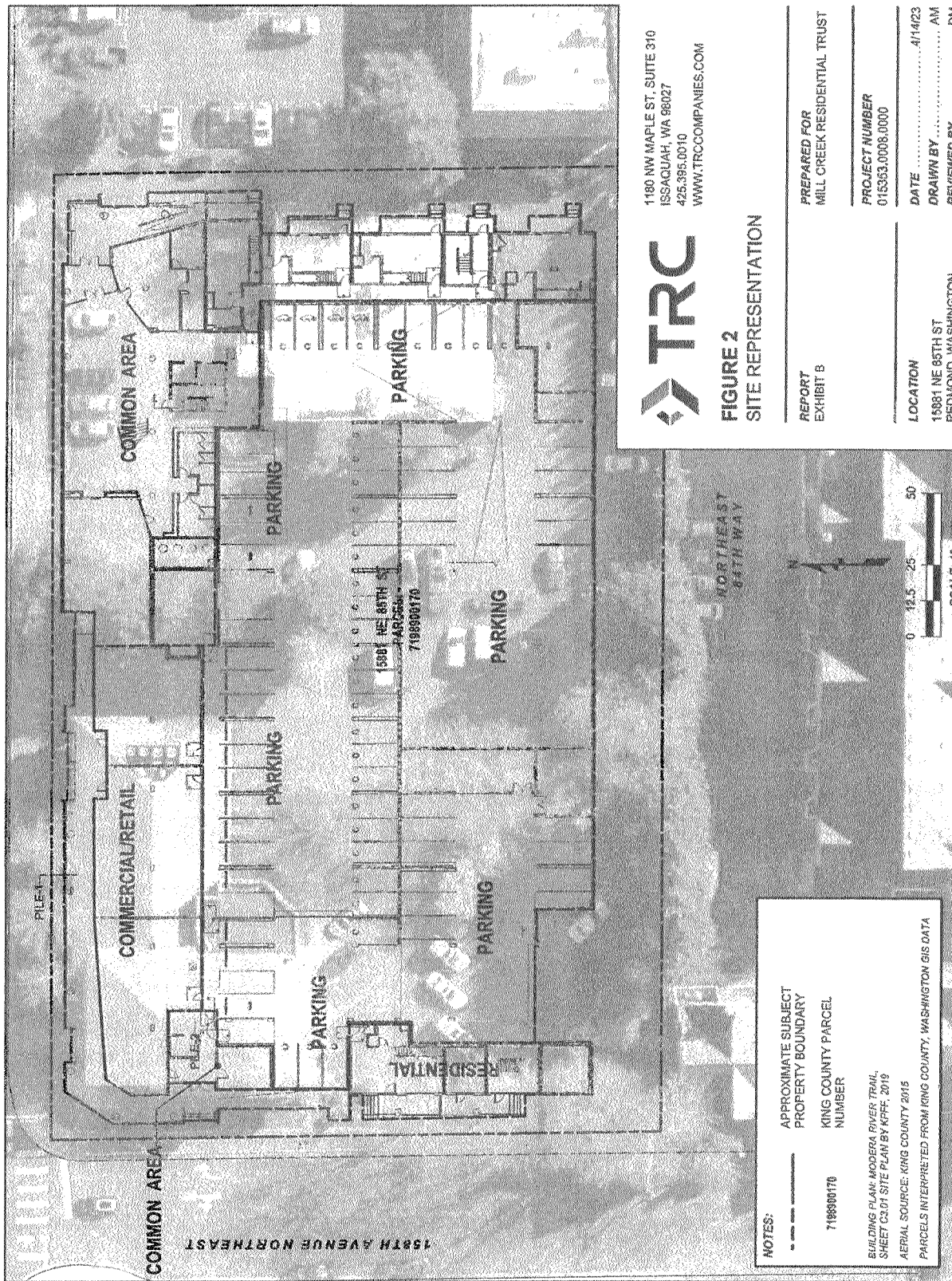
REPORT
EXHIBIT B

PREPARED FOR
MILL CREEK RESIDENTIAL TRUST

PROJECT NUMBER
015353.0008.0000

LOCATION
15881 NE 85TH ST
REDMOND, WASHINGTON

DATE11/22/22
DRAWN BY SR
REVIEWED BY RM



1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
425.395.0010
WWW.TRCOMPANIES.COM



FIGURE 2
SITE REPRESENTATION

REPORT
EXHIBIT B

PREPARED FOR
MILL CREEK RESIDENTIAL TRUST

PROJECT NUMBER
015353.0008.0000

DATE 4/14/23
DRAWN BY AM
REVIEWED BY RM

LOCATION
15881 NE 85TH ST
REDMOND, WASHINGTON

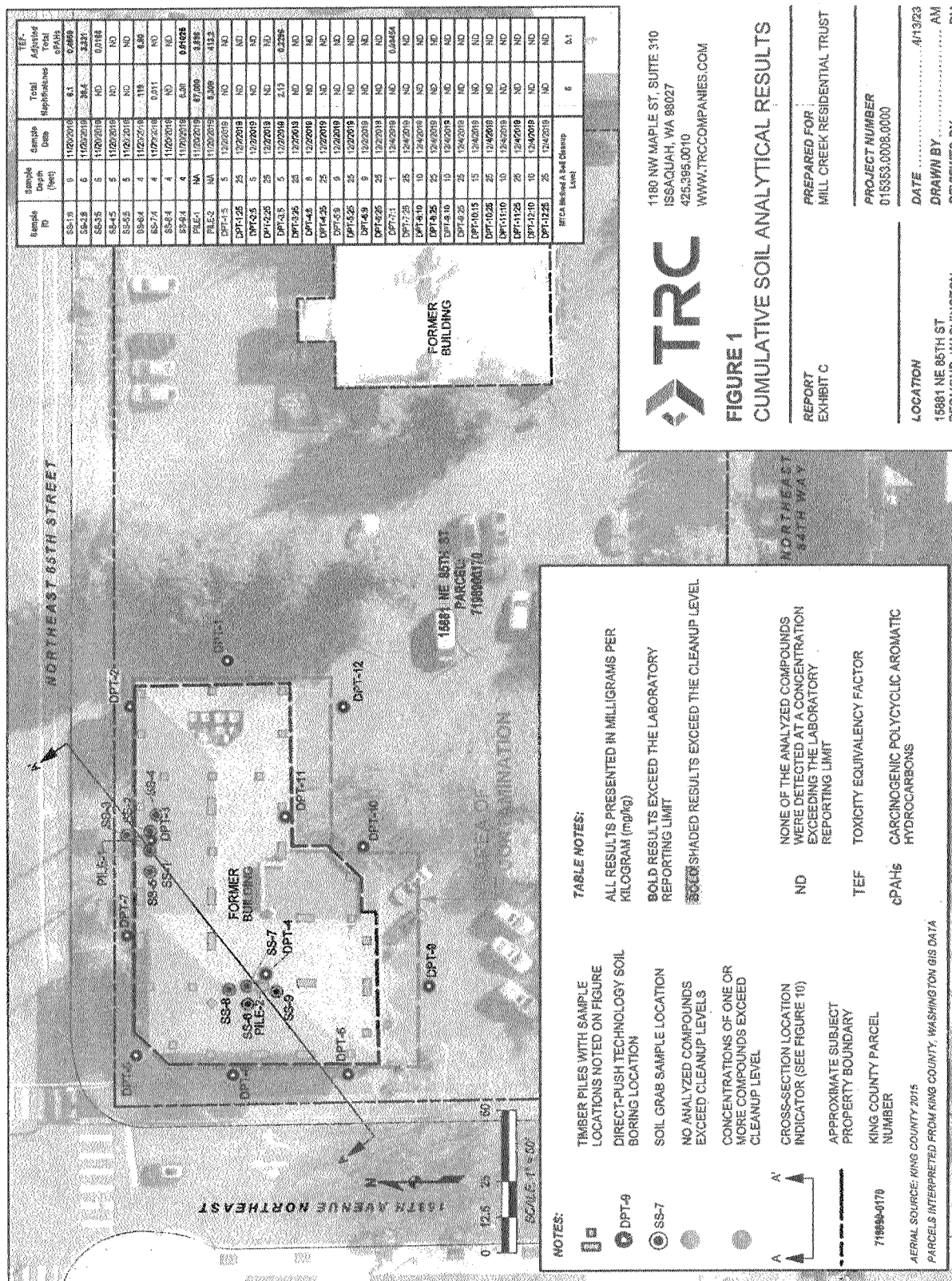
NOTES:

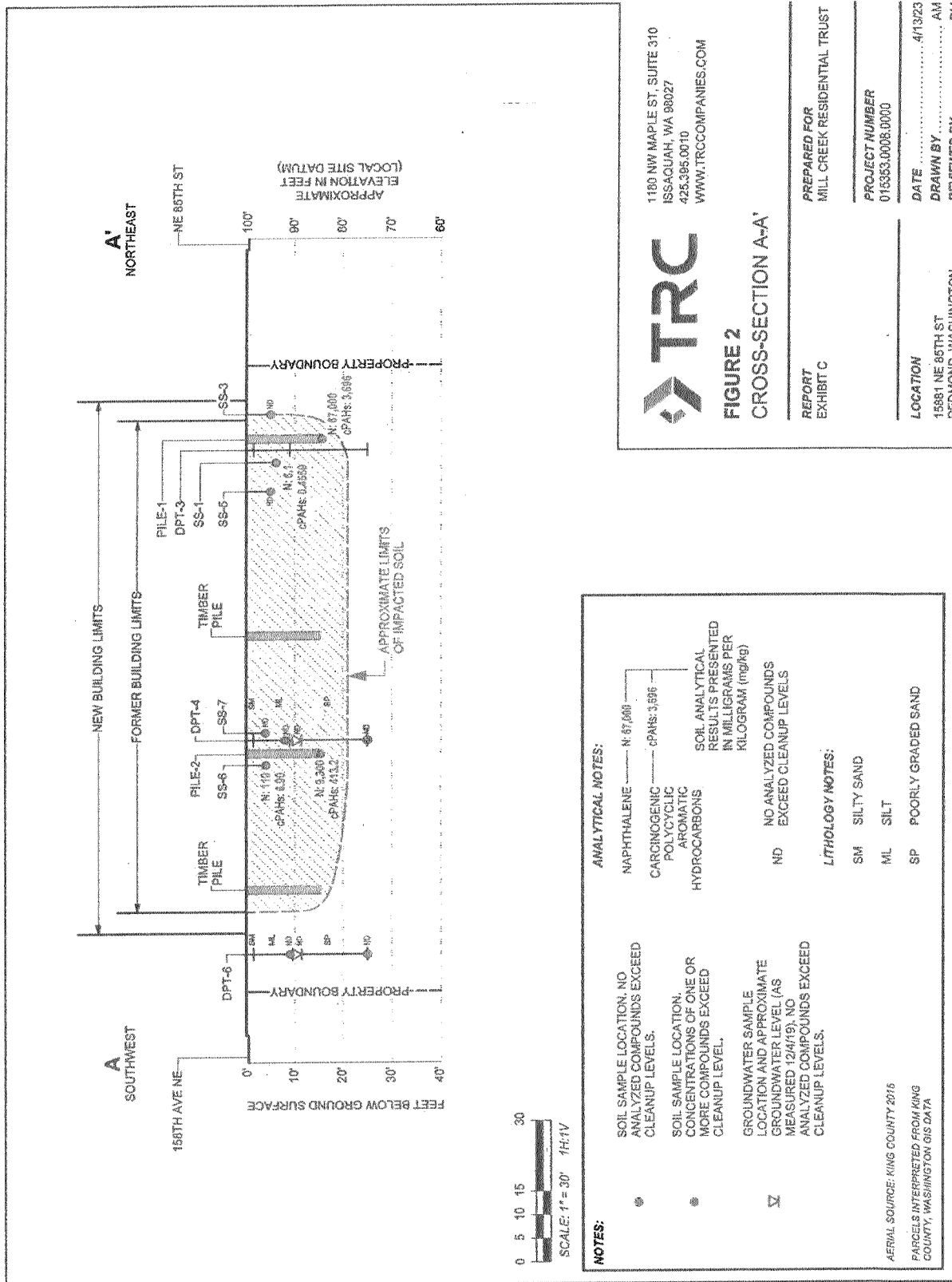
APPROXIMATE SUBJECT
PROPERTY BOUNDARY
KING COUNTY PARCEL
NUMBER
7198900170

BUILDING PLAN: MODERA RIVER TRAIL,
SHEET C3.01 SITE PLAN BY KPFF, 2019
AERIAL SOURCE: KING COUNTY 2015
PARCELS INTERPRETED FROM KING COUNTY, WASHINGTON GIS DATA

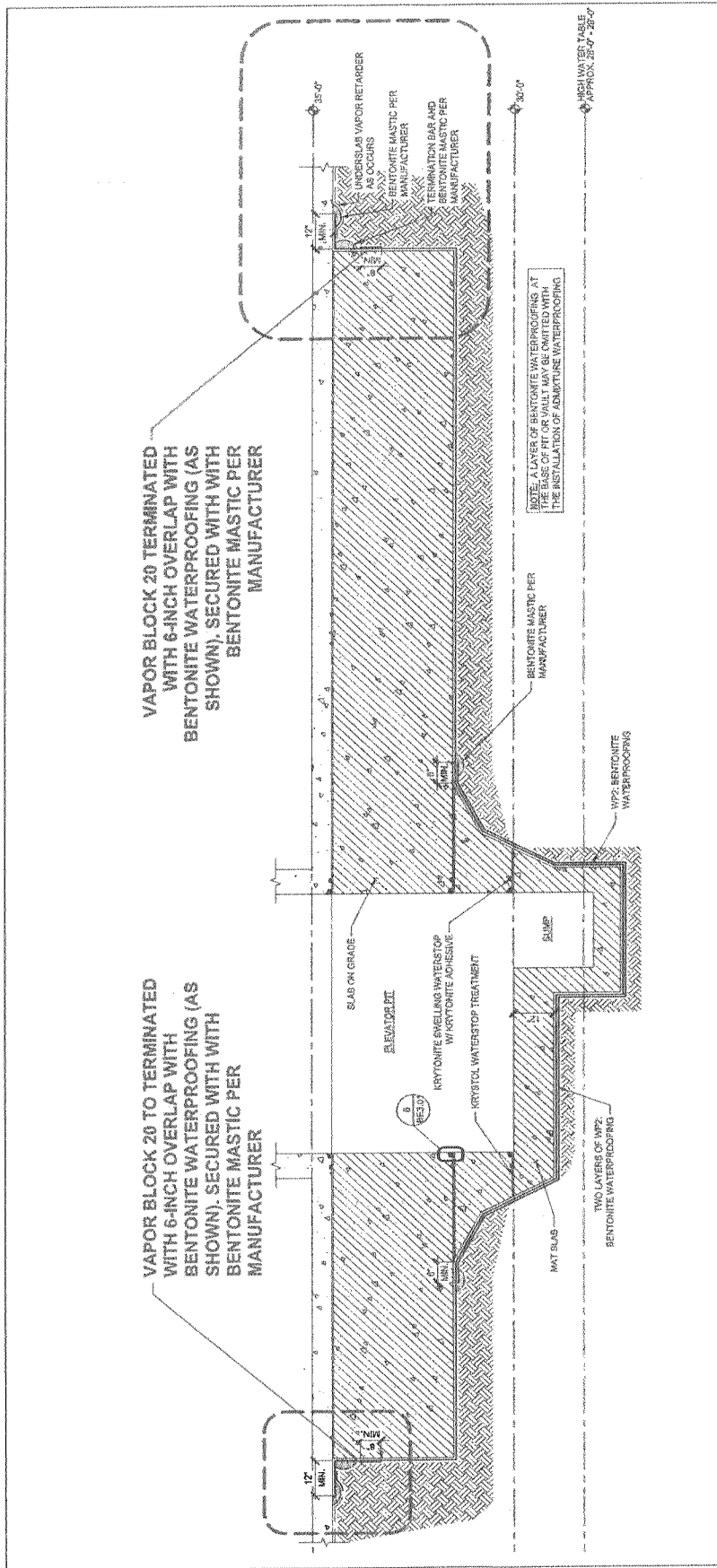
Exhibit C

MAPS ILLUSTRATING THE LOCATIONS OF RESTRICTIONS









TRC
1180 NW MAPLE ST. SUITE 310
BESSEMER, WA 98027
PH: 206.835.0000
WWW.TRCCOMPANIES.COM

**FIGURE 4
VAPOR BARRIER DETAIL**

REPORT EXHIBIT C	PREPARED FOR MILL CREEK RESIDENTIAL TRUST
LOCATION 1180 NW MAPLE ST. BESSEMER, WASHINGTON	PROJECT NUMBER D1885.0001.0000
DATE 11/15/2023	REVIEWED BY AM

Exhibit E

CAP MONITORING PLAN



1180 NW Maple St., Suite 310
Issaquah, WA 98027

T 425.395.0010
TRCcompanies.com

Cap Monitoring Plan Concrete Floor Slab and Vapor Barrier

**Modera River Trail Site
15881 NE 85th Street
Redmond, Washington**

Parcel Number: 7198900170
Facility Site ID: 75292
Cleanup Site ID: 15281
Voluntary Cleanup Program ID: NW3292

June 2, 2023

Prepared By:

TRC Environmental Corporation
1180 NW Maple Street, Suite 310
Issaquah, Washington 98027
(425) 395-0010

A handwritten signature in cursive script, appearing to read "Ramsey S. Mauldin".

Prepared by:
Ramsey S. Mauldin
Senior Environmental Scientist

A handwritten signature in cursive script, appearing to read "Eric Koltes".

Reviewed and approved by:
Eric Koltes, L.G.
Principal Geologist

TRC Project Number: 015353.0008.0000

QR TR

Cap Monitoring Plan
Concrete Floor Slab and Vapor Barrier
15881 ME 85th Street, Redmond, Washington
June 2, 2023

INTRODUCTION

This Cap Monitoring Plan (CMP) has been prepared for the commercial property at 15881 Northeast 85th Street in Redmond, Washington (parcel number 7198900170, "subject property"). Soil and soil vapor beneath a portion of the concrete floor slab at the subject property is impacted with naphthalenes and carcinogenic polycyclic aromatic hydrocarbons (cPAHs). Soil is impacted with both naphthalenes and cPAHs. Soil vapor is impacted with naphthalene. The source of these impacts is creosote-preserved timber pilings beneath the subject property. The impacted area is considered a "Site" under the Model Toxics Control Act (Revised Code of Washington Chapter 70.105D and its implementing regulations, Washington Administrative Code [WAC] 173-340; collectively referred to as "MTCA").

The selected remedy to address environmental impacts at the Site included installation of a vapor barrier beneath the planned structure and implementing institutional controls to limit potential exposure to contaminants. During building construction, a vapor barrier was installed under portions of the concrete slab to mitigate the potential for vapor intrusion into the building. The vapor barrier and concrete slab prevent exposure to impacted soil and soil vapor at the subject property. The institutional controls associated with the Site include the use of an Environmental Covenant (Covenant) filed with King County. Exhibit C of the Covenant includes observed concentrations of contaminants of concern, the Area of Contamination, and Vapor Barrier Extent, and illustrates the Restricted Area to which the Covenant applies. That exhibit is included in this CMP as Attachment A. This CMP describes specific inspection and reporting actions to be taken by the owner of the subject property, or its agents, to ensure that any actions taken at the subject property do not impact the integrity of the Site remedy or result in exposure to contaminated soil or soil vapor.

INSPECTION

Inspection of the concrete floor slab should be conducted within the entirety of the Restricted Area (Figure 4 of Attachment A) at least annually. The inspection should include the following items:

- Slab settlement or movement;
- New floor penetrations that may compromise the integrity of the vapor barrier;
- New cracks or fractures of the concrete floors or joints; and
- Other activities that could affect the performance of the concrete floor and the vapor barrier.

MAINTENANCE

Maintenance of the concrete floor slab and underlying vapor barrier is required by the Covenant to prevent potential exposures to impacted soil or migration of impacted soil vapor into the indoor air. Maintenance tasks will be identified during periodic inspections of the concrete floor slab. Maintenance of the concrete floor slab may include the following tasks:

Cap Monitoring Plan
Concrete Floor Slab and Vapor Barrier
15881 NE 85th Street, Redmond, Washington
June 2, 2023

- Notify Ecology in advance of any modifications to the structure, floor, or other components of the vapor barrier system that may otherwise affect its intended performance.
- Report to Ecology within 48 hours of the discovery of any damages to the structure, floor, or vapor barrier within the Restricted Area.
- Repair any new perforations to the concrete floor slab and underlying vapor barrier immediately upon identification. Vapor barrier installation and repair instructions are included in Attachment B.
- Repair any cracks or other damages in the concrete floor slab and underlying vapor barrier immediately upon discovery to maintain its intended function.

REPORTING

A completed inspection summary should be prepared to document the findings of the inspections described in this CMP. The annual inspection summary should be submitted to the Washington State Department of Ecology (Ecology) within 30 days of completion of such inspection. An Annual Inspection Summary Report Form (Report Form) is provided as Attachment C.

If any damage to the structure, concrete floor, or vapor barrier is discovered and repaired, a report documenting the discovery and repair work should be submitted to Ecology within 30 days of completing the repairs.

Completed Report and Forms should be transmitted to Ecology at the following address:

Environmental Covenants Coordinator and Periodic Reviewer
Washington State Department of Ecology Northwest Regional Office, Toxics Cleanup Program
PO Box 330316
Shoreline, WA 98133-9716
VCP-NWRO@ECY.WA.gov

ENCLOSURES

Attachments

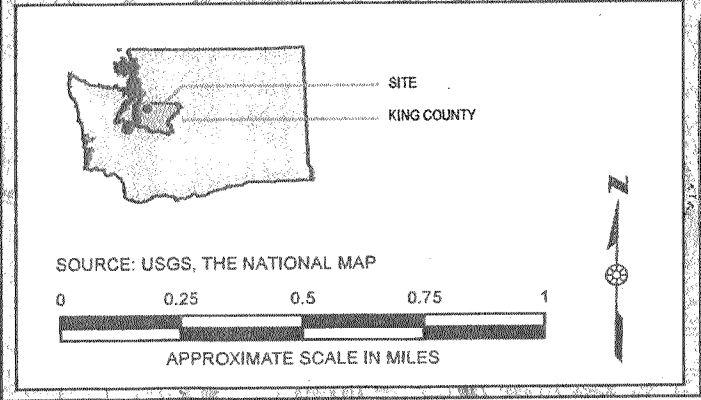
- Attachment A Site Figures
Attachment B Vapor Barrier Installation and Repair Instructions
Attachment C Annual Inspection Summary Report Form

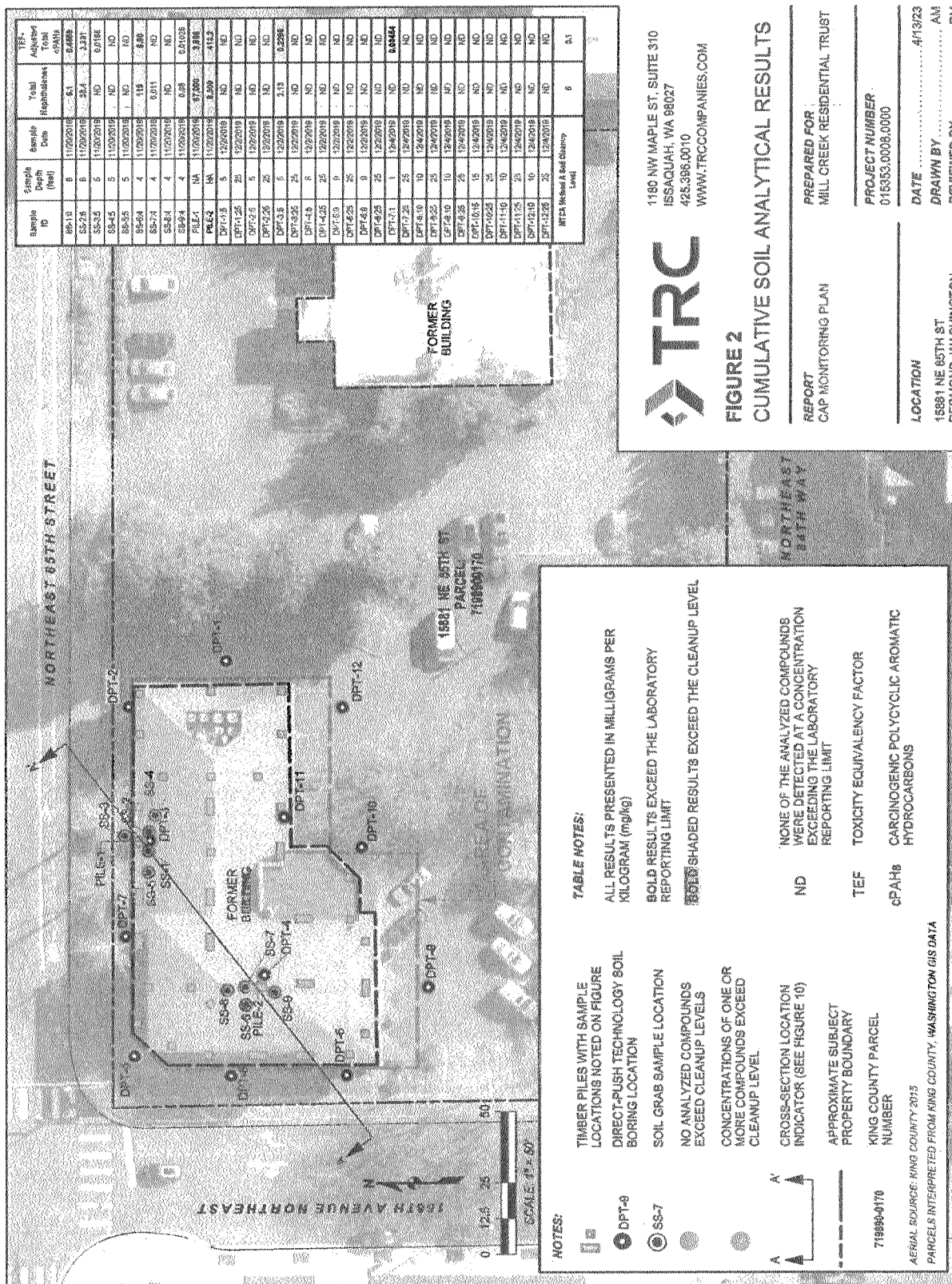
Cap Monitoring Plan
Concrete Floor Slab and Vapor Barrier
15881 ME 85th Street, Redmond, Washington
June 2, 2023

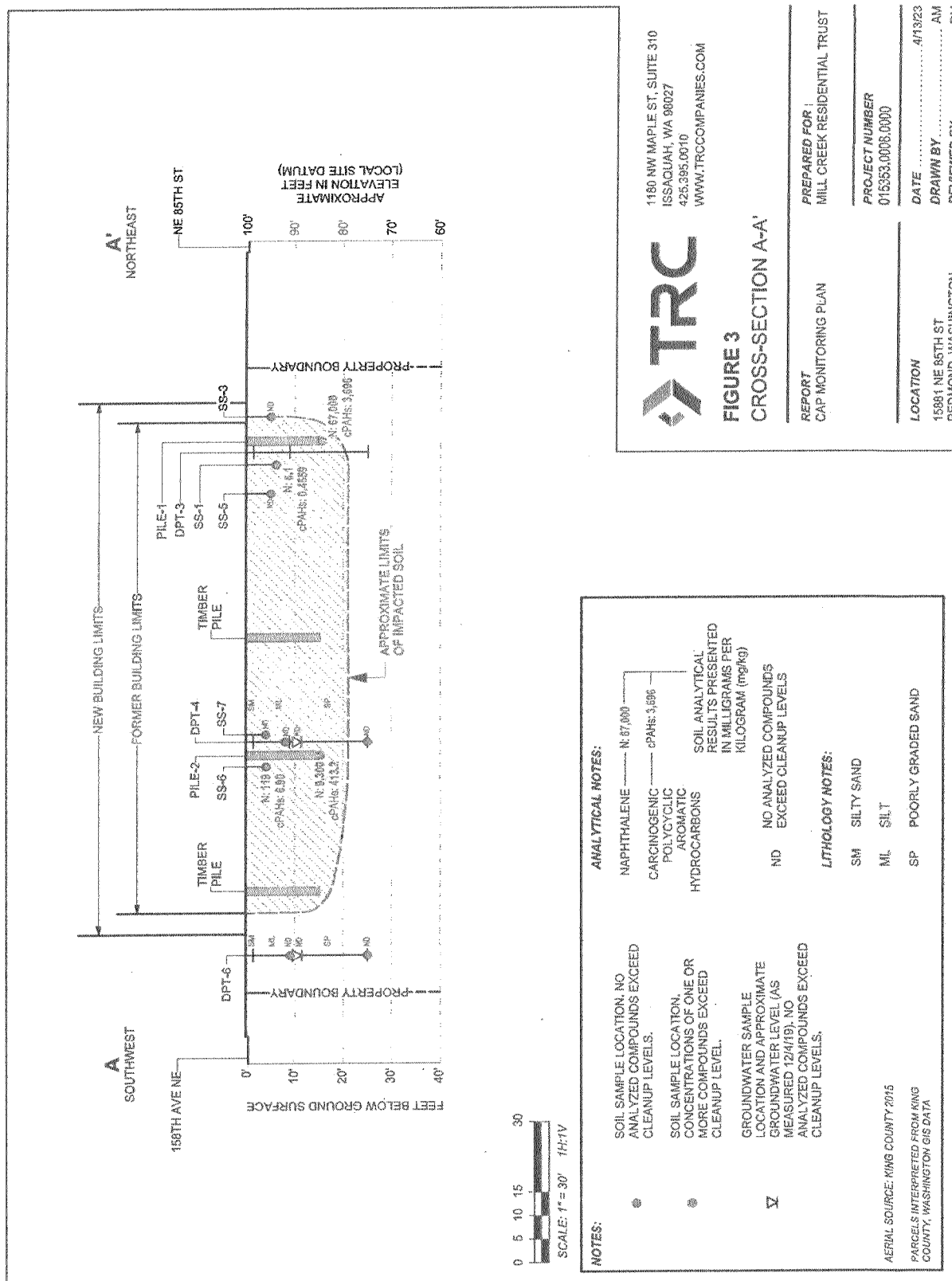
LIMITATIONS

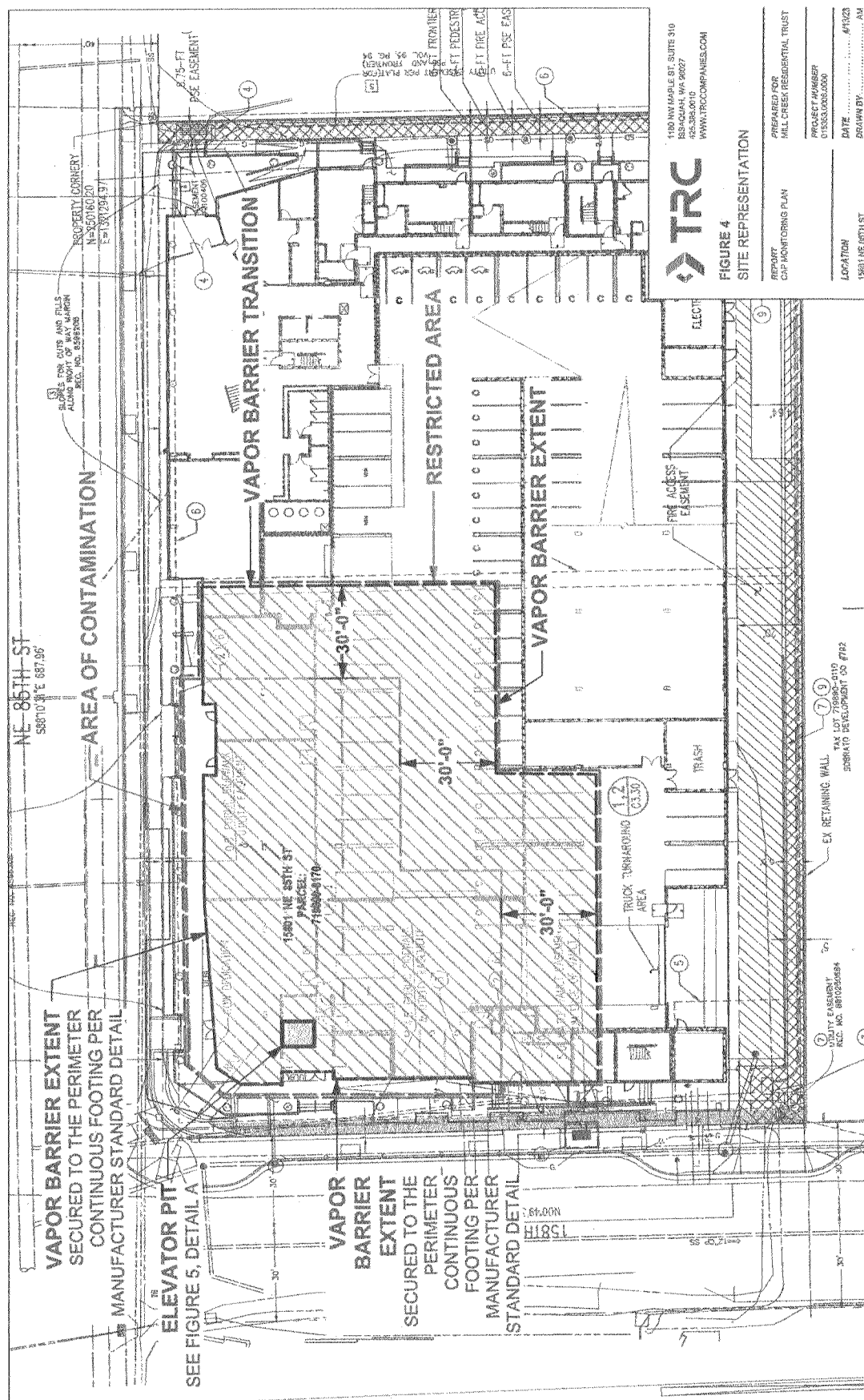
To the extent that preparation of this CMP required the application of best professional judgment and the application of scientific principles, certain results of this work were based on subjective interpretation. TRC makes no warranties, express or implied, including and without limitation warranties as to merchantability or fitness for a particular purpose. The information provided in this CMP is not to be construed as legal advice.

Attachment A
Site Figures









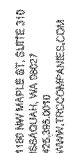


FIGURE 5
VAPOR BARRIER DETAIL

REPORT	PREPARED FOR
CAP MONITORING PLAN	MILL CREEK RESIDENTIAL TRUST
LOCATION	PROJECT NUMBER
15081 NE 45TH ST	010353.0006.0000
REDMOND, WASHINGTON	DATE
	01/18/23
	DRAWN BY
	REVIEWED BY
	PM

Attachment B
Vapor Barrier Installation and Repair Instructions

VAPORBLOCK® PLUS™ VBP20

UNDER-SLAB VAPOR / GAS BARRIER

RAVEN

PRODUCT DESCRIPTION

VaporBlock® Plus™ 20 is a seven-layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission. VaporBlock® Plus™ 20 is a highly resilient underslab / vertical wall barrier designed to restrict naturally occurring gases such as radon and/or methane from migrating through the ground and concrete slab. VaporBlock® Plus™ 20 is more than 100 times less permeable than typical high-performance polyethylene vapor retarders against Methane, Radon and other harmful VOCs.

VaporBlock® Plus™ 20 is one of the most effective underslab gas barriers in the building industry today far exceeding ASTM E-1745 (Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs) Class A, B and C requirements. Available in a 20 (Class A) mil thicknesses designed to meet the most stringent requirements. VaporBlock® Plus™ 20 is produced within the strict guidelines of our ISO 9001:2008 Certified Management System.

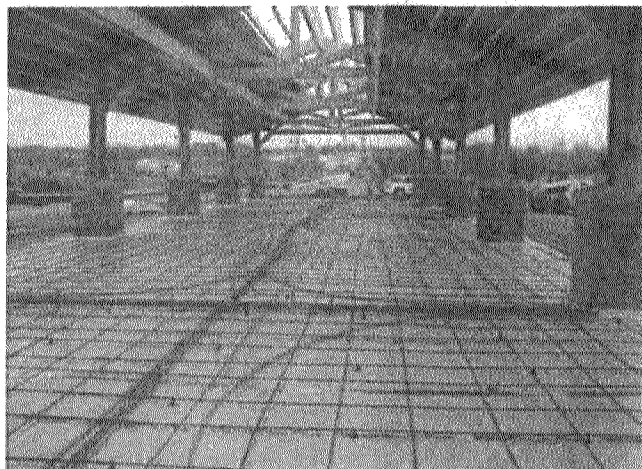
PRODUCT USE

VaporBlock® Plus™ 20 resists gas and moisture migration into the building envelop when properly installed to provide protection from toxic/harmful chemicals. It can be installed as part of a passive or active control system extending across the entire building including floors, walls and crawl spaces. When installed as a passive system it is recommended to also include a ventilated system with sump(s) that could be converted to an active control system with properly designed ventilation fans.

VaporBlock® Plus™ 20 works to protect your flooring and other moisture-sensitive furnishings in the building's interior from moisture and water vapor migration, greatly reducing condensation, mold and degradation.

SIZE & PACKAGING

VaporBlock® Plus™ 20 is available in 10' x 150' rolls to maximize coverage. All rolls are folded on heavy-duty cores for ease in handling and installation. Other custom sizes with factory welded seams are available based on minimum volume requirements. Installation instructions and ASTM E-1745 classifications accompany each roll.



Under-Slab Vapor/Gas Retarder

PRODUCT

PART

VaporBlock® Plus™ 20 VBP20

APPLICATIONS

Radon Barrier	Under-Slab Vapor Retarder
Methane Barrier	Foundation Wall Vapor
VOC Barrier	Retarder

VaporBlock® Plus™
UNDERSLAB VAPOR RETARDER / GAS BARRIER

VAPORBLOCK® PLUS™ VBP20

UNDER-SLAB VAPOR / GAS BARRIER

PROPERTIES	TEST METHOD	VAPORBLOCK® PLUS™ 20	
		IMPERIAL	METRIC
APPEARANCE		White/Gold	
THICKNESS, NOMINAL		20 mil	0.51 mm
WEIGHT		102 lbs/MSF	498 g/m ²
CLASSIFICATION	ASTM E 1745	CLASS A, B & C	
³ TENSILE STRENGTH	ASTM E 154 Section 9 (D-882)	58 lbf	102 N
IMPACT RESISTANCE	ASTM D 1709	2600 g	
PERMEANCE (NEW MATERIAL)	ASTM E 154 Section 7 ASTM E 96 Procedure B	0.0098 Perms grains/(ft ² ·hr·in·Hg)	0.0064 Perms g/(24hr·m ² ·mm Hg)
PERMEANCE (AFTER CONDITIONING)	ASTM E 154 Section 8, E96	0.0079	0.0052
(SAME MEASUREMENT AS ABOVE PERMEANCE)	Section 11, E96	0.0079	0.0052
	Section 12, E96	0.0097	0.0064
	Section 13, E96	0.0113	0.0074
WVTR	ASTM E 96 Procedure B	0.0040 grains/hr·ft ²	0.0028 gm/hr·m ²
BENZENE PERMEANCE	See Note ⁶	1.57E-10 m/s	
TOLUENE PERMEANCE	See Note ⁶	2.18E-10 m/s	
ETHYLBENZENE PERMEANCE	See Note ⁶	1.71E-10 m/s	
M & P-XYLENES PERMEANCE	See Note ⁶	1.62E-10 m/s	
O-XYLENE PERMEANCE	See Note ⁶	1.53E-10 m/s	
RADON DIFFUSION COEFFICIENT	K124/02/95	< 1.1 x 10 ⁻¹³ m ² /s	
METHANE PERMEANCE	ASTM D 1434	3.68E ⁻¹² m/s Gas Transmission Rate (GTR): 0.32 mL/m ² ·day·atm	
MAXIMUM STATIC USE TEMPERATURE		180° F	82° C
MINIMUM STATIC USE TEMPERATURE		- 70° F	- 57° C

³ Tests are an average of machine and transverse directions.

⁶ Aqueous Phase Film Permeance.

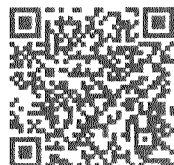
Permeation of Volatile Organic Compounds through EVOH Thin Film Membranes and Coextruded LLDPE/EVOH/LLDPE Geomembranes, McWalters and Rowe, Journal of Geotechnical and Geoenvironmental Engineering © ASCE/September 2015. (Permeation is the Permeation Coefficient adjusted to actual film thickness)

VaporBlock® Plus™ Placement

All instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions accompany each roll of VaporBlock® Plus™ and can also be located on our website. ASTM E-1643 also provides general installation information for vapor retarders.

VaporBlock® Plus™
UNDERSLAB VAPOR RETARDER / GAS BARRIER

VaporBlock® Plus™ is a seven-layer co-extruded barrier made using high quality virgin-grade polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission.



Scan QR Code to download current technical data sheets via the Raven website.

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.RavenEFD.com

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VaporBlock® Plus™

UNDERSLAB VAPOR RETARDER / GAS BARRIER

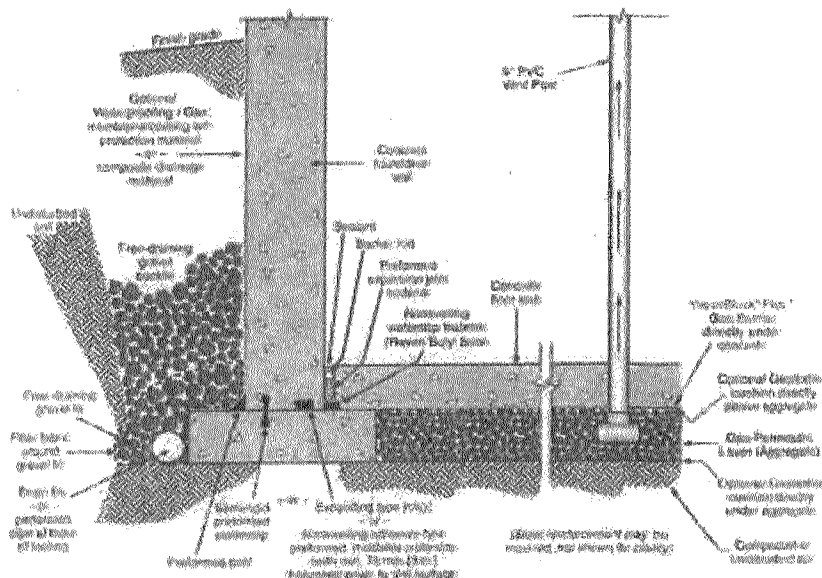
INSTALLATION GUIDELINES - With VaporSeal™ Tape

Please Note: Read these instructions thoroughly before installation to ensure proper use of VaporBlock® Plus™. ASTM E 1465, ASTM E 2121 and, ASTM E 1643 also provide valuable information regarding the installation of vapor / gas barriers. When installing this product, contractors shall conform to all applicable local, state and federal regulations and laws pertaining to residential and commercial building construction.

- When VaporBlock® Plus™ gas barrier is used as part of an active control system for radon or other gas, a ventilation system will be required.
- If designed as a passive system, it is recommended to install a ventilation system that could be converted to an active system if needed.

Materials List:

VaporBlock® Plus™ Vapor / Gas Barrier
VaporSeal™ 4" Seaming Tape
VaporSeal™ 12" Seaming/Repair Tape
Butyl Seal 2-Sided Tape
VaporBoot Plus Pipe Boots 12/Box (recommended)
VaporBoot Tape (optional)
POUR-N-SEAL™ (optional)
1" Foam Weather Stripping (optional)
Mako® Screed Supports (optional)



Elements of a moisture/gas-resistant floor system. General illustration only.
(Note: This example shows multiple options for waterstop placement.)

VAPORBLOCK® PLUS™ PLACEMENT

- 1.1. Level and tamp or roll granular base as specified. A base for a gas-reduction system may require a 4" to 6" gas permeable layer of clean coarse aggregate as specified by your architectural or structural drawings after installation of the recommended gas collection system. In this situation, a cushion layer consisting of a non-woven geotextile fabric placed directly under VaporBlock® Plus™ will help protect the barrier from damage due to possible sharp coarse aggregate.
- 1.2. Unroll VaporBlock® Plus™ running the longest dimension parallel with the direction of the pour and pull open all folds to full width. (Fig. 1)
- 1.3. Lap VaporBlock® Plus™ over the footings and seal with Raven Butyl Seal tape at the footing-wall connection. Prime concrete surfaces, when necessary, and assure they are dry and clean prior to applying Raven Butyl Seal-Tape. Apply even and firm pressure with a rubber roller. Overlap joints a minimum of 6" and seal overlap with 4" VaporSeal™ Tape. When used as a gas barrier, overlap joints a minimum of 12" and seal in-between overlap with an optional 2-sided Raven Butyl Seal Tape. Then seal with 4" VaporSeal™ Tape centered on the overlap seam. (Fig. 2)

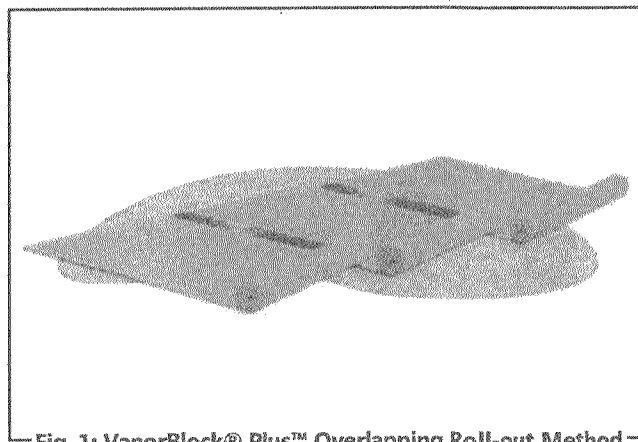


Fig. 1: VaporBlock® Plus™ Overlapping Roll-out Method



Fig. 2: VaporBlock® Plus™ Overlap Joint Sealing Methods

SINGLE PENETRATION PIPE BOOT INSTALLATION

1.4. Seal around all plumbing, conduit, support columns or other penetrations that come through the VaporBlock® Plus™ membrane.

1.4a. **Method 1:** Pipes four inches or smaller can be sealed with Raven VaporBoot Plus preformed pipe boots. VaporBoot Plus preformed pipe boots are formed in steps for 1", 2", 3" and 4" PVC pipe or IPS size and are sold in units of 12 per box (Fig. 3 & 5).

Pipe boots may also be fabricated from excess VaporBlock® Plus™ membrane (Fig. 4 & 6) and sealed with VaporBoot Tape or VaporSeal™ Tape (sold separately).

1.4b. **Method 2:** To fabricate pipe boots from VaporBlock® Plus™ excess material (see Fig. 4 & 6 for A-F):

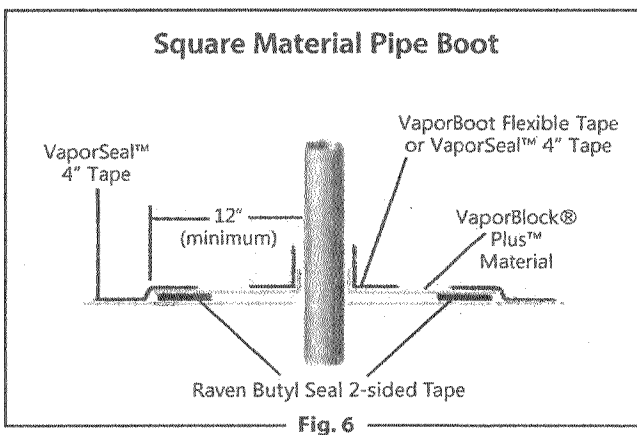
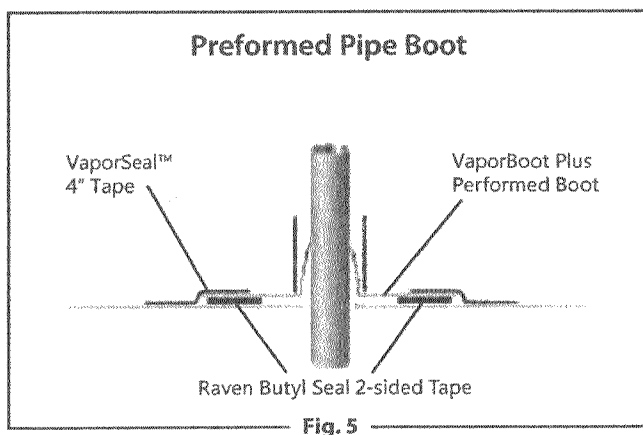
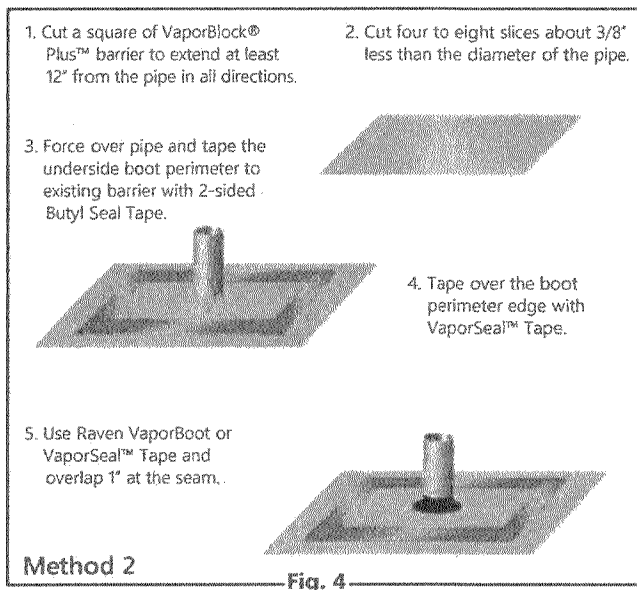
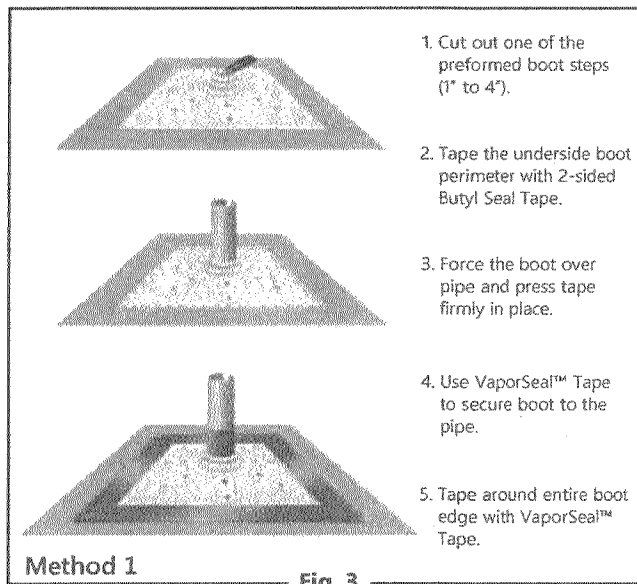
- Cut a square large enough to overlap 12" in all directions.
- Mark where to cut opening on the center of the square and cut four to eight slices about 3/8" less than the diameter of the pipe.
- Force the square over the pipe leaving the tightly stretched cut area around the bottom of the pipe with approximately a 1/2" of the boot material running vertically up the pipe. (no more than a 1/2" of stretched boot material is recommended)
- Once boot is positioned, seal the perimeter to the membrane by applying 2-sided Raven Butyl Seal Tape in between the two layers. Secure boot down firmly over the membrane taking care not to have any large folds or creases.

E) Use VaporBoot Tape or VaporSeal™ Tape to secure the boot to the pipe.

VaporBoot Tape (option) – fold tape in half lengthwise, remove half of the release liner and wrap around the pipe allowing 1" extra for overlap sealing. Peel off the second half of the release liner and work the tape outward gradually forming a complete seal.

VaporSeal™ Tape (option) – Tape completely around pipe overlapping the VaporBlock® Plus™ square to create a tight seal against the pipe.

F) Complete the process by taping over the boot perimeter edge with VaporSeal™ Tape to create a monolithic membrane between the surface of the slab and gas/moisture sources below and at the slab perimeter. (Fig. 4 & 6)



MULTIPLE PENETRATION PIPE BOOT INSTALLATION

1.5. Sealing side-by-side multiple penetrations (option 1);

- A) Cut a patch large enough to overlap 12" in all directions (Fig. 7) of penetrations.
- B) Mark where to cut openings and cut four to eight slices about 3/8" less than the diameter of the penetration for each.
- C) Force patch material over penetration to achieve a tight fit and form a lip.
- D) Once patch is positioned, seal the perimeter to the membrane by applying 2-sided Raven Butyl Seal Tape in-between the two layers. (Fig. 8)
- E) After applying Raven Butyl Seal Tape between the patch and membrane, tape around each of the penetrations and the patch with VaporSeal™ 4" tape. (Fig. 9) For additional protection apply POUR-N-SEAL™ or an acceptable polyurethane elastomeric sealant around the penetrations. (Fig. 10)

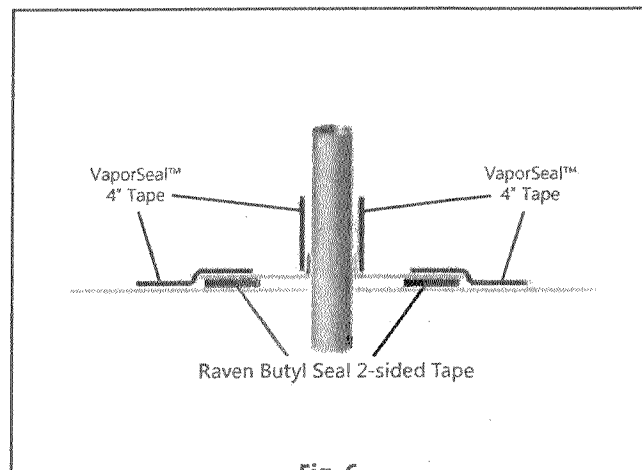


Fig. 6

Option 1

Cut a patch large enough to overlap 12" in all directions and slide over penetrations (Make openings as tight as possible.)

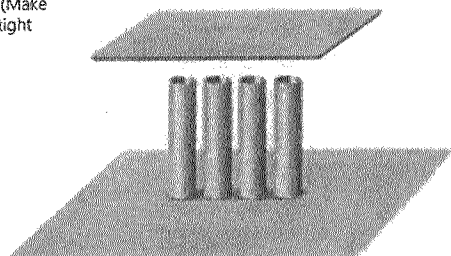


Fig. 7

Once the overlay patch is positioned, seal the perimeter to the membrane by applying 2-sided Raven Butyl Seal Tape in-between the two layers.

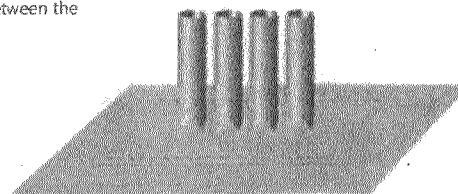


Fig. 8

After applying Raven Butyl Seal Tape between the patch and membrane, tape around the perimeter of the penetration and the patch with VaporSeal™ 4" Tape.

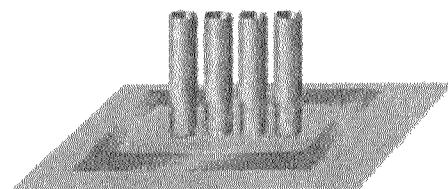


Fig. 9

For additional protection apply POUR-N-SEAL™ or an acceptable polyurethane elastomeric sealant around the penetrations.

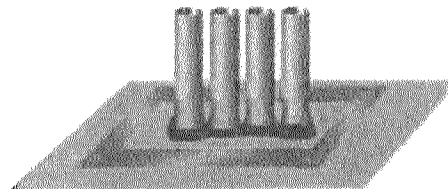


Fig. 10

Option 2

1.6. POUR-N-SEAL™ method of sealing side-by-side multiple penetrations (option 2);

- A) Install the vapor barrier as closely as possible to pipe penetrations to minimize the amount of POUR-N-SEAL™ necessary to seal around all penetrations.
- B) Once barrier is in place, remove soil or other particles with a dry cloth or a fine broom to allow for improved adhesion to the POUR-N-SEAL™ liquid.
- C) Create a dam, around the penetration area approximately 2" away from the pipe or other vertical penetrations by removing the release liner from the back of a 1" weather stripping foam and adhere to the vapor barrier. Form a complete circle to contain the POUR-N-SEAL™ materials (Fig. 11).
- D) Once mixed, pour contents around the pipe penetrations. If needed, a brush or a flat wooden stick can be used to direct the sealant completely around penetrations creating a complete seal (Fig. 12-13).
- E) DO NOT leave excess POUR-N-SEAL™ in plastic container for longer than the time it takes to pour sealant.

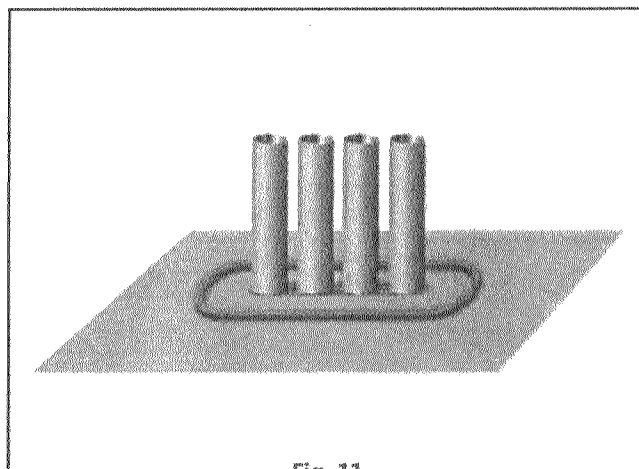


Fig. 11

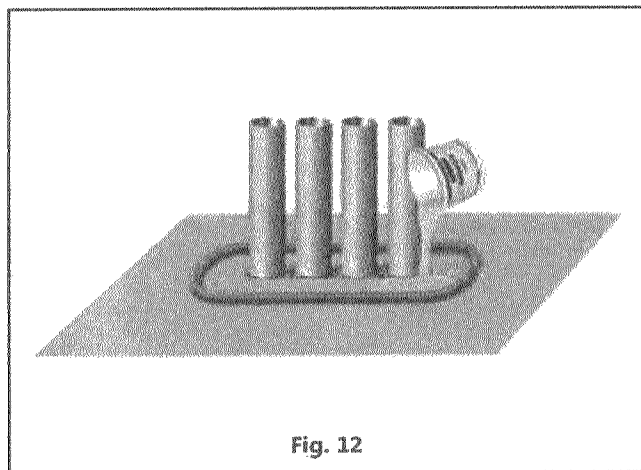


Fig. 12

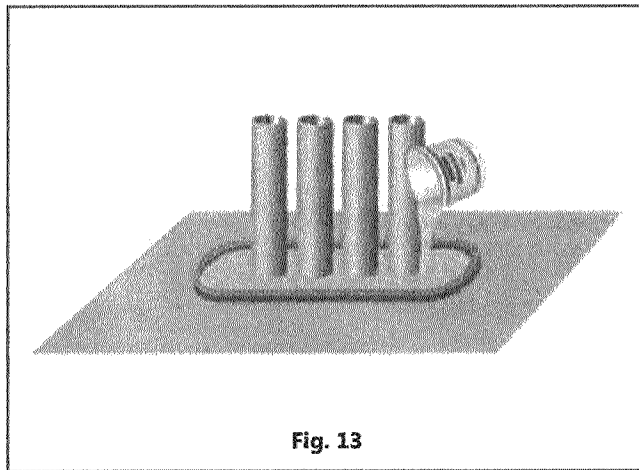


Fig. 13

VAPORBLOCK® PLUS™ REPAIR INSTRUCTIONS

- 1.7. Proper installation requires all holes and openings are repaired prior to placing concrete. When patching small holes, simply cut a 12" long piece of 12" wide VaporSeal™ tape. Remove release liner and center over the opening. Apply pressure to create a seal (Fig. 14-15).
- 1.8. When installing VaporBlock® Plus™ around pipe penetrations, vertical columns, electrical ducts and other obstructions, you will find it necessary to cut it to the nearest outside edge. This cut can be easily sealed with 12" wide VaporSeal™ tape, by simply centering it over the cut, 6" on either side. Once the tape is placed correctly, apply pressure to assure a complete seal (Fig. 16).

Reminder Note: All holes or penetrations through the membrane will need to be patched with 12" VaporSeal™ Tape.

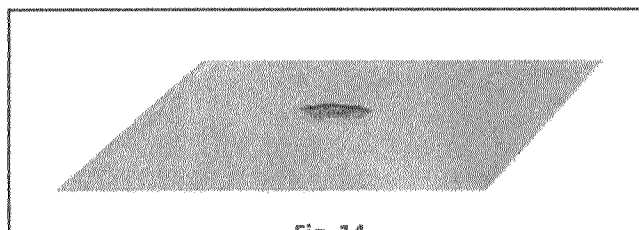


Fig. 14

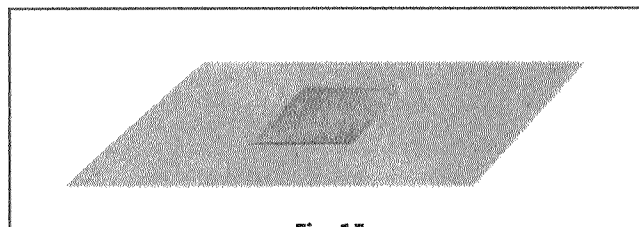


Fig. 15

VAPORBLOCK® PLUS™ PROTECTION

- 2.1. When installing reinforcing steel and utilities, in addition to the placement of concrete, take precaution to protect VaporBlock® Plus™. Carelessness during installation can damage the most puncture-resistant membrane. Sheets of plywood cushioned with geotextile fabric temporarily placed on VaporBlock® Plus™ provide for additional protection in high traffic areas including concrete buggies.
- 2.2. Use only brick-type or chair-type reinforcing bar supports to protect VaporBlock® Plus™ from puncture.
- 2.3. Avoid driving stakes through VaporBlock® Plus™. If this cannot be avoided, each individual hole must be repaired per section 1.7.
- 2.4. To avoid penetrating VaporBlock® Plus™ when installing screed supports, utilize non-penetrating support, such as the Mako® Screed Support System (Fig. 17). Avoid driving stakes through VaporBlock® Plus™. If this cannot be avoided, each individual hole must be repaired per figures 14-15.
- 2.5. If a cushion or blotter layer is required in the design between VaporBlock® Plus™ and the slab, additional care should be given if sharp crushed rock is used. Washed rock will provide less chance of damage during placement. Care must be taken to protect blotter layer from precipitation before concrete is placed.

VaporBlock® Plus™ Gas & Moisture Barrier can be identified on site as gold/white in color printed in black ink with following logo and classification listing (Fig. 18)



VaporBlock® Plus™
Gas & Moisture Barrier

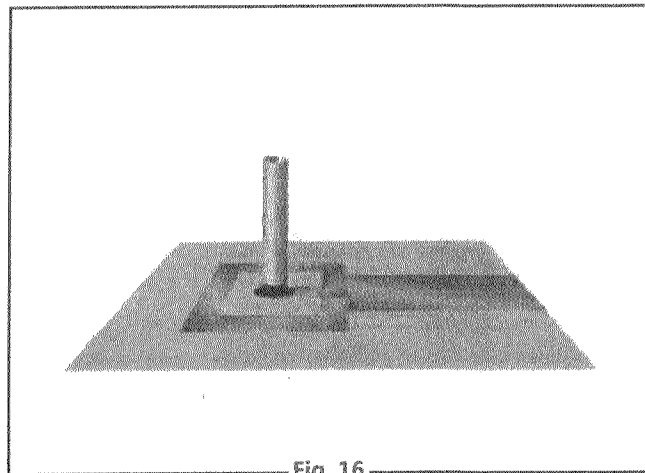


Fig. 16

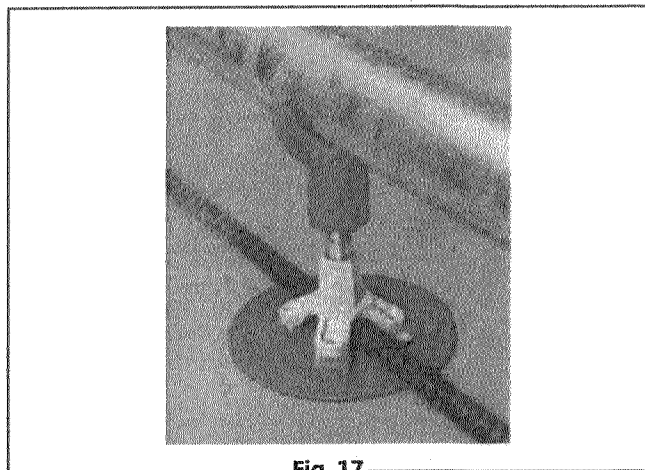


Fig. 17



Fig. 18

* Patent Pending

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, nor guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.RavenEFD.com



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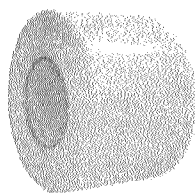
ACCESSORIES

SEAMING TAPES & OTHER ACCESSORIES FOR PLASTIC SHEETING

From tie-down fasteners to field seaming tape, Raven Industries has the accessories you need to maximize your film's versatility and minimize installation time on the job.

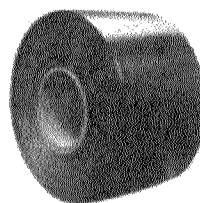
ACCESSORY TAPES AND EPOXY

VaporBond Tape (TVB4)



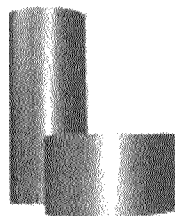
This white single-sided tape combines a heavy-duty, weather-resistant polyethylene backing with an aggressive rubber adhesive. VaporBond Tape offers excellent seaming capabilities for our materials with an "Easy Tear" feature to reduce installation time. TVB4 has a WVTR of 0.18 perms per ASTM D3833. Typical applications include vapor retarders, covers and liners. Available in 4" x 210' roll.

R25B Tape (R25B)



R25B Tape is a single sided aggressive synthetic elastomeric adhesive that bonds instantly to properly prepared polyethylene and polypropylene. The black polymer backing and adhesive is specially formulated to provide years of performance even in direct sunlight. A poly release liner provides for ease of installation. Available in 4" x 100' roll.

VaporSeal™ Tape (TVSP4/TVSP12)



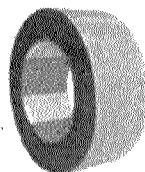
VaporSeal™ Tape is a patented single-sided 7-layer gas barrier tape with a release liner for ease of installation. The backing contains a layer of highly impermeable EVOH designed to block migration of radon, methane and VOC's. An aggressive acrylic adhesive provides outstanding adhesion to polyethylene over a wide temperature range. Typical uses include joining, repairing and sealing gas/moisture barriers. Available in 4" x 160' and 12" x 50' rolls.

Butyl Seal Tape (TP2BR)



Butyl seal is a double-sided reinforced aggressive black butyl rubber tape used to join panels of polyethylene and polypropylene together by overlapping the edges and applying Butyl Seal in between. It is also used to adhere to concrete walls and footings when properly prepared. Butyl Seal is non-hardening and flexible. Available in 2" x 50' roll.

VaporBoot Tape (TBOOT)



VaporBoot Tape is a single-sided elastomeric butyl tape used to complete pipe boot installations (sealing the boot to the pipe). The 100% stretchable Butyl adhesive features excellent adhesion values and 3-D stretching that can be easily molded to multiple surfaces without any creases and folds. Available in 2" x 16.4' roll.

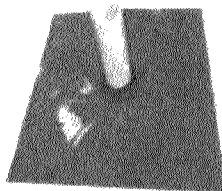
POUR-N-SEAL™ (PNS1G)



POUR-N-SEAL™ is a gray two part epoxy used to seal around multi-pipe penetrations in areas where pipe boots are not practical, when installing VaporBlock or Absolute Barrier. The POUR-N-SEAL system includes 25 lineal feet of a 1" adhesive-backed foam to form a dam around multi-pipe penetrations to contain POUR-N-SEAL™ during the setting process.

ADDITIONAL ACCESSORIES

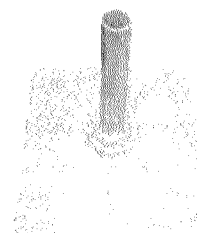
VaporBoot/VaporBoot G System (VBOOT/VBOOTG)



The VaporBoot System is designed to assist in securing pipe and other penetrations that run vertically through the vapor retarder material. The VaporBoot System offers a quick solution and is delivered to the jobsite in a complete package. VaporBoots are produced from high performance VaporBlock® and VaporBlock® G™ material.

Package Contents:
25 - VaporBoots (18" x 18", w/precut center marker)
1 - roll of VaporBoot Tape

VaporBoot Plus Preformed Pipe Boots (VBPBT)



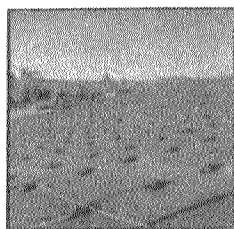
VaporBoot Plus Preformed Pipe Boots are produced from heavy 40 mil co-extruded polyethylene and barrier resins for excellent strength and durability. The preformed boots are stepped to fit 1" to 4" wide pipe penetrations. VaporBoot Plus Preformed Pipe Boots are available in quantities of 12 per box.

ACCESSORIES

SEAMING TAPES & OTHER ACCESSORIES FOR PLASTIC SHEETING

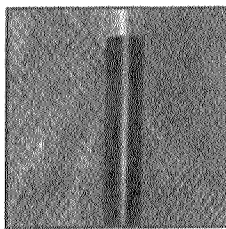
ADDITIONAL ACCESSORIES (CONTINUED)

Dura♦Skrim® Reinforced Sandbags



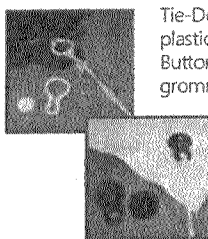
Dura♦Skrim reinforced sandbags are used to secure large covers and liners to prevent wind damage. Stock bags are produced with strong Dura♦Skrim 8 & 12 mil reinforced polyethylene. These 15" wide x 24" long bags are designed to hold 35 lbs. Sandbags are also available in other Raven reinforced materials with minimum order requirements. 11.8" Cable Ties are also available.

Dura-Clip™ (CLIP11)



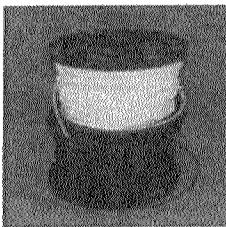
These full size clips are 11" long and fit most commercial scaffolding. Dura-Clips will securely fasten your poly sheeting to scaffolding, reducing wind whip and increasing the life of your enclosure. Clips are normally placed about every 3' onto the enclosure.

Tie-Down Buttons (BUTI) & Tarp Grabbers (BUTEZ)



Tie-Down Buttons & Tarp Grabbers help keep plastic sheeting securely in place. Tie-Down Buttons are designed to eliminate traditional grommets in plastic sheeting up to 10 mil thick and are reusable plastic fittings that are easy to install in any position. Tarp Grabbers are up to 4 times stronger than a brass grommet and are typically used in heavier plastic sheeting from 10 mil to 30 mil thick. Great for equipment covers, large storage covers and truck tarps.

Raven Welding Rod



Raven Welding Rod is used for field seaming, repairs and detail work, such as installing pipe boots. Packaged in 25 lb spools, it is available in 4mm and 5mm sizes to fit most brands of extrusion guns. Raven Welding Rod is made from a thermally UV stabilized LLDPE resin and is available in both black and white to correspond with the color of geomembranes being utilized.

PROPERTIES	TAPE ACCESSORY PROPERTIES				
	VaporBond Tape (TVB4)	VaporSeal™ Tape (TVSP4)	VaporBoot Tape (T500T)	R25B Tape (R25B)	Butyl Seal Tape (TP2BR)
BACKING	6.7 mil Polyethylene	7 mil LDPE	30 mil EPDM	8 mil Multipolymer	NA
ADHESIVE	3.3 mil Rubber Based Pressure-Sensitive	2 mil Acrylic Adhesive Pressure-Sensitive	20 mil Butyl Rubber	17 mil Synthetic Elastomeric	40 mil Butyl Rubber
COLOR	White	Silver	Black	Black	Black
TYPE	Single Sided	Single Sided	Single Sided	Single Sided	Double Sided
SIZE	4" x 210'	4" x 160' / 12" x 50'	2" x 16.4'	4" x 100'	2" x 50'
ROLLS PER CASE	12	12 / 4	64	6	20
WEIGHT PER CASE	45 lbs	50 lbs / 18 lbs	45 lbs	33 lbs	55 lbs
ADHESION VALUES	35 oz. / in. (to steel)	80 oz. / in. (to steel)	145 oz. / in. (to steel)	144 oz. / in. (to steel)	88 oz. / in. (to steel)
PERMS	0.89 g/(24h*100 in²)	0.014 g/(24h*100 in²)	N/A	<0.005 g/(24h*100 in²)	0.82 g/(24h*100 in²)
SERVICE TEMP.	-40° F to +180° F	-40° F to +190° F	+14° F to +122° F	+20° F to +180° F	0° F to +170° F
MIN. APPLICATION TEMP.	50° F	50° F	14° F	35° F	35° F
IDEAL STORAGE TEMP./HUMIDITY	70° F w/ 40-50 %	60°-80° F w/ 40-60 %	70° F w/ 70 %	70° F w/ 40-50 %	70° F w/ 40-50 %



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Attachment C
Annual Inspection Summary Report Form



1180 NW Maple St., Suite 310
Issaquah, WA 98027

T 425.395.0010
TRCcompanies.com

Annual Inspection Summary Report Form Concrete Floor Slab and Vapor Barrier

**Modera River Trail Site
15881 NE 85th Street
Redmond, Washington**

Parcel Number: 7198900170
Facility Site ID: 75292
Cleanup Site ID: 15281
Voluntary Cleanup Program ID: NW3292

April 17, 2023

Prepared By:

TRC Environmental Corporation
1180 NW Maple Street, Suite 310
Issaquah, Washington 98027
(425) 395-0010

Attachment B: Annual Inspection Summary Report Form
Cap Monitoring Plan
15881 Northeast 85th Street, Redmond, Washington
April 17, 2023

INTRODUCTION

This Annual Inspection Summary Report Form may be used to document the inspections required under the Environmental Covenant for the properties identified above and described in the Cap Monitoring Plan. Fill out each item listed below and submit to the Washington State Department of Ecology at the following address:

Environmental Covenants Coordinator
Washington State Department of Ecology
Toxics Cleanup Program
P.O. Box 47600
Olympia, WA 98504—7600
(360) 407-6000
ToxicsCleanupProgramHQ@ecy.wa.gov

Attachment B: Annual Inspection Summary Report Form
Cap Monitoring Plan
15881 Northeast 85th Street, Redmond, Washington
April 17, 2023

INSPECTION CHECKLIST

Circle yes or no for each inspection item. If you answer yes, please describe the reason for your answer in the space provided. Use the back of the form or a separate sheet of paper if additional space is needed.

1. Has there been any slab settlement or movement at the facility during the past year? Yes or No?

If "Yes," please describe: _____

2. Have there been any new floor penetrations during the past year? Yes or No?

If "Yes," please describe: _____

3. Have any new cracks larger than ¼ inch in width been observed during the past year?

Yes or No? If "Yes," please describe: _____

4. Has there been any modification to the floor slab that could affect the performance of the vapor barrier in the past year? Yes or No?

If "Yes", please describe: _____

5. Have any repairs been made to floor slab over the past year? Yes or No?

If "Yes," please describe: _____

This Annual Inspection Summary is due to the Washington State Department of Ecology by

_____ each year while the Environmental Covenant is in effect.

For questions about this Annual Inspection Summary Form, contact TRC Environmental Corporation at 425-395-0010.

EXHIBIT F

CONFIRMATIONAL GROUNDWATER MONITORING PLAN



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Confirmational Groundwater Monitoring Plan

**Modera River Trail Site
15881 NE 85th Street
Redmond, Washington**

Parcel Number: 7198900170
Facility Site ID: 75292
Cleanup Site ID: 15281
Voluntary Cleanup Program ID: NW3292

June 2, 2023

Prepared By:

TRC Environmental Corporation
1180 NW Maple Street, Suite 310
Issaquah, Washington 98027
(425) 395-0010

A handwritten signature in black ink, appearing to read 'Ramsey Mauldin', positioned above a horizontal line.

Prepared by:
Ramsey S. Mauldin
Senior Environmental Scientist

A handwritten signature in black ink, appearing to read 'Eric Koltes', positioned above a horizontal line.

Reviewed and Approved by:
Eric Koltes, L.G.
Principal Geologist/Program Manager

TRC Project Number: 015353.0008.0000

QR

A small, circular handwritten signature or initials, likely 'RAM' or 'RM', positioned next to the 'QR' label.

TR

A small, handwritten signature or initials, likely 'EK', positioned next to the 'TR' label.

Confirmational Groundwater Monitoring Plan
Modera River Trail Site
15881 NE 85th Street, Redmond, WA
June 2, 2023

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FIGURES

- Figure 1 General Vicinity Map
Figure 2 Site Representation with Groundwater Monitoring Well Locations

Confirmational Groundwater Monitoring Plan
Modera River Trail Site
15881 NE 85th Street, Redmond, WA
June 2, 2023

1.0 INTRODUCTION

This Confirmational Groundwater Monitoring Plan (CGMP) has been prepared for the commercial property at 15881 Northeast 85th Street in Redmond, Washington (parcel number 7198900170, "subject property", or "Site"). The location of the Site is depicted on Figure 1.

This CGMP is required by the Washington State Department of Ecology (Ecology) as a component of an Environmental Covenant (Covenant) filed with King County. The Covenant is required due to contamination remaining at the subject property resulting from creosote-covered piles left in place during development. This CGMP is included in the Covenant as Exhibit F and presents the schedule and procedures for implementing continued groundwater monitoring.

2.0 BACKGROUND

During previous remedial actions, groundwater was assessed for the presence of naphthalenes and carcinogenic polycyclic aromatic hydrocarbons (cPAHs). As part of this work, TRC Environmental Corporation (TRC) directed the installation of two monitoring wells (MW-1 and MW-2) on the north of the subject property. The monitoring well locations are depicted on Figure 2.

During prior sampling events, neither naphthalene nor cPAHs were observed in groundwater at concentrations exceeding Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) in any sample collected. This included seasonal data over four quarters of monitoring. Despite groundwater not being impacted, Ecology has requested additional monitoring at the 5-year periodic review. This monitoring was requested due to the proximity of the Site to a City of Redmond drinking water well. The City of Redmond drinking water well is approximately 600 feet to the north.

3.0 SCHEDULE

In accordance with the Covenant, groundwater samples will be collected in the first quarter of 2028. No other sampling dates are proposed as part of this CGMP.

4.0 GROUNDWATER SAMPLING PROCEDURES

Groundwater monitoring and sampling procedures will include measuring water levels and collecting groundwater samples for laboratory analysis.

Prior to sampling, both wells will be opened to allow groundwater elevations to equilibrate after exposure to barometric conditions. Following equilibration, water levels will be collected from both wells using an electric water level meter. Measurements will be collected to the nearest 0.01 foot relative to the northernmost point of top of casing on the well.

Confirmational Groundwater Monitoring Plan
Modera River Trail Site
15881 NE 85th Street, Redmond, WA
June 2, 2023

After measuring groundwater levels, samples will be collected using standard low-flow methods and single-use sample tubing. Wells will be purged using a peristaltic pump at a flow rate of less than or equal to 100 milliliters per minute. During well purging, field parameters of temperature, pH, conductivity, dissolved oxygen, and oxidation-reduction potential will be recorded using a calibrated water quality meter and flow-through cell. Turbidity will also be measured using a turbidity meter. Field parameters will be recorded every 3 to 5 minutes until groundwater conditions have stabilized. Groundwater conditions will be considered stabilized when at least three consecutive readings meet the following criteria:

- Temperature: ± 3 percent
- pH: ± 0.1
- Conductivity: ± 3 percent
- Dissolved oxygen: ± 10 percent if greater than 0.5 milligrams per liter
- Oxidation-reduction potential: ± 20 millivolts
- Turbidity: ± 10 percent if greater 5 nephelometric turbidity units

Upon parameter stabilization, samples will be retained in laboratory-supplied containers appropriate for the analyses. Each sample container will be immediately labeled and placed into an iced cooler pending delivery to the analytical laboratory. All samples will be handled and transported under standard Chain-of-Custody protocols.

Samples will be submitted for analysis of naphthalenes and cPAHs by U.S. Environmental Protection Agency (EPA) Method 8270E.

5.0 REPORTING

Following receipt of analytical data, a Groundwater Monitoring Report (Report) will be prepared to document the methods and results of the groundwater monitoring event. The Report will include tables summarizing the analytical results, figures depicting sampling locations, and laboratory analytical reports. The Report will be submitted to Ecology within 60 days of completion of the groundwater monitoring event. The Report will be submitted to Ecology at the following address:

Environmental Covenants Coordinator and Periodic Reviewer
Washington State Department of Ecology Northwest Regional Office, Toxics Cleanup Program
PO Box 330316
Shoreline, WA 98133-9716
VCP-NWRO@ECY.WA.gov

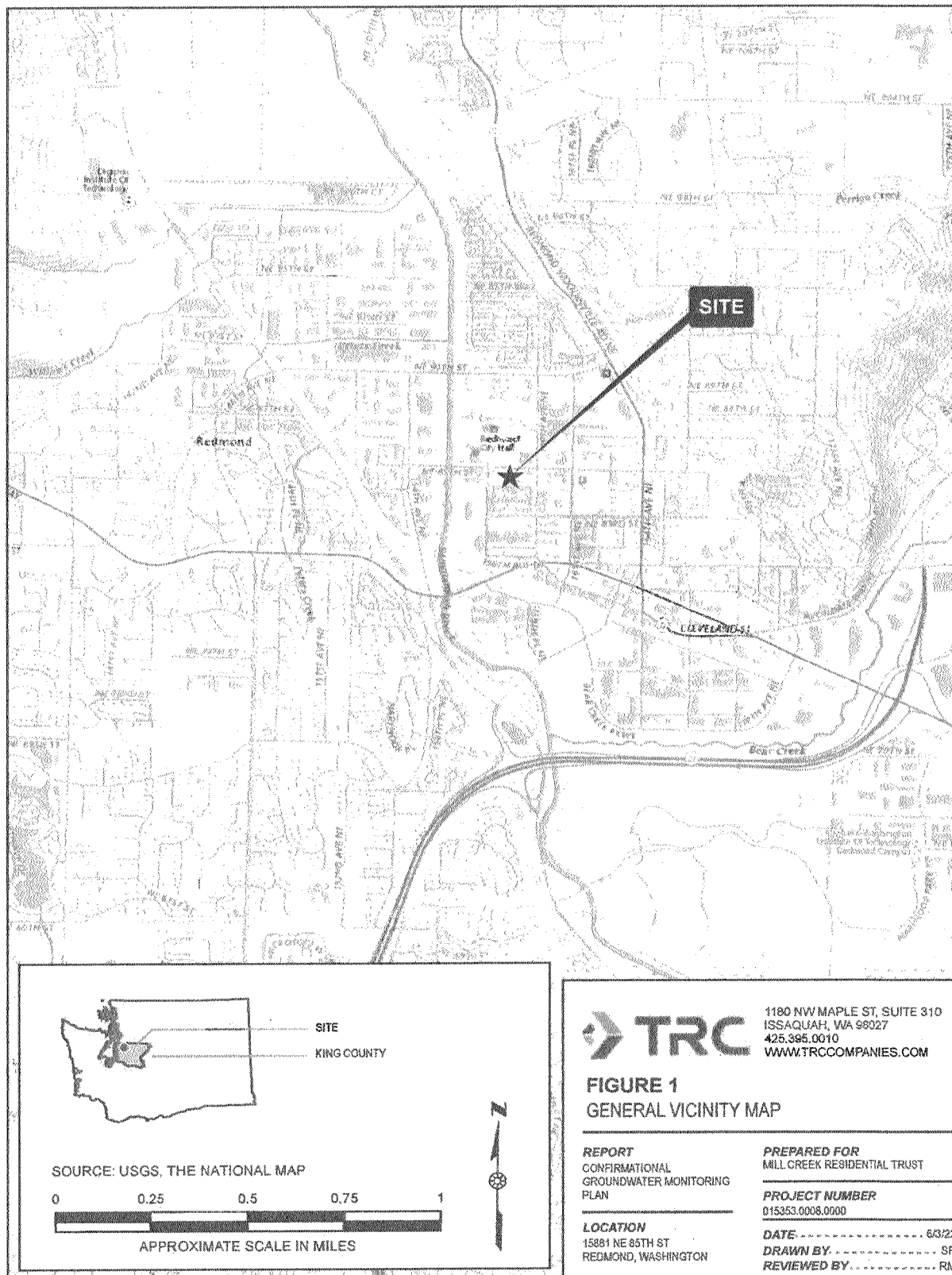
Confirmational Groundwater Monitoring Plan
Modera River Trail Site
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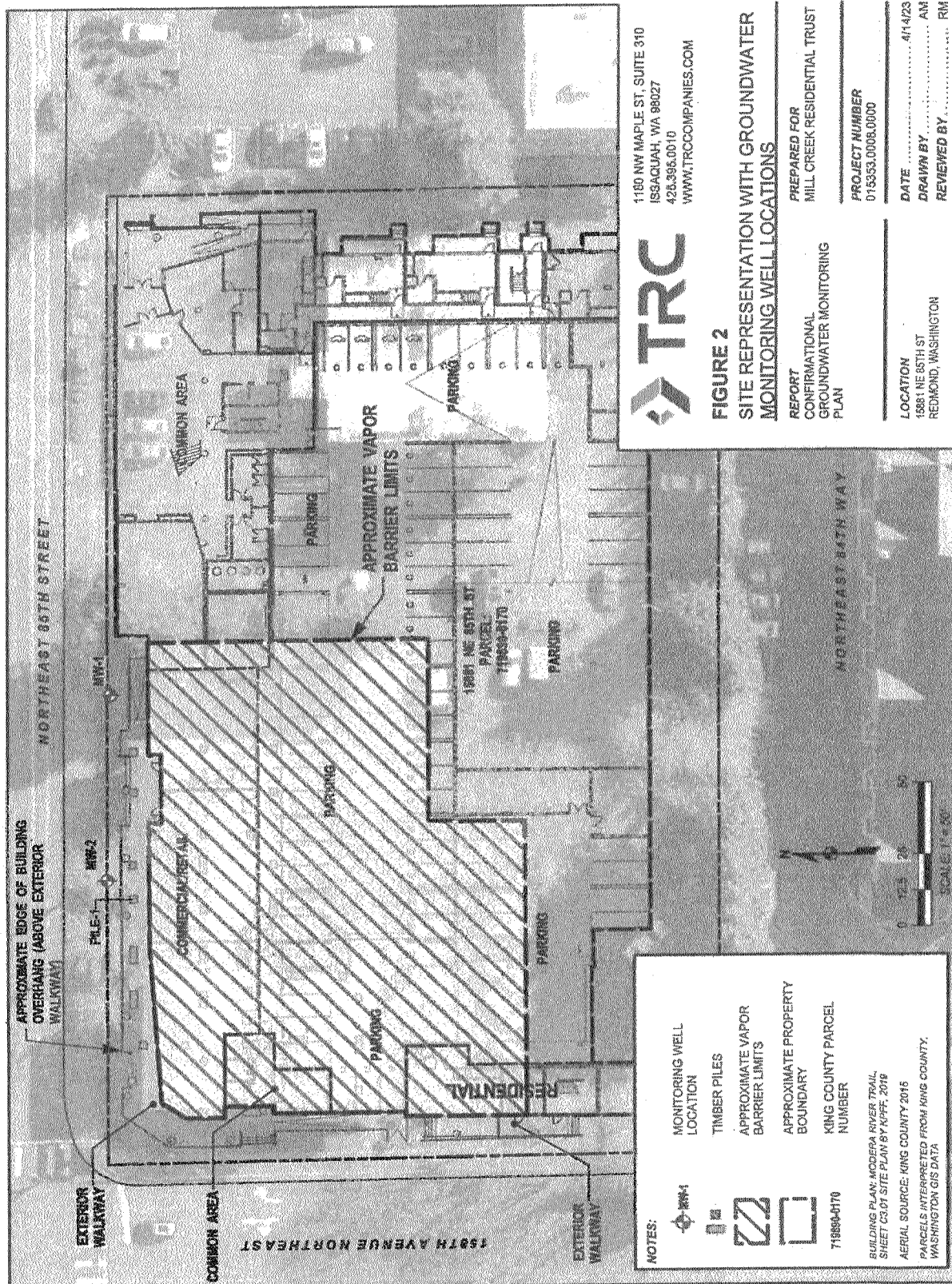
6.0 LIMITATIONS

To the extent that preparation of this CGMP required the application of best professional judgment and the application of scientific principles, certain results of this work were based on subjective interpretation. TRC makes no warranties, express or implied, including and without limitation warranties as to merchantability or fitness for a particular purpose. The information provided in this CGMP is not to be construed as legal advice.

/

Figures





Exhibit

SUBORDINATION AGREEMENT

KNOW ALL PERSONS, that Comerica Bank, the owner and holder of that certain Deed of Trust bearing the date of October 18, 2019, executed by NE 85th Street Development, LLC and recorded in the office of the County Auditor of King County, State of Washington on October 22, 2019 under Auditor's File Number 20191022001703, does hereby agree that said Instrument shall be subordinate to the interest of the State of Washington, Department of Ecology, under the environmental covenant to which this Subordination Agreement is attached.


Signature

by: Kevin E. Crayton
Printed Name

Title: SVP- Texas Market

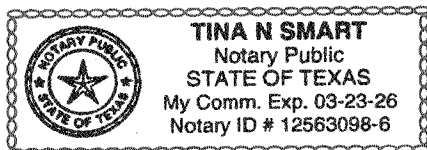
Dated: 7/11/2023


CORPORATE ACKNOWLEDGMENT

STATE OF Texas

COUNTY OF Dallas

On this 11th day of July, 2023, I certify that Kevin E. Crayton personally appeared before me, acknowledged that he is the SVP- Texas Market of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument for said corporation.




Notary Public in and for the State of
Texas
Residing at _____

My appointment expires
3-23-26