

ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
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jennifer.c.sedlachek@exxonmobil.com

Jennifer C. Sedlachek
Project Manager

ExxonMobil

August 25, 2017

RECEIVED

By Alameda County Environmental Health 10:52 am, Aug 25, 2017

Ms. Karel Detterman
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Former Mobil RAS #10MHG/160 14th Street, Oakland, California.

Dear Ms. Detterman:

Attached for your review and comment is a letter report entitled *Soil and Groundwater Report Addendum*, dated August 25, 2017, for the above-referenced site. The letter was prepared by Cardno, of Petaluma, California, and details proposed activities at the subject site.

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's Geotracker Website.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,



Jennifer C. Sedlachek
Project Manager

Attachment: Cardno's *Soil and Groundwater Report Addendum*, dated August 25, 2017

cc: Ms. Janice A. Jacobson, Cardno

August 25, 2017
Cardno 287202.R03

Cardno

601 N. McDowell Boulevard
Petaluma, CA 94954
USA

Phone: +1 800 382 9105
Fax: +1 707 789 0414
Contractor: #997036

www.cardno.com

Ms. Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Soil and Groundwater Report Addendum
Former Mobil Service Station 10MHG
160 14th Street, Oakland, California

Ms. Sedlachek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation, Cardno prepared this addendum to the *Soil and Groundwater Report*, dated March 28, 2017 (Cardno, 2017). The purpose of this addendum is to provide a cross section of the parking garage to support the existence of a 10-foot thick bio-attenuation zone and to address comments made by the Alameda County Health Care Services Agency, Department of Environmental Health (ACDEH) in a letter dated January 26, 2017, and in electronic correspondence dated July 12, 2017 (Appendix A).

The ACDEH comments are paraphrased in bold font followed by Cardno's responses in normal font.

ACDEH understands that the site was redeveloped into a mixed use residential commercial building prior to 2008 while still an open fuel leak case. According to the case file, much to all of the property was over excavated to a substantial depth to accommodate the new building's subgrade features including two elevator shafts and a parking garage; however, documentation of the final excavated depth, confirmation soil sampling of the remaining soil, or the risk of vapor intrusion to indoor air has not been determined or assessed.

August 25, 2017
Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

A tier 1 risk evaluation was performed by ACC Environmental Consultants, Inc. (ACC) in June 2006 (ACC, 2006). The risk evaluation determined that the commercial ESL for PCE in groundwater was not exceeded. In addition, ACC stated that the site development plan included the installation of a vapor barrier under grade level foundation and a waterproofing system below grade foundation. During site development, 8,000 tons of soil were excavated and removed. The excavation was approximately 150 feet long, 20 feet wide, and 15 feet deep and included the area where the former USTs were located (ACC, 2009).

Benzene was detected in groundwater at 250 µg/L in boring B11 at the edge of the property. Since benzene groundwater concentrations exceed 100 µg/L, to meet Scenario 3 of the LTCP, a 10-foot bioattenuation zone containing combined soil concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) less than 100 milligrams per kilogram (mg/kg) must be shown to exist. Please review the building plans of the new development to determine the final excavated depth of the building foundation, especially the final excavated depth below ground surface (bgs) of the parking garage, the elevator shaft, and as well as all other subgrade features.

Cardno reviewed building plans for the site to assess the depth of sub-grade structures in the building. According to the building plans, the sump pit at the bottom of the elevator shaft is located 5 feet bgs. During the most recent site assessment in 2016, groundwater was encountered from between 17 and 20 feet bgs, indicating that there is an unsaturated zone extending approximately 12 feet below the elevator shaft. With the exception of one soil sample (SB2, 8 feet bgs), none of the soil samples collected to date have exceeded 100 mg/kg total TPHg (Cardno, 2017). There is at least a 10-foot bio-attenuation zone between the elevator shaft and dissolved-phase benzene concentrations.

The parking area of the building does not extend past the ground floor; therefore, it does not represent a continuous pathway, limiting the potential exposure to vapors from this location. The parking area is continually ventilated and open to the outside air.

There are no residential units located on the ground floor. In addition, a vapor barrier was installed underneath the parking lift area and the building slab (Appendix B).

Please prepare a cross section showing the subsurface features, the base of the excavation, and historical soil and groundwater data to support the existence of a 10-foot thick bioattenuation zone. Alternately, if the data does not support the existence of a 10-foot thick bioattenuation zone, please provide documentation that it meets an alternative LTCP scenario or include a work plan to collect sufficient data to determine that it may meet one of the other criteria.

August 25, 2017
Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

There is at least 10 feet of bio-attenuation zone between the elevator shaft and dissolved-phase benzene concentrations. In addition, "a Stego® Wrap 15-mil Class A vapor barrier was installed prior to the installation of the slab on grade parking garage and the ground floor commercial spaces" (ACC, 2008). A data sheet for the vapor barrier material is included in Appendix C and states that it is used as a sub-slab vapor barrier and can control soil gases. Additionally, "a bentonite waterproofing barrier (Volclay Voltex DS) was installed in the below grade parking garage lift area" (ACC, 2008). Building plans showing slab on grade construction are included in Appendix B. A cross section location map is included as Plate 1. A cross section showing subsurface features is included as Plate 2.

CONCLUSIONS

The USTs were removed from the site in May 1986 (Blaine, 1986). During UST removal activities, 6,528 tons of soil were excavated and removed (Blaine, 1986). A tier 1 human health risk assessment was performed by ACC in April 2006 and it was determined that ESLs were not exceeded (ACC, 2006). During site development, 8,000 tons of soil were excavated and removed (ACC, 2009). A vapor barrier was installed under the building slab during site development (ACC, 2008). Because there is a 10-foot bio-attenuation zone and a vapor barrier was installed under the building slab, exposure to petroleum vapors migrating from groundwater to indoor air does not pose an unacceptable human health risk to the occupants of the site building or nearby buildings. Cardno concludes that the site adequately meets the vapor intrusion to indoor air criteria (SWRCB, 2012).

RECOMMENDATIONS

Cardno recommends closing the UST case associated with the site.

CONTACT INFORMATION

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services Company, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Ms. Janice A. Jacobson, Cardno, 601 N. McDowell Boulevard, Petaluma, California, 94954. The agency contact is Ms. Karel Detterman, Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, Alameda, California, 94502.

August 25, 2017
 Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

LIMITATIONS

For documents cited that were not generated by Cardno, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Ms. Janice A. Jacobson, Cardno's project manager for this site, at janice.jacobson@cardno.com or at (707) 766-2000 with any questions regarding this addendum.

Sincerely,

**SCANNED
IMAGE**

Janice A. Jacobson
 Senior Project Manager
 for Cardno
 707 766 2000
 Email: janice.jacobson@cardno.com

**SCANNED
IMAGE**

David R. Daniels
 P.G. 8737
 for Cardno
 707 766 2000
 Email: david.daniels@cardno.com



Enclosures:

References

Acronym List

Plate 1 Cross Section Location Map

Plate 2 Cross Section A-A'

Appendix A Correspondence

Appendix B Building Plans

Appendix C Data Sheet for Stego® Wrap Vapor Barrier

August 25, 2017
Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

cc: Ms. Karel Detterman, Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577

August 25, 2017
Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

REFERENCES

ACC Environmental Consultants (ACC). June 5, 2006. *Tier 1 Risk Evaluation, 160 14th Street, Oakland California.*

ACC Environmental Consultants (ACC). September 29, 2008. *Request for Regulatory Closure, 160 14th Street, Oakland, California.*

ACC Environmental Consultants (ACC). July 6, 2009. *Response to Alameda County Environmental Health, 160 14th Street, Oakland, California.*

Blaine Tech Services (Blaine). May 22, 1986. *Field Sampling at Mobil Station, 14th & Madison, Oakland, CA on May 8, 1986.*

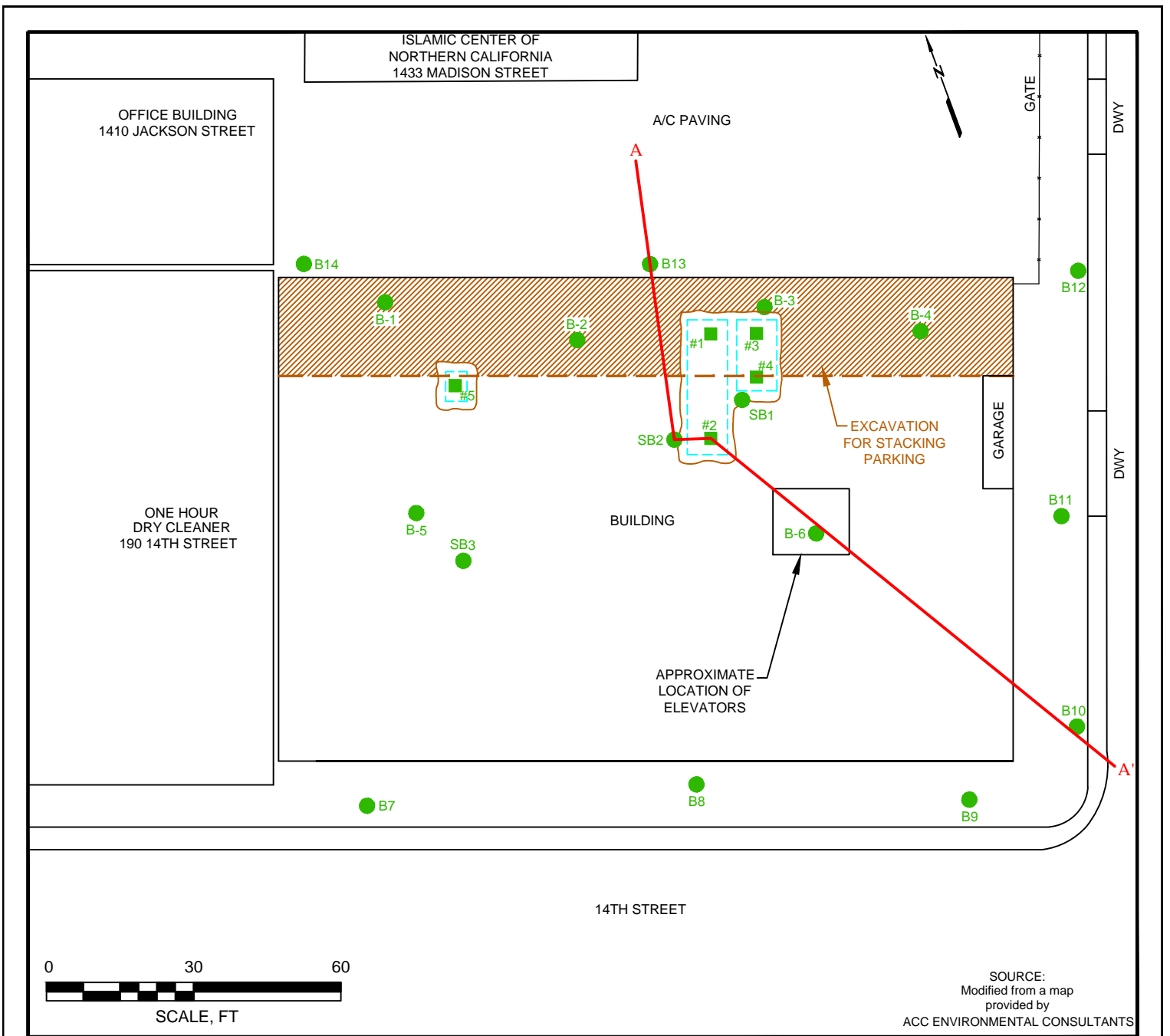
Cardno. March 28, 2017. *Soil and Groundwater Report, Former Mobil Service Station 10MHG, 160 14th Street, Oakland, California.*

State Water Resources Control Board (SWRCB). August 17, 2012. *Low-Threat Underground Storage Tank Case Closure Policy.* Adopted May 1, 2012.

August 25, 2017
 Cardno 287202.R03 Former Mobil Service Station 10MHG, Oakland, California

ACRONYM LIST

µg/L	Micrograms per liter	NAPL	Non-aqueous phase liquid
µg/m ³	Micrograms per cubic meter	NEPA	National Environmental Policy Act
µs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
AST	Aboveground storage tank	OSHA	Occupational Safety and Health Administration
bgs	Below ground surface	OVA	Organic vapor analyzer
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	P&ID	Process and Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic (or polyaromatic) hydrocarbon
COC	Chain-of-Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly-owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HIT	High-intensity targeted	SVOC	Semi-volatile organic compound
HVOC	Halogenated volatile organic compound	TAME	Tertiary amyl methyl ether
J	Estimated value between MDL and PQL (RL)	TBA	Tertiary butyl alcohol
LEL	Lower explosive limit	TCE	Trichloroethene
LPC	Liquid-phase carbon	TOC	Top of well casing elevation; datum is msl
LRP	Liquid-ring pump	TOG	Total oil and grease
LUFT	Leaking underground fuel tank	TPH	Total petroleum hydrocarbons
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon



FN 022872_XSEC GSP

LEGEND

- B14 ● Soil Boring
- Cross-Section Line A — A'
- #5 ■ Excavation Soil Sample
- Former UST



CROSS SECTION LOCATION MAP

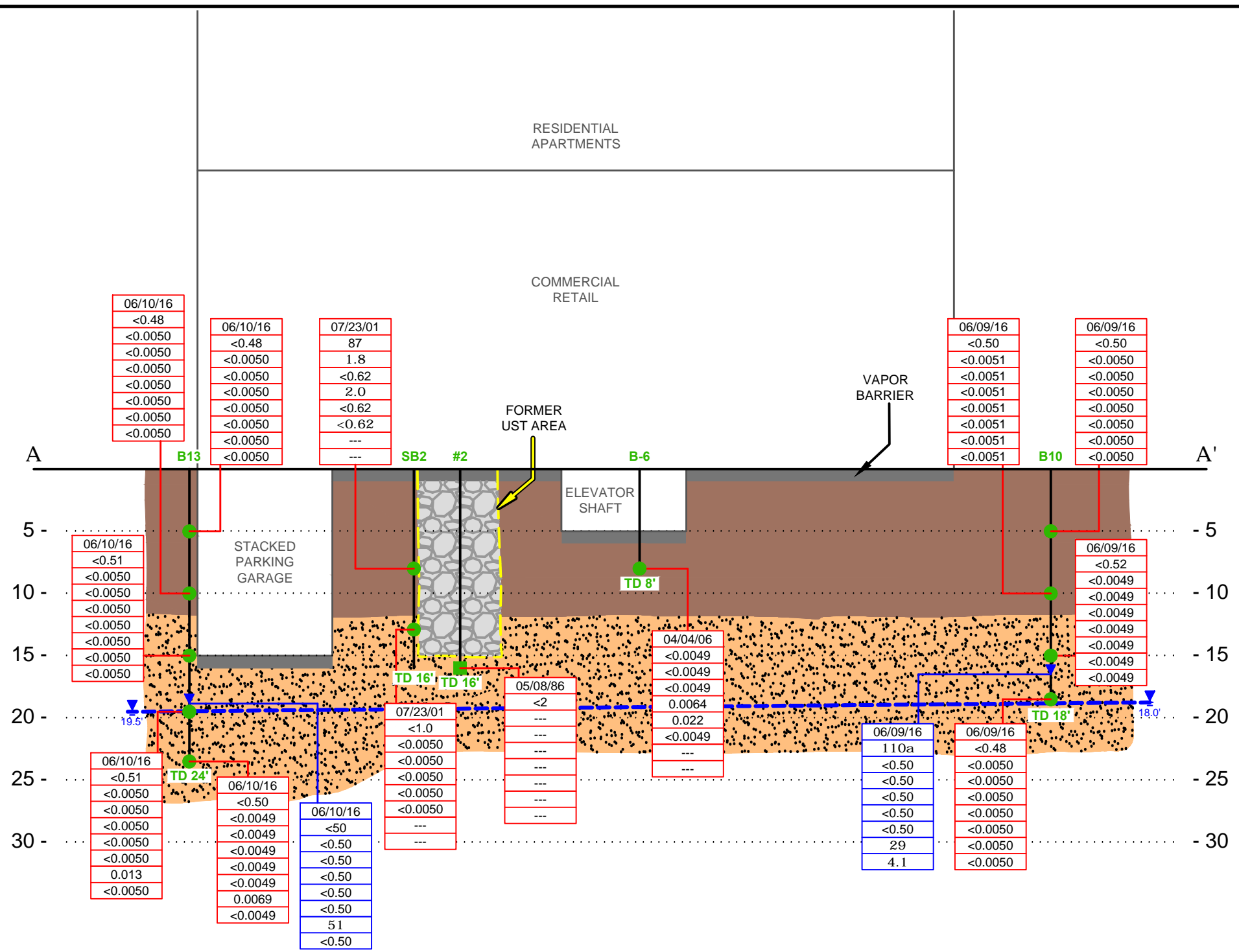
Former Mobil Service Station 10MHG
160 14th Street
Oakland, California

PROJECT NO.
2872

PLATE
1

EXPLANATION

- B13 SOIL BORING SAMPLE LOCATIONS
- #2 SOIL EXCAVATION SAMPLE LOCATION
- A — A' CROSS-SECTION LINE
- APPROXIMATE DEPTH OF GROUNDWATER (FEET BELOW TOP OF CASING)
- COARSE-GRAINED MATERIAL
- FINE-GRAINED MATERIAL
- BACK FILL MATERIAL



FN 022872_XSEC A-A'

CROSS SECTION A-A'

FORMER MOBIL SERVICE STATION 10MHG
160 14th Street
Oakland, California

Select soil analyte concentrations

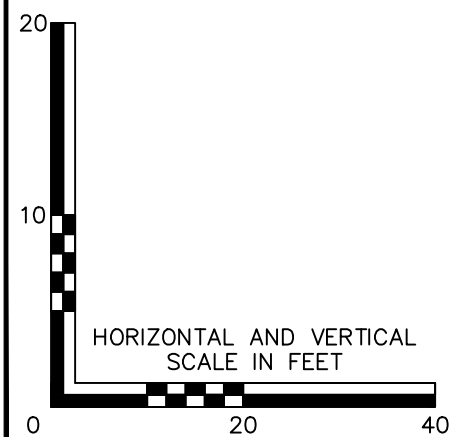
	07/23/01	Sampling date
TPHg	87	Total petroleum hydrocarbons as gasoline (mg/kg)
B	1.8	Benzene (mg/kg)
T	<0.62	Toluene (mg/kg)
E	2.0	Ethylbenzene (mg/kg)
X	<0.62	Total xylenes (mg/kg)
MTBE	<0.62	Methyl tertiary butyl ether (mg/kg)
PCE	---	Tetrachloroethene (mg/kg)
TCE	---	Trichloroethene (mg/kg)

- < Less than the stated laboratory reporting limit
- mg/kg Milligrams per kilogram
- Not analyzed/Not applicable/Not sampled
- BOLD** Above Tier 1 Environmental Screening Levels (February 2016)

Select groundwater analyte concentrations

	06/09/16	Sampling date
TPHg	110a	Total petroleum hydrocarbons as gasoline (µg/L)
B	<0.50	Benzene (µg/L)
T	<0.50	Toluene (µg/L)
E	<0.50	Ethylbenzene (µg/L)
X	<0.50	Total xylenes (µg/L)
MTBE	<0.50	Methyl tertiary butyl ether (µg/L)
PCE	29	Tetrachloroethene (µg/L)
TCE	4.1	Trichloroethene (µg/L)

- < Less than the stated laboratory reporting limit
- µg/L Micrograms per liter
- a The chromatographic pattern does not match that of the specified standard
- BOLD** Above Tier 1 Environmental Screening Levels (February 2016)



NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

Cardno
Shaping the Future

PROJECT NO.
2872

PLATE
2

APPENDIX A

CORRESPONDENCE



January 26, 2017

Ms. Jennifer Sedlachek
ExxonMobil
4096 Piedmont Ave. #194
Piedmont, CA 94611
(Sent via E-mail to: jennifer.c.sedlachek@exxonmobil.com)

Subject: Fuel Leak Case No. RO0002922 and Geotracker Global ID T06019782296, Mobil #10-MHG, 160
14th St., Oakland, CA 94612

Dear Ms. Sedlachek:

Thank you for attending the meeting at Alameda County Department of Environmental Health's (ACDEH's) office on Thursday January 19, 2017. The purpose of was to discuss the results of the *Soil and Groundwater Investigation Report* (Report) dated July 28, 2016 and in reference to the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP), identify any remaining data gaps, and develop a path to case closure. ACDEH understands that site was redeveloped into a mixed residential commercial building prior to 2008 while still an open fuel leak case. As discussed during the meeting, two data gaps were identified, as described in the Technical Comments. ACDEH requests that you address the identified data gaps discussed during our meeting by submitting a Soil and Groundwater Investigation Report by the date provided below.

TECHNICAL COMMENTS

1. **LTCP Media Specific Criteria for Groundwater** – To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed in the policy.

The site groundwater gradient direction is not known; however there are several adjacent environmental cases with historical groundwater data which indicate the local gradient direction is predominantly towards Lake Merritt located approximately 820 feet to the east. A grab groundwater sample from B11 located near the east and presumed downgradient edge of the property detected 250 micrograms per liter (ug/L) benzene. The LTCP defines the length of the plume as the maximum extent from the point of release of any petroleum related constituent gasoline-range organic (GRO) in groundwater that exceeds the water quality objectives. Using the criteria listed in Table 1 of the LTCP's *Technical Justification for Groundwater Media-Specific Criteria* to define the length of the plume, please prepare a figure plotting the estimated GRO plume length(s) in the groundwater gradient direction on an aerial photograph base map. Please show the prevalent groundwater gradient direction for nearby cases and identify sensitive receptors within 1,000 feet of the edge of the plume. On the same figure, please identify buildings with basements, beneficial resources and other sensitive receptors, surface water bodies, schools, hospitals, day care centers, elder care facilities.

2. **LTCP Media Specific Criteria for Vapor Intrusion to Indoor Air:** The LTCP describes conditions, including bioattenuation (unsaturated) zones, which if met, will assure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to human occupants of existing or future site buildings, and adjacent parcels. Appendices 1 through 4 of the LTCP criteria

illustrate four potential exposure scenarios and describe characteristics and criteria associated with each scenario.

ACDEH understands that the site was redeveloped into a mixed use residential commercial building prior to 2008 while still an open fuel leak case. According to the case file, much to all of the property was overexcavated to a substantial depth to accommodate the new building's subgrade features including two elevator shafts and a parking garage; however, documentation of the final excavated depth, confirmation soil sampling of the remaining soil, or the risk of vapor intrusion to indoor air has not been determined or assessed. Benzene was detected in groundwater at 250 ug/L in boring B11 at the edge of the property. Since benzene groundwater concentrations exceed 100 ug/L, to meet Scenario 3 of the LTCP, a 10-foot bioattenuation zone containing combined soil concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) less than 100 milligrams per kilogram (mg/kg) must be shown to exist. Please review the building plans of the new development to determine the final excavated depth of the building foundation, especially the final excavated depth below ground surface (bgs) of the parking garage, the elevator shaft, and as well as all other subgrade features. Please prepare a cross section showing the subsurface features, the base of the excavation, and historical soil and groundwater data to support the existence of a 10-foot thick bioattenuation zone. Alternately, if the data does not support the existence of a 10-foot thick bioattenuation zone, please provide documentation that it meets an alternative LTCP scenario or include a work plan to collect sufficient data to determine that it may meet one of the other criteria.

Technical Report Request

Please upload the technical report to the ACDEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **March 31, 2017 – Soil and Groundwater Report**
File to be named: RO2922_SWI_R_yyyy-mm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

If you have any questions, please call me at (510) 567-6708 or send me an e-mail message karel.detterman@acgov.org. Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

Sincerely,

Karel Detterman, PG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party(ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

Ms. Sedlachek
RO0002922
January 26, 2017, Page 3

cc: Ms. Leticia Gonzalez, Property Supervisor, Satellite Affordable Housing Associates (SAHA), 1835 Alcatraz Avenue, Berkeley, California 94703, (Sent via E-mail to: lgonzalez@sahahomes.org)

Mr. Ted Dang, Fourteenth and Madison Associates, 1305 Franklin Street, Oakland, CA 94612

Madison Street Lofts, 1835 Alcatraz Avenue, Berkeley, CA 94703-2714

Mr. Liang Lee, 388 Market Street, Floor 5, San Francisco, CA 94111-5311

Mr. Jim Chappell, Cardno, 601 N. McDowell, Petaluma, CA 94954, (Sent via E-mail to: jim.chappell@cardno.com)

Ms. Janice Jacobson, Cardno, 601 N. McDowell, Petaluma, CA 94954, (Sent via E-mail to: janice.jacobson@cardno.com)

Karel Detterman, ACDEH, (Sent via E-mail to: karel.detterman@acgov.org)

Dilan Roe, ACDEH, (Sent via E-mail to: dilan.roe@acgov.org)

Paresh Khatri, ACDEH, (Sent via E-mail to: paresh.khatri@acgov.org)

Electronic File, GeoTracker

Detterman, Karel, Env. Health

From: Detterman, Karel, Env. Health
Sent: Wednesday, July 12, 2017 5:46 PM
To: 'Janice Jacobson'; jennifer.c.sedlachek@exxonmobil.com
Cc: James Chappell; 'Igonzalez@sahahomes.org'; Roe, Dilan, Env. Health; Khatri, Paresh, Env. Health
Subject: Fuel Leak Case No. RO0002922 and Geotracker Global ID T06019782296, Mobil #10-MHG, 160 14th St., Oakland, CA 94612

Hi Janice and Jennifer:

Thank you for your suggestion to meet tomorrow regarding RO2922 after your meeting with Keith Nowell. Unfortunately, Dilan has back to back meetings and suggests we schedule a meeting in August upon her return from vacation.

Please choose from this selection of August dates:

Wednesday August 9: one hour meeting anytime between 11AM to 2 PM
Tuesday August 15 1-3PM
Thursday August 17 1-3 PM

I have reviewed the Soil and Groundwater Report dated March 28, 2017 which was prepared in response to Alameda County Department of Environmental Health's (ACDEH's) January 26, 2017 Directive Letter. Thank you for addressing Technical Comment 1 regarding LTCP Media Specific Criteria for Groundwater; however, a cross section requested in Technical Comment 2 regarding LTCP Media Specific Criteria for Vapor Intrusion to Indoor Air was not submitted.

As requested in January 26, 2017 Directive Letter Technical Comment 2: Please prepare a cross section showing the subsurface features, the base of the excavation, and historical soil and groundwater data to support the existence of a 10-foot thick bioattenuation zone. Alternately, if the data does not support the existence of a 10-foot thick bioattenuation zone, please provide documentation that it meets an alternative LTCP scenario or include a work plan to collect sufficient data to determine that it may meet one of the other criteria.

Technical Report Request

Please upload the cross section to the ACDEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **August 8, 2017 – Miscellaneous Report**
File to be named: RO2922_MISC_R_yyyy-mm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

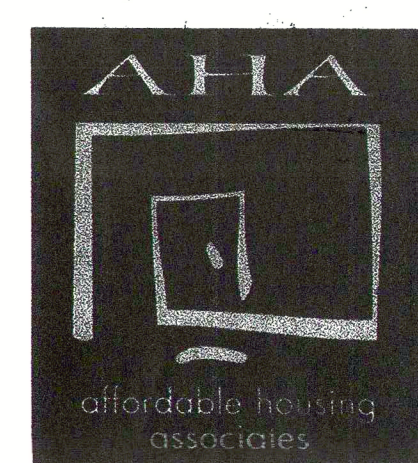
Thank you,

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708
Fax: 510.337.9335
Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

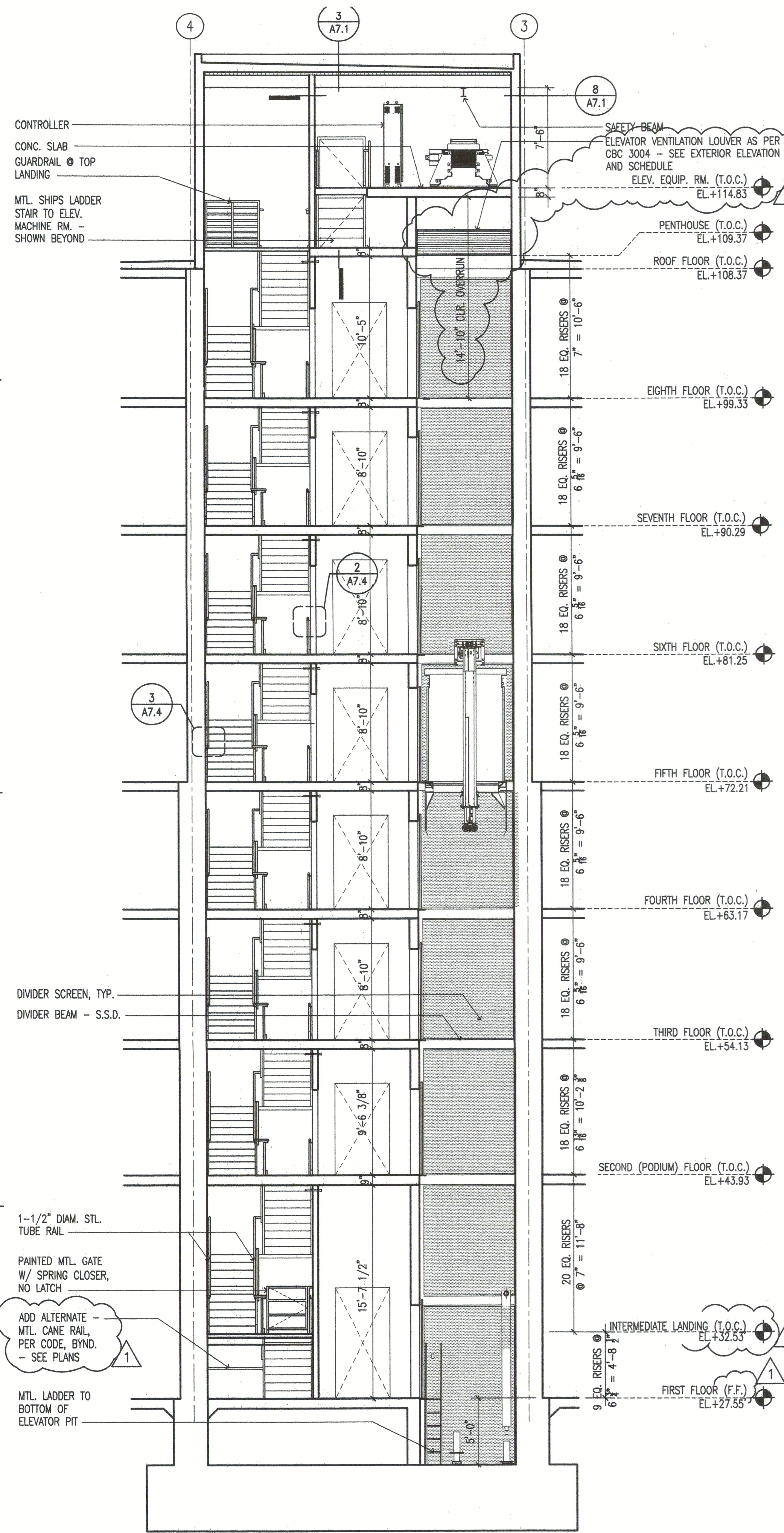
APPENDIX B

BUILDING PLANS

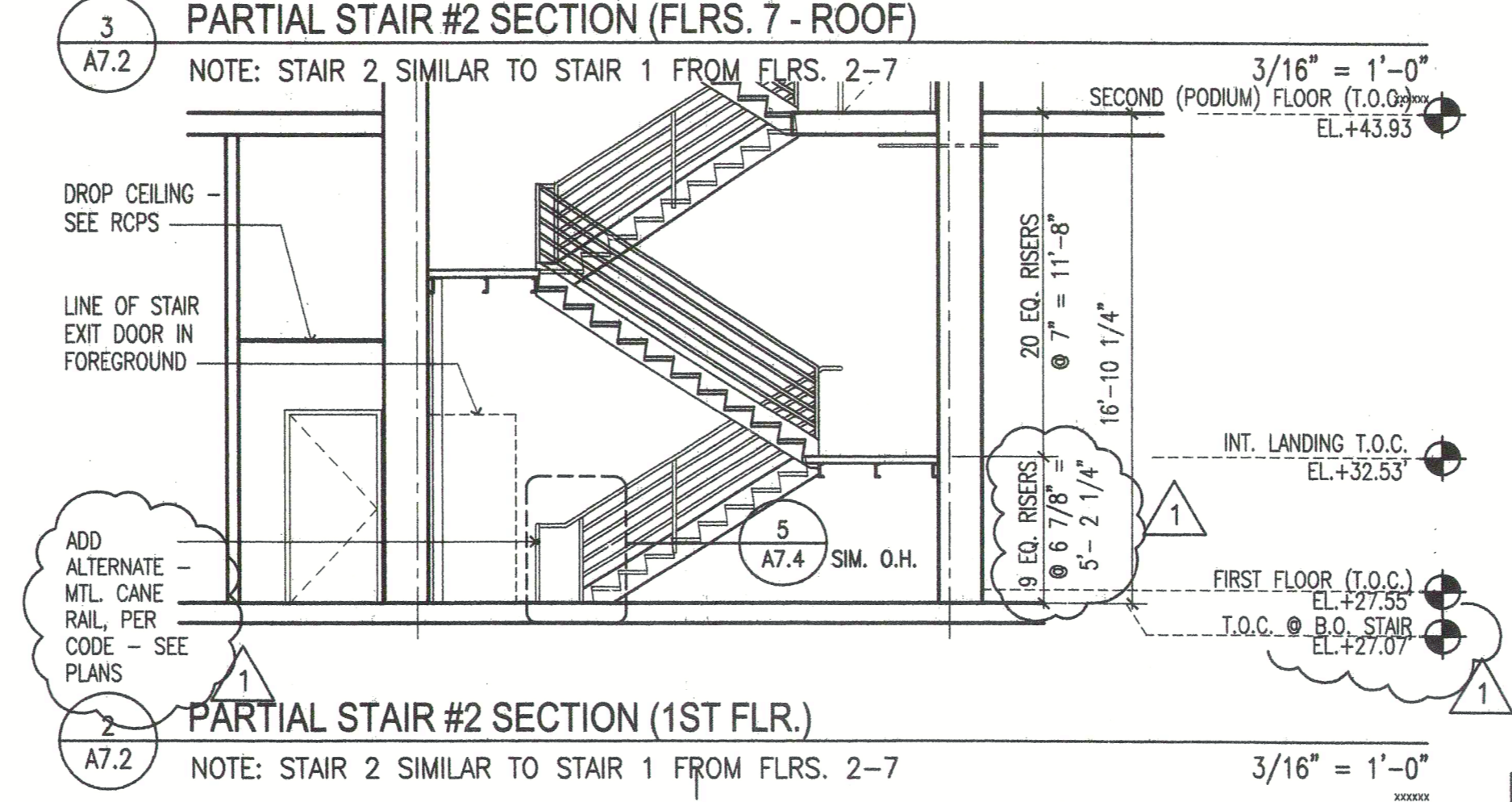
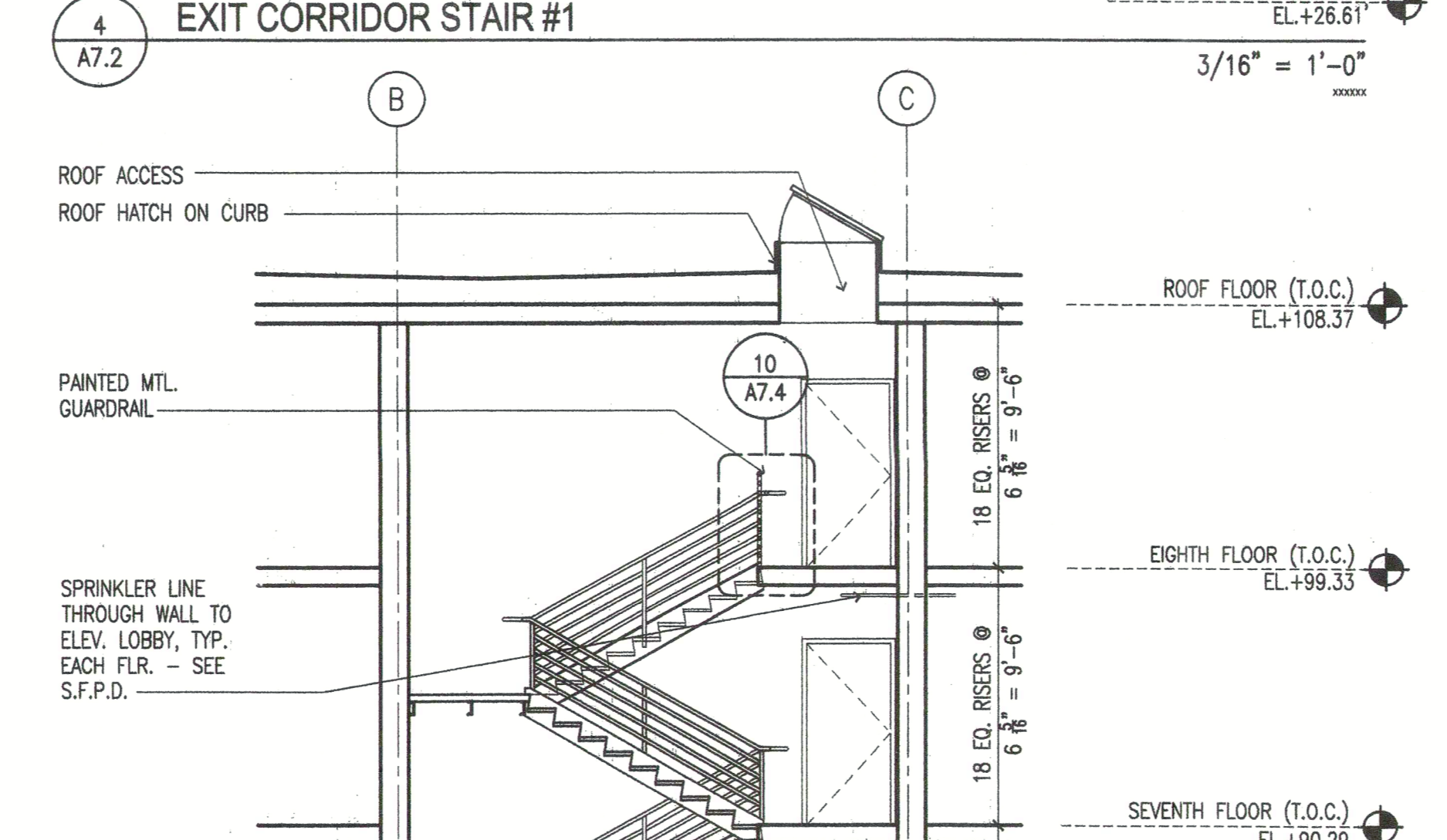
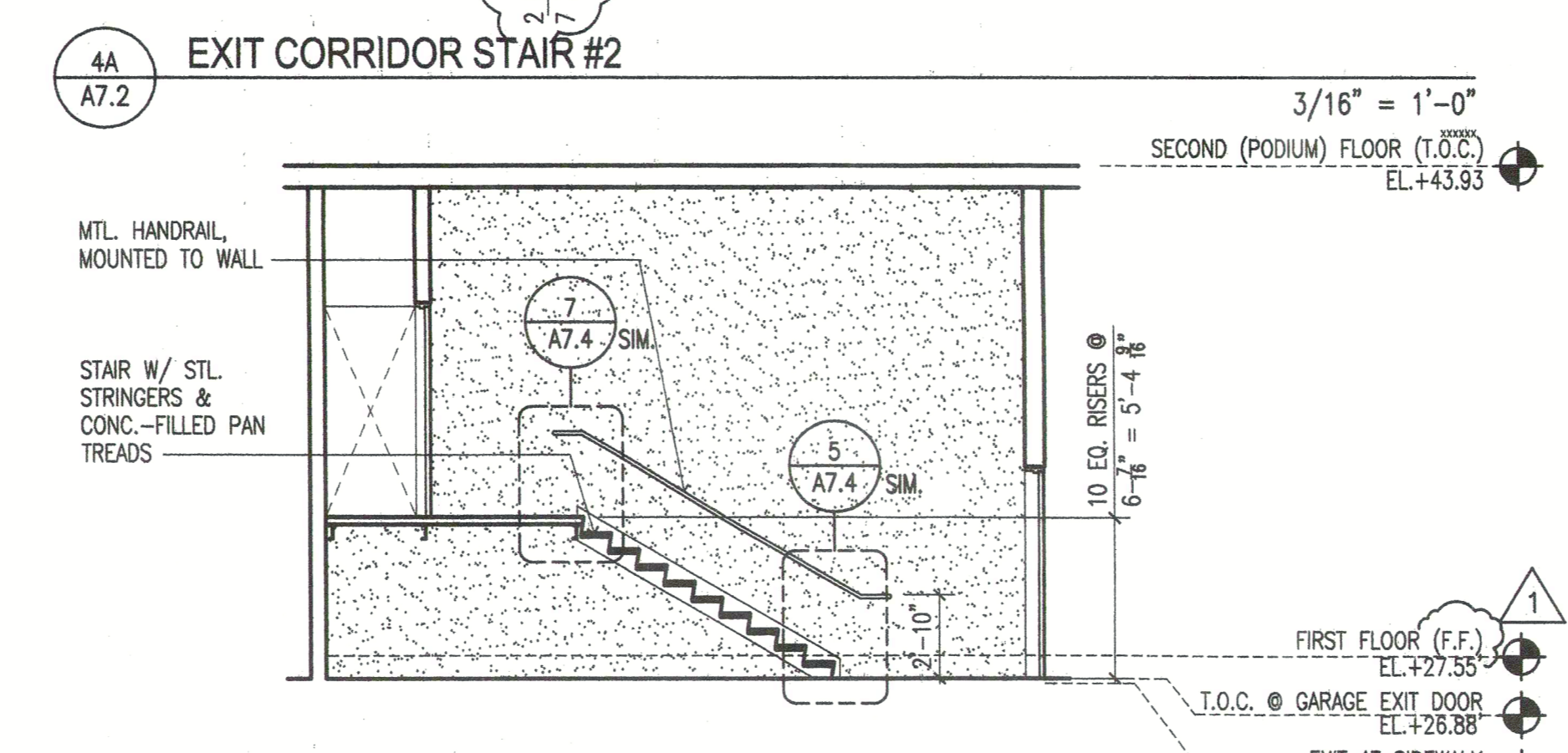
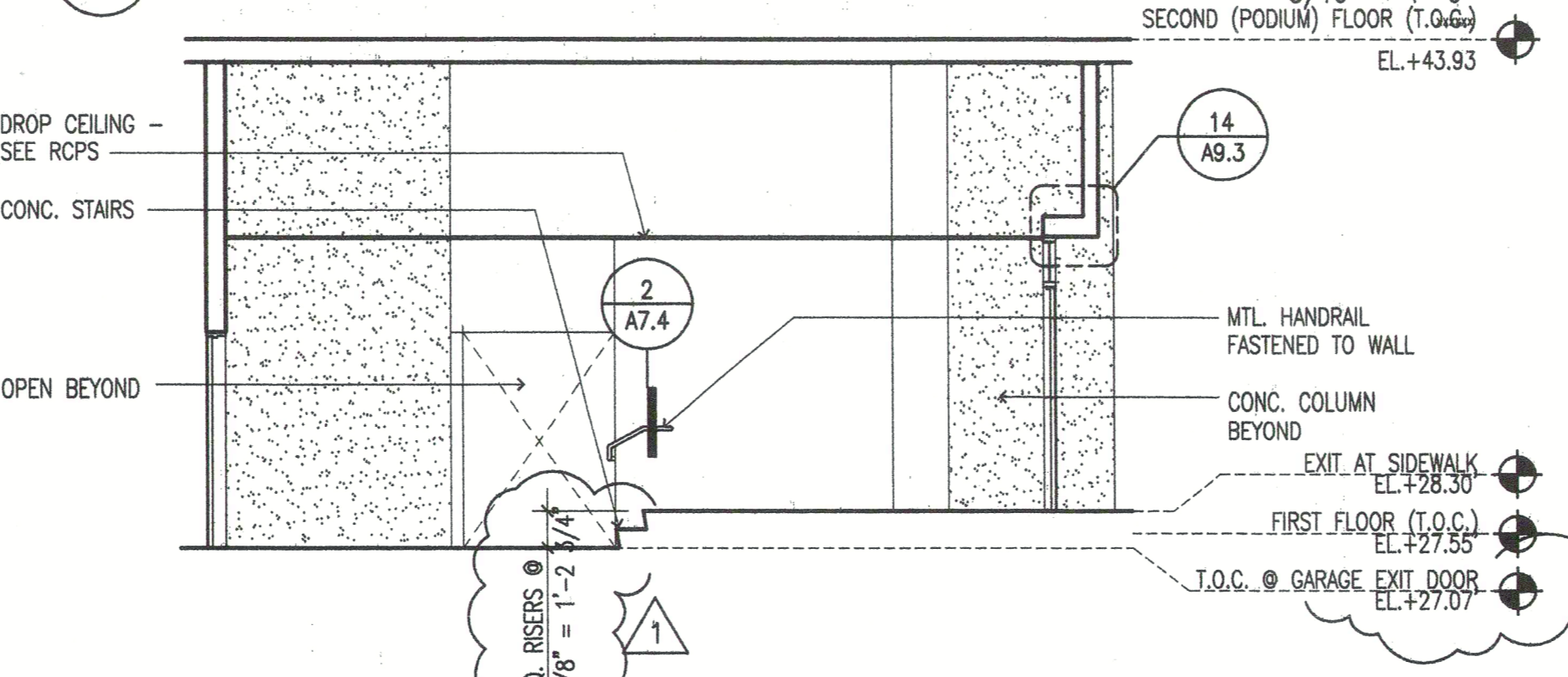
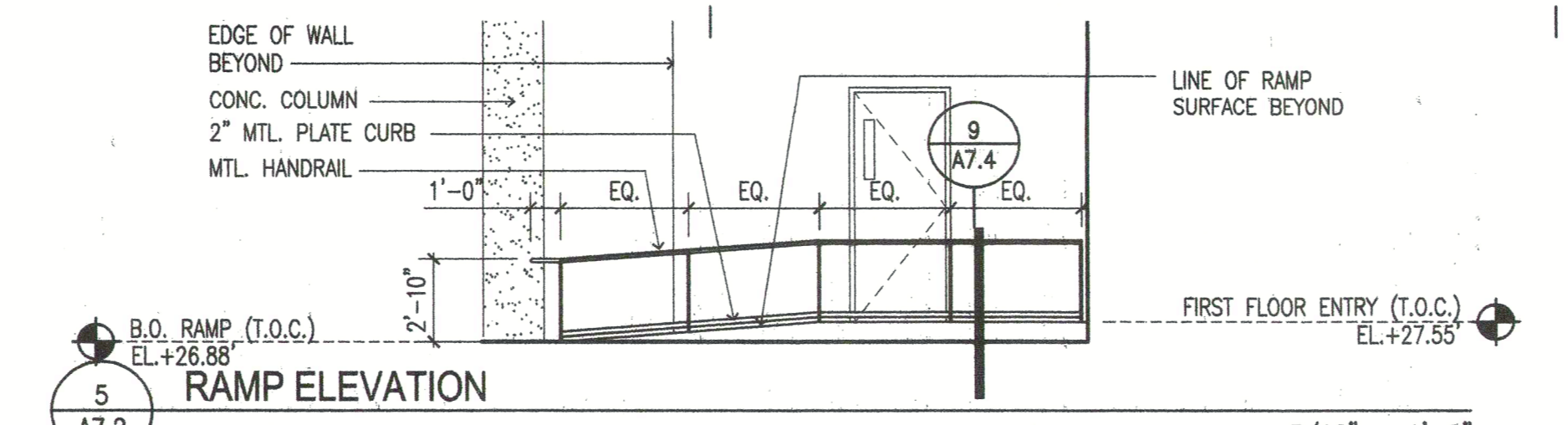


MEP BID SET	08.31.05
FOUNDATION PERMIT	09.29.05
100% DESIGN DEVELOPMENT	11.07.05
BUILDING PERMIT AND 50% CD SET	01.20.06
100% CONSTRUCTION DRAWINGS / BID SET	03.06.06
ISSUED FOR CONSTRUCTION	04.28.06

DATE: 08.31.05
 JOB No: 0127
 PHASE: C.D.
 PERMIT No:
 SCALE: 1/8" = 1'-0"
 ISSUED FOR: 100% CD

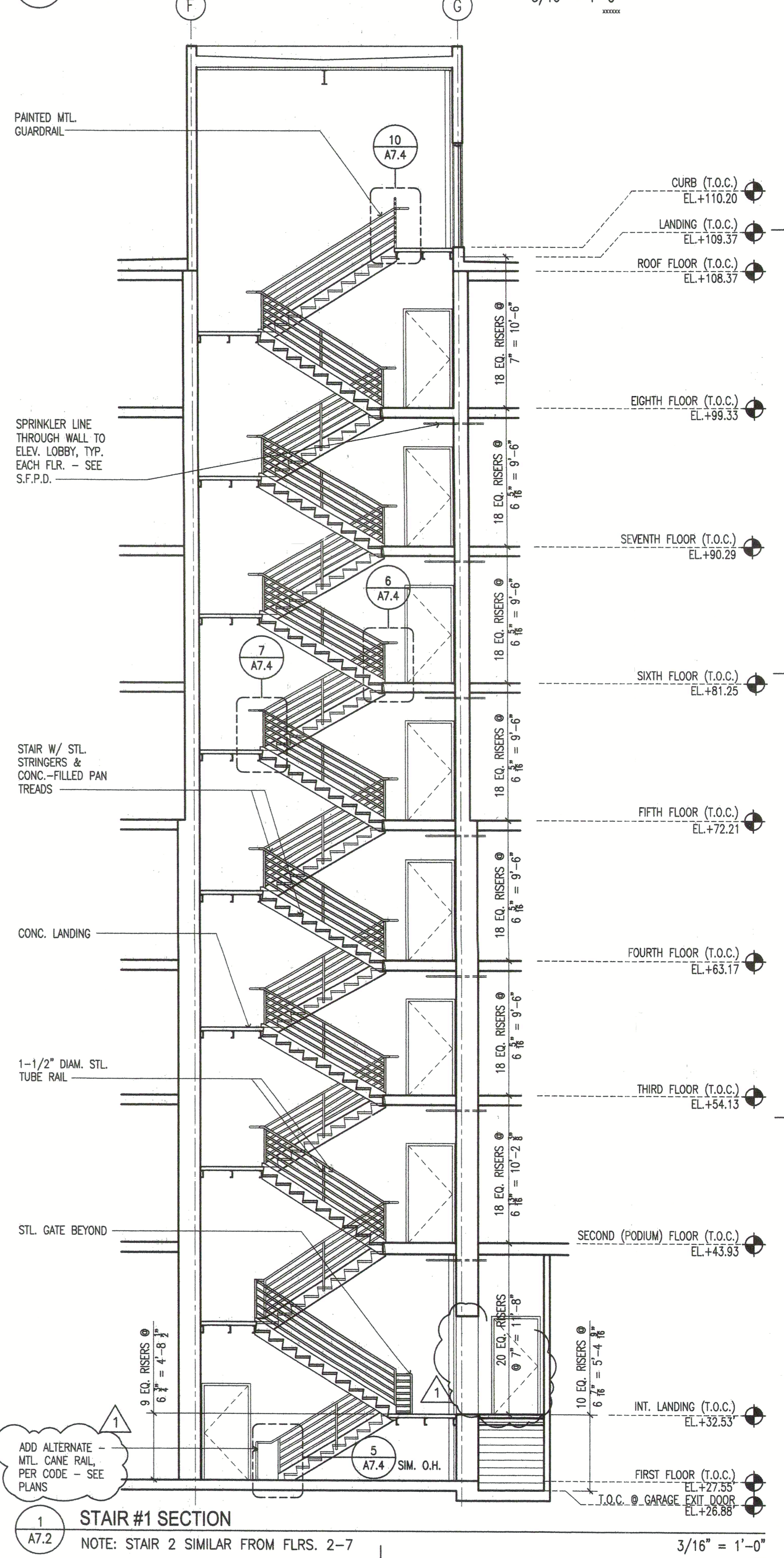
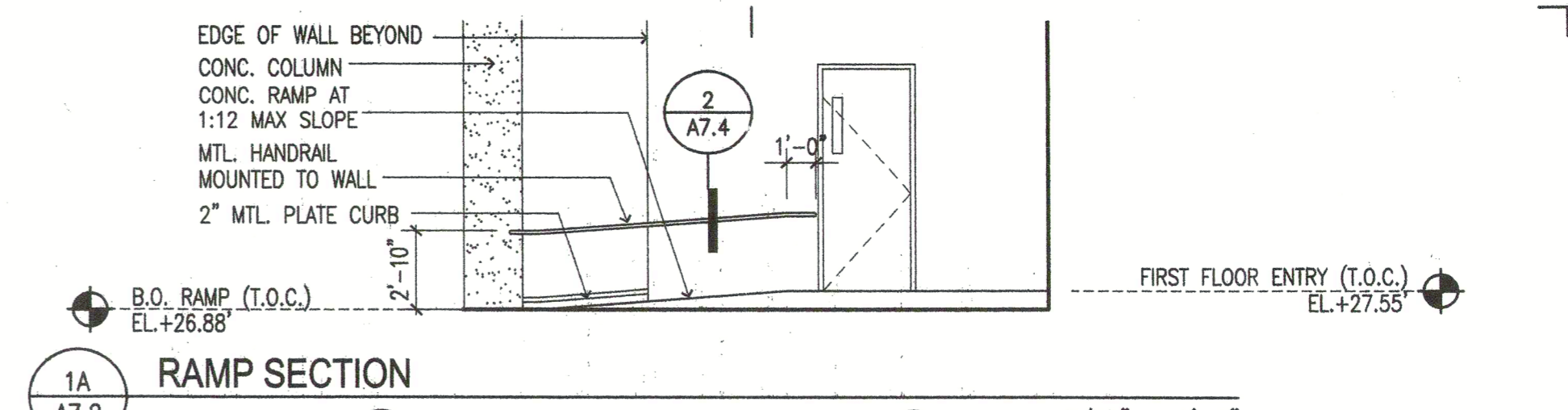


6 STAIR #1 SECTION
 A7.2 3/16" = 1'-0"



3 PARTIAL STAIR #2 SECTION (FLRS. 7 - ROOF)
 A7.2 NOTE: STAIR 2 SIMILAR TO STAIR 1 FROM FLRS. 2-7
 3/16" = 1'-0"

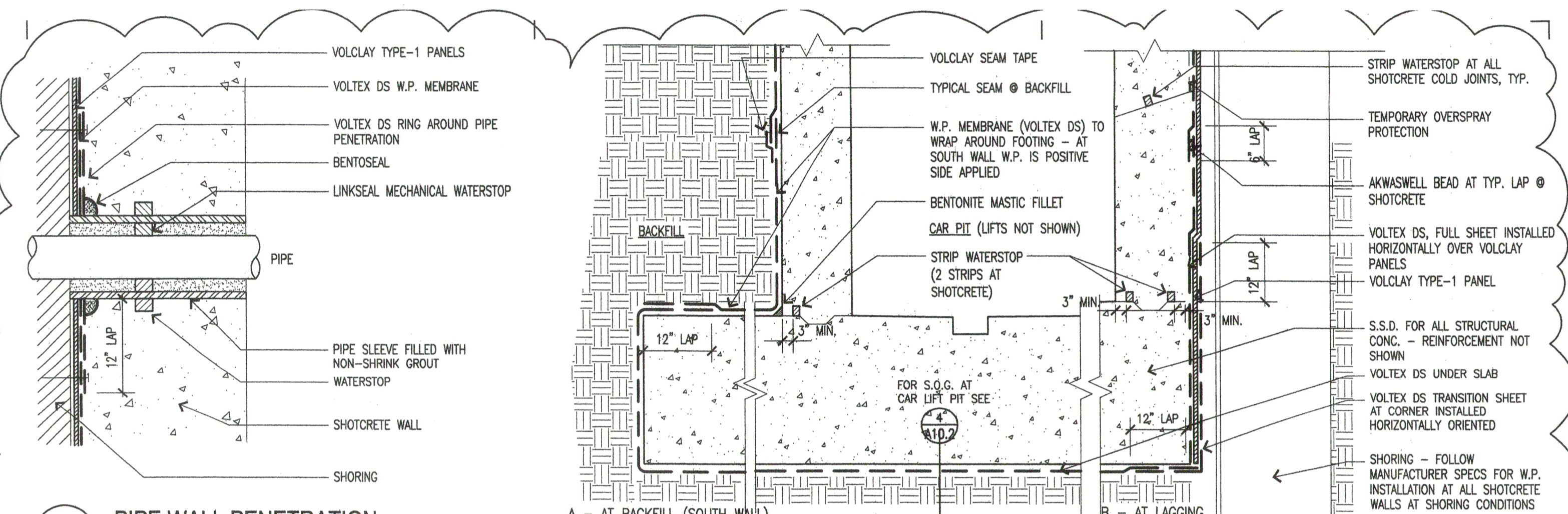
4 PARTIAL STAIR #2 SECTION (1ST FLR.)
 A7.2 NOTE: STAIR 2 SIMILAR TO STAIR 1 FROM FLRS. 2-7
 3/16" = 1'-0"



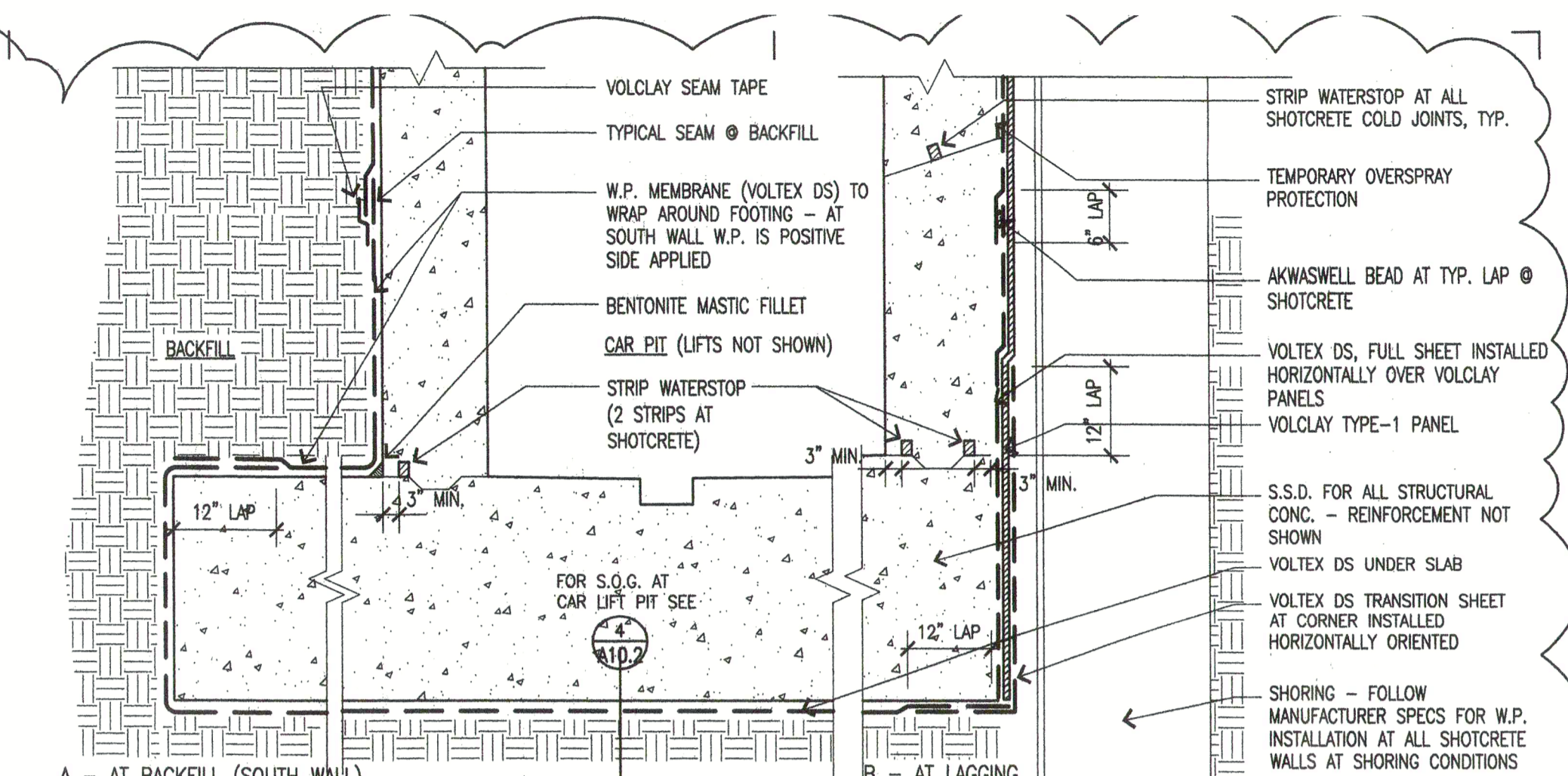
1 STAIR #1 SECTION
 A7.2 NOTE: STAIR 2 SIMILAR FROM FLRS. 2-7
 3/16" = 1'-0"

MEP BID SET	08.31.05
FOUNDATION PERMIT	09.29.05
100% DESIGN DEVELOPMENT	11.07.05
BUILDING PERMIT AND 50% CD SET	01.20.06
100% CONSTRUCTION DRAWINGS / BID SET	03.06.06
ISSUED FOR CONSTRUCTION	04.28.06

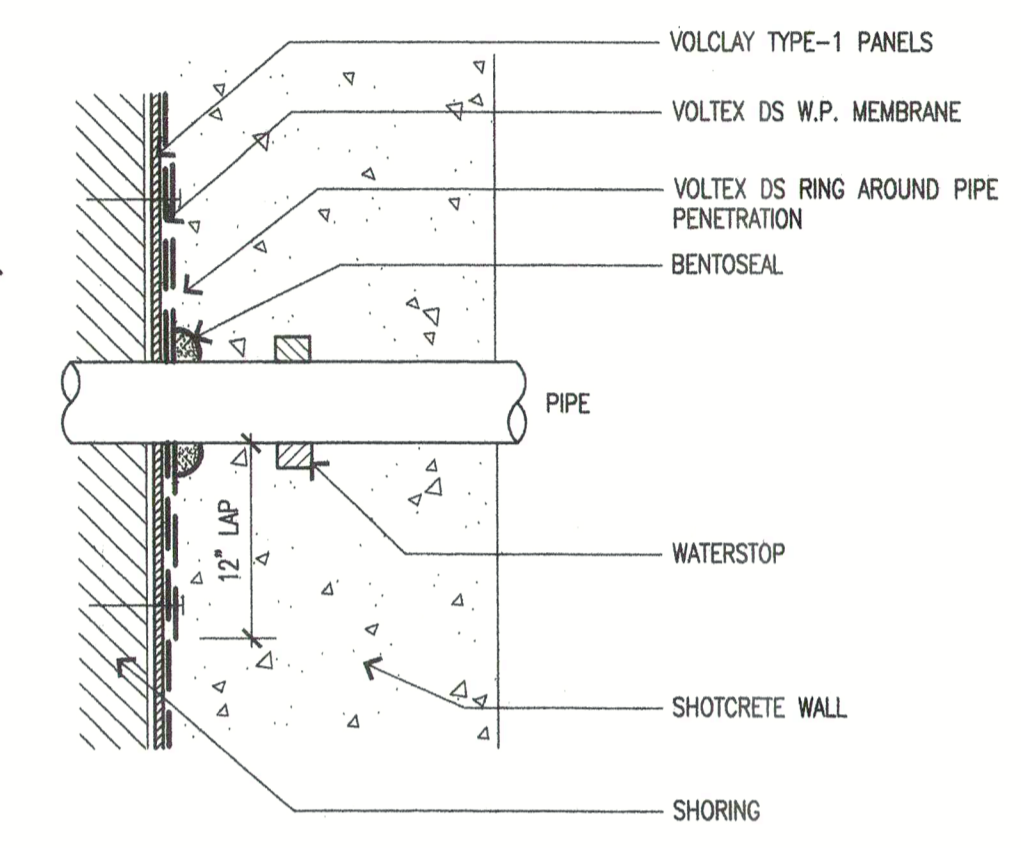
DATE: 08.31.05
JOB No: 0127
PHASE: C.D.
PERMIT No:
SCALE: 1/8" = 1'-0"
ISSUED FOR: 100% CD



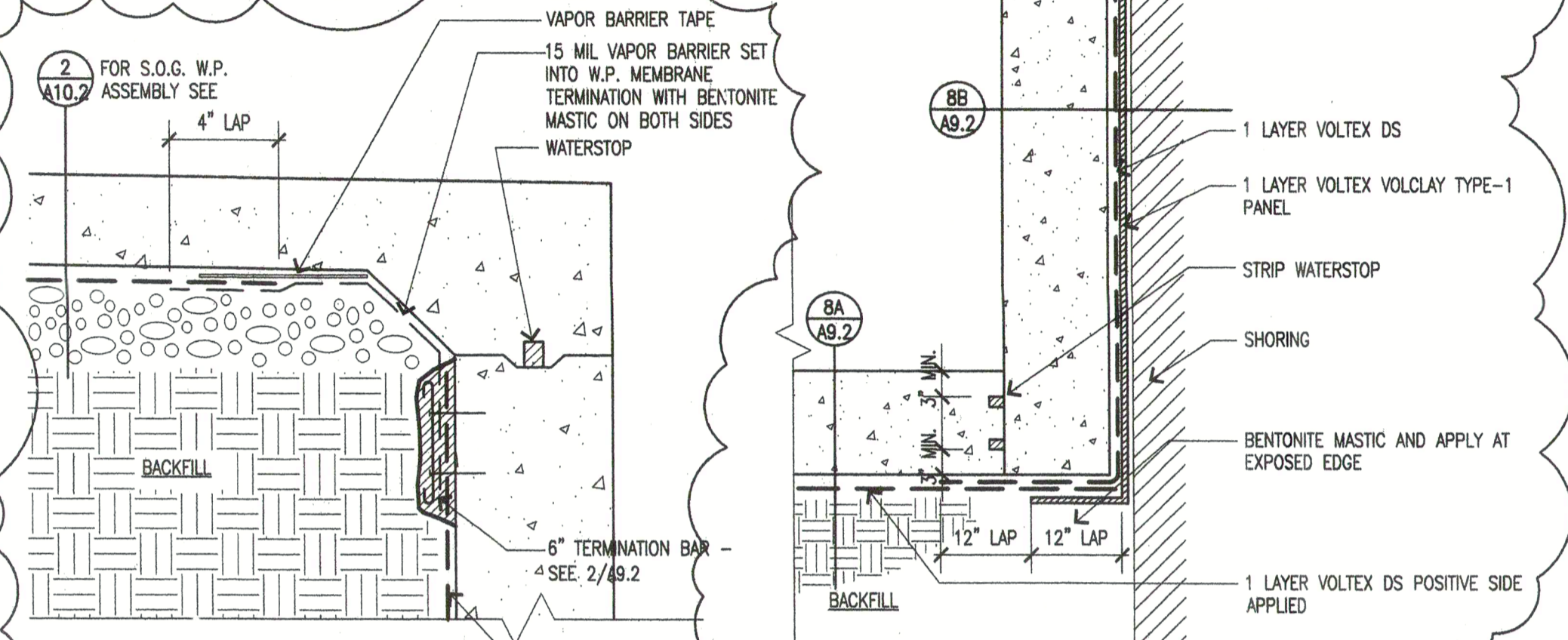
12 PIPE WALL PENETRATION FOR LARGE PIPES
A9.2



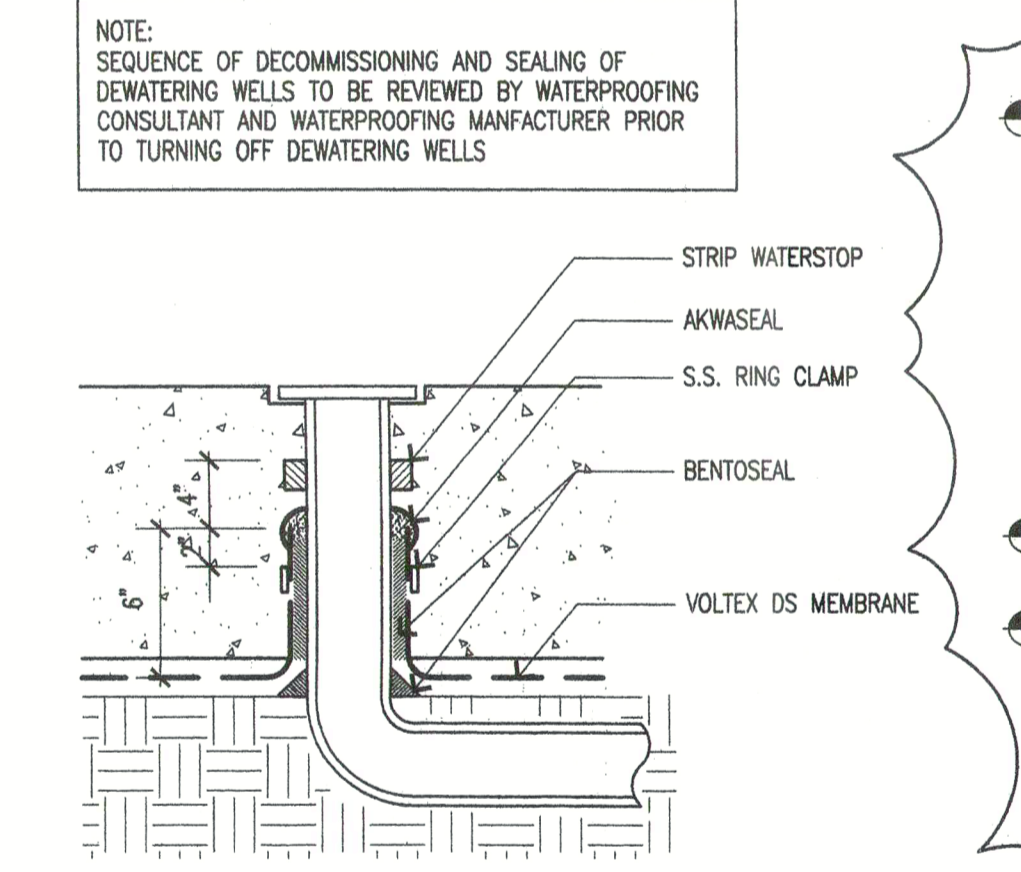
8 W.P. ASSEMBLY @ CAR LIFT PIT
A9.2



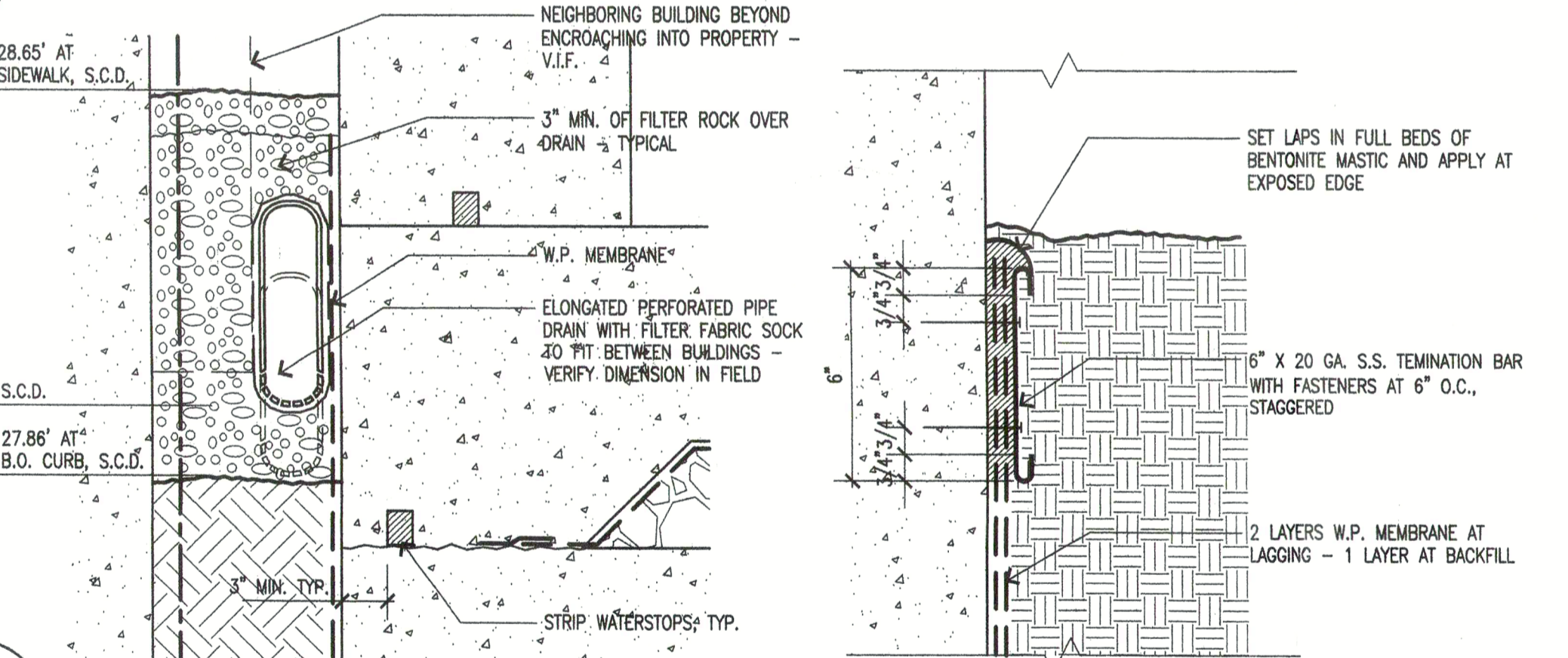
11 PIPE WALL PENETRATION FOR PIPES 4\"/>



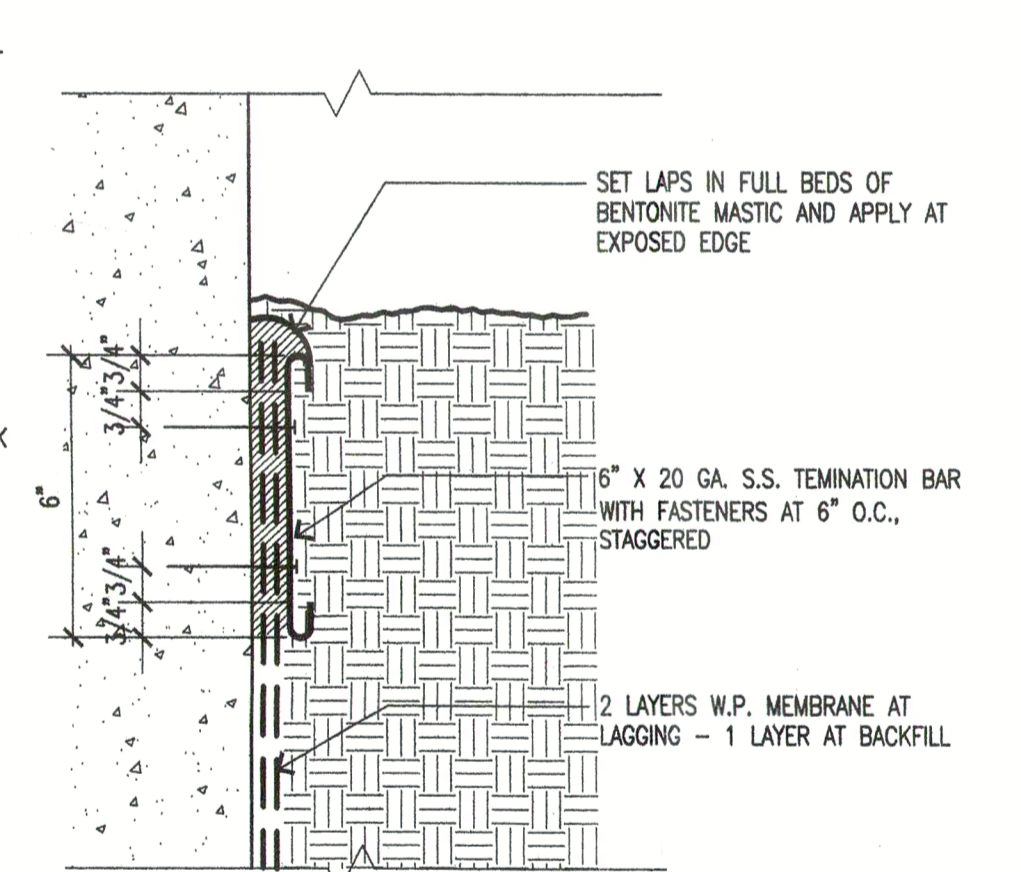
3 BLIND TO POSITIVE W.P. TRANSITION @ NORTH-EAST CORNER CAR PIT
A9.2



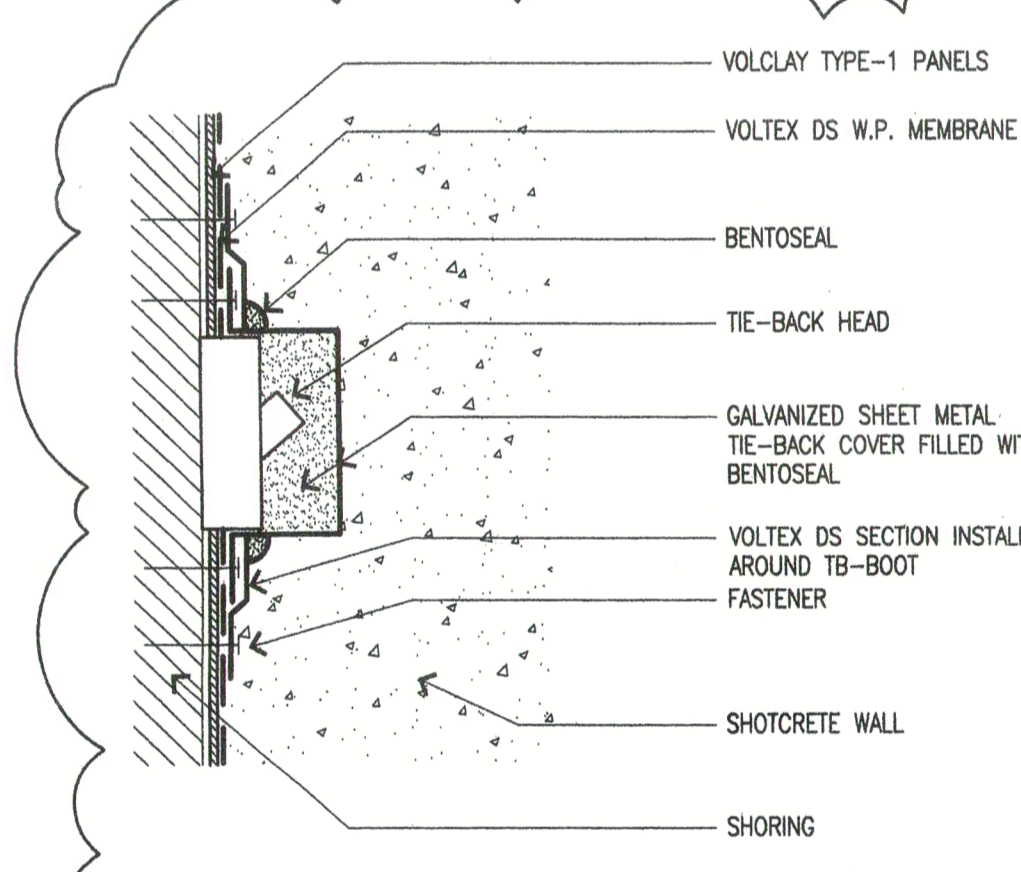
10 PIPE PENETRATION THROUGH MHT SLAB @ GRADE
A9.2



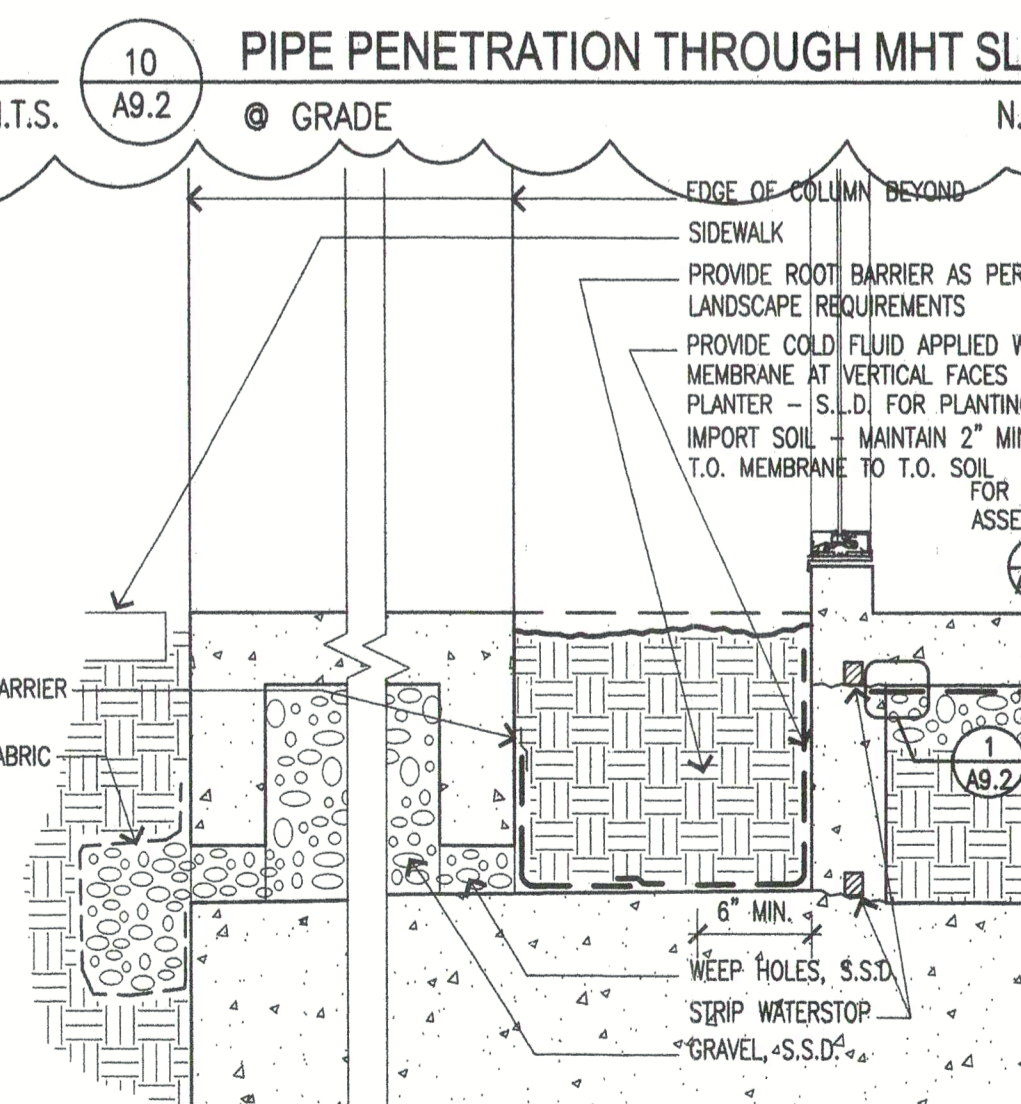
7 W.P. AT CAR LIFT PIT AT S.O.G.
A9.2



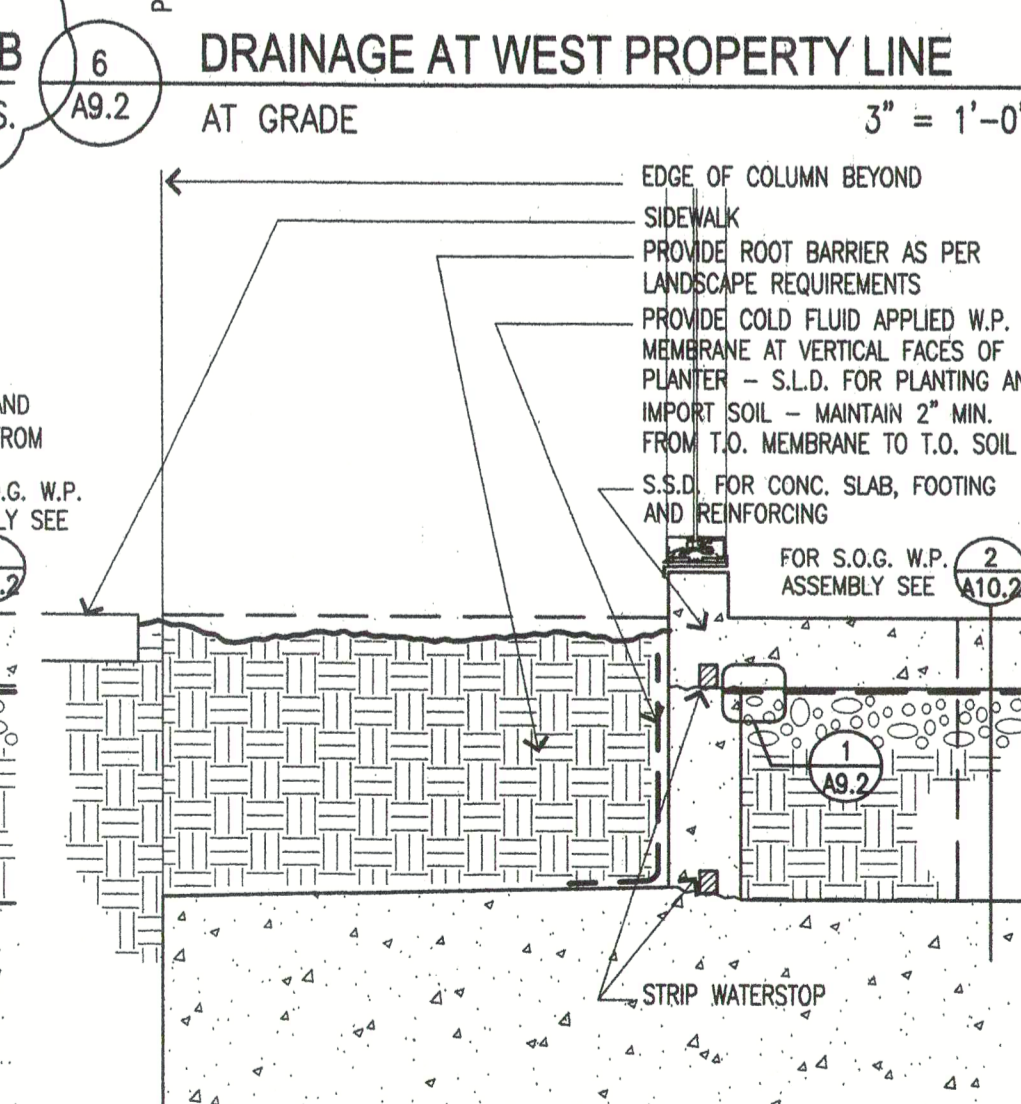
2 CAR PIT W.P. MEMBRANE TERMINATION AT GRADE
A9.2



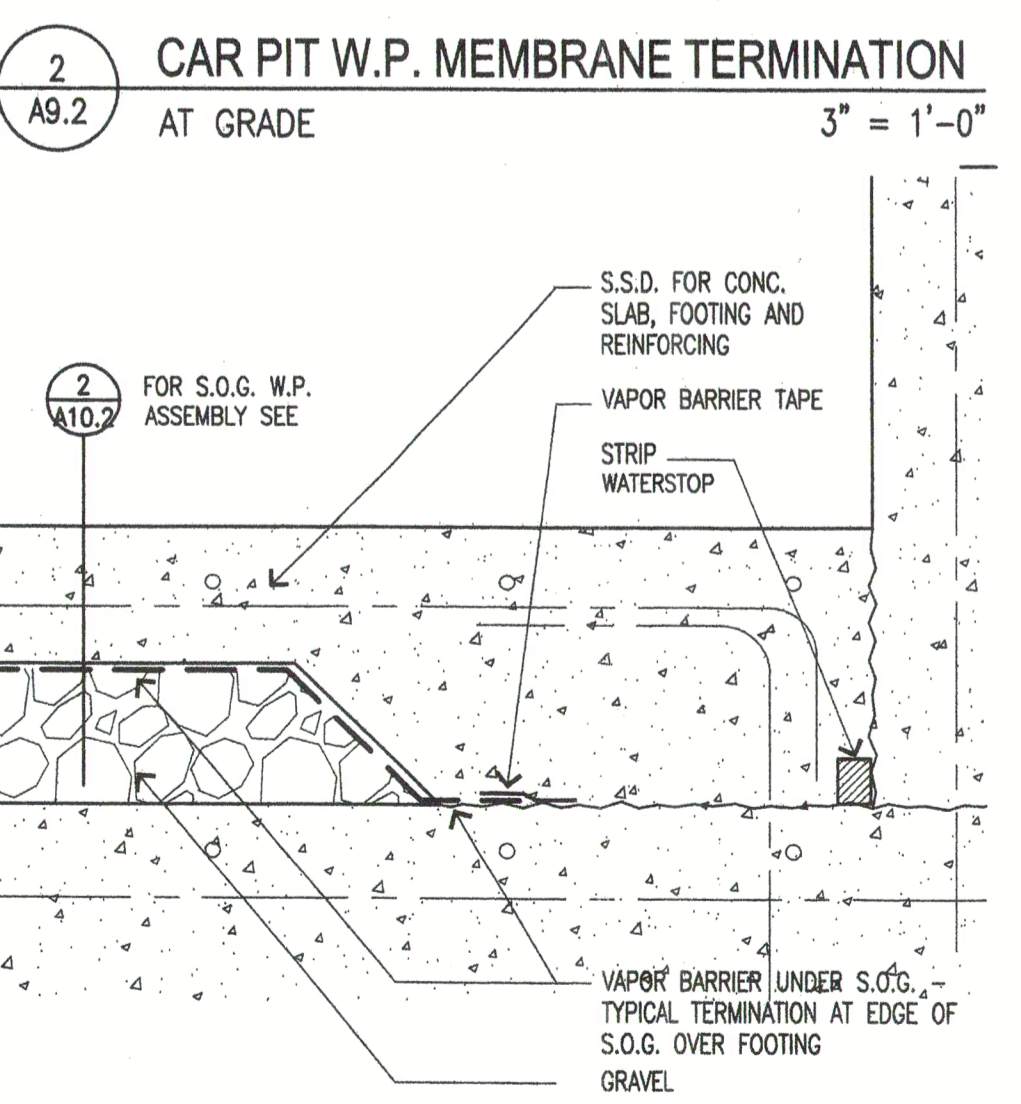
14 TIE-BACKS WATERPROOFING @ WEST SIDE, W.O.
A9.2



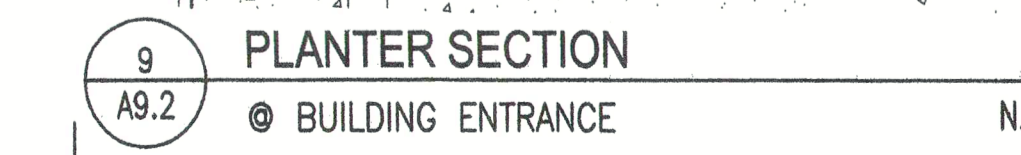
9 PLANTER SECTION @ BUILDING ENTRANCE
A9.2



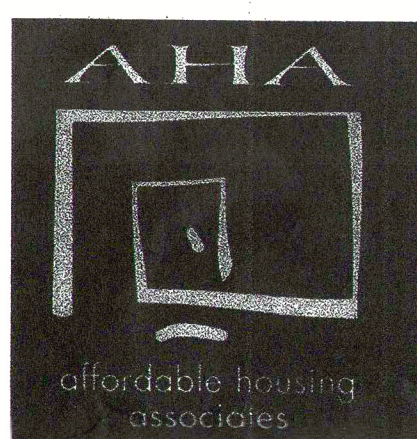
5 PLANTER SECTION @ RETAIL ENTRANCES
A9.2



1 TYPICAL S.O.G. VAPOR BARRIER TYPICAL TERMINATION POINT
A9.2

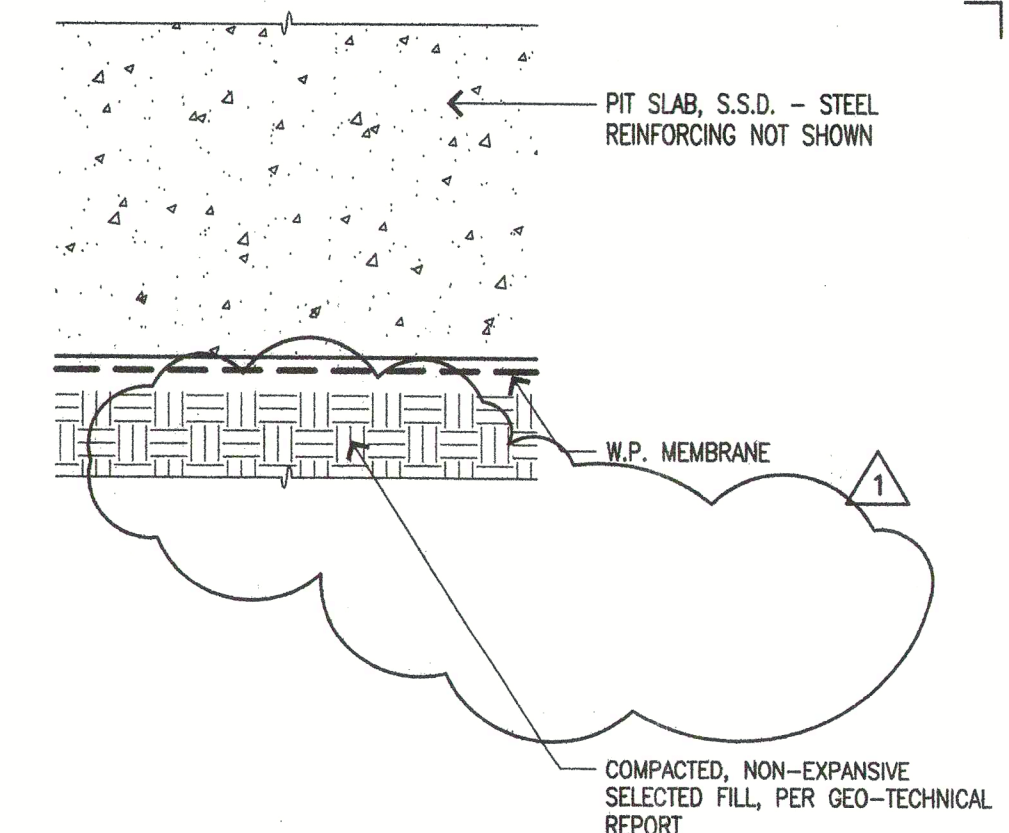


6 DRAINAGE AT WEST PROPERTY LINE AT GRADE
A9.2



MEP BID SET	08.31.05
FOUNDATION PERMIT	09.29.05
100% DESIGN DEVELOPMENT	11.07.05
BUILDING PERMIT AND 50% CD SET	01.20.06
100% CONSTRUCTION DRAWINGS / BID SET	03.06.06
ISSUED FOR CONSTRUCTION	04.28.06

DATE: 08.31.05
 JOB No: 0127
 PHASE: C.D.
 PERMIT No:
 SCALE: 1/8" = 1'-0"
 ISSUED FOR: 100% CD

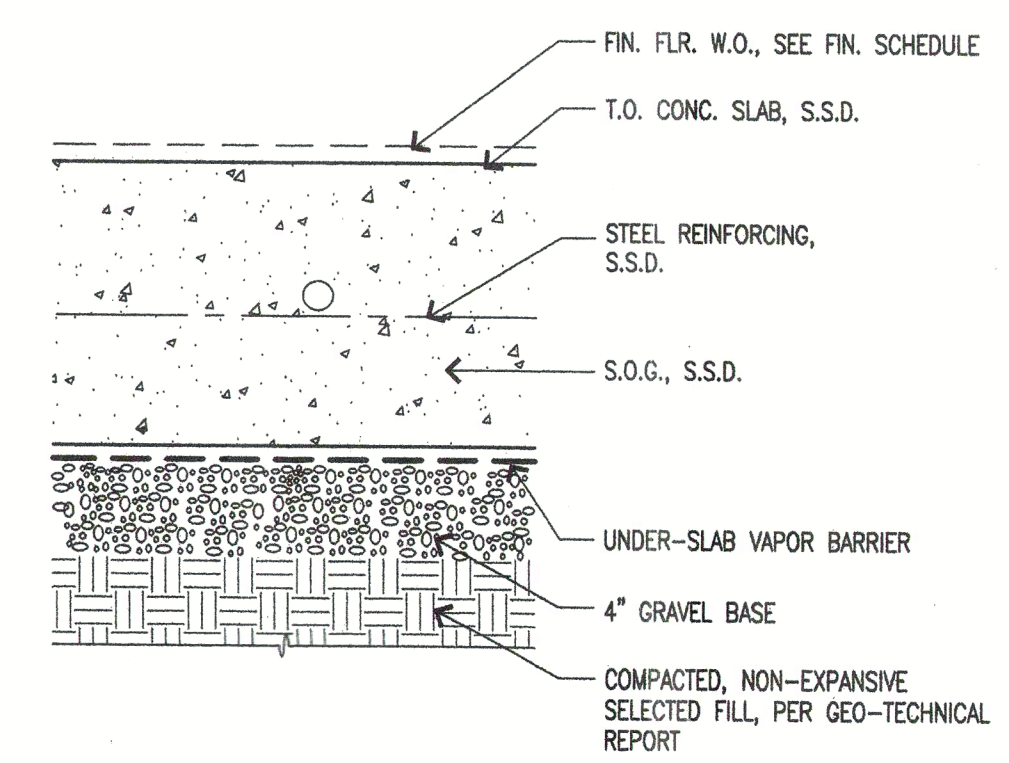


NON-RATED ASSEMBLY

4 SLAB ON GRADE - INT. AT CAR LIFT PIT 3" = 1'-0"

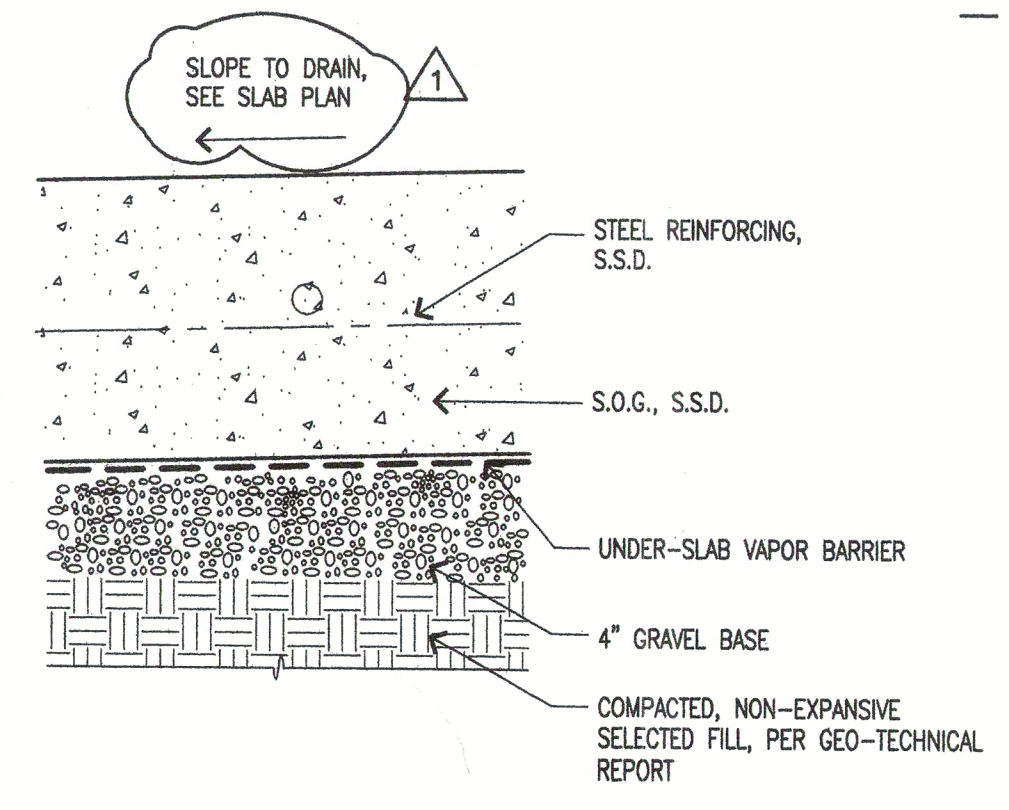
SHEET NOTES:
 1. FOR PIPE ISOLATION AT UPPER FLOORS SEE 19 A10.6 A10.6
 2. FOR PIPE ISOLATION AT S.O.G. SEE 10 A8.2

SHEET NOTES



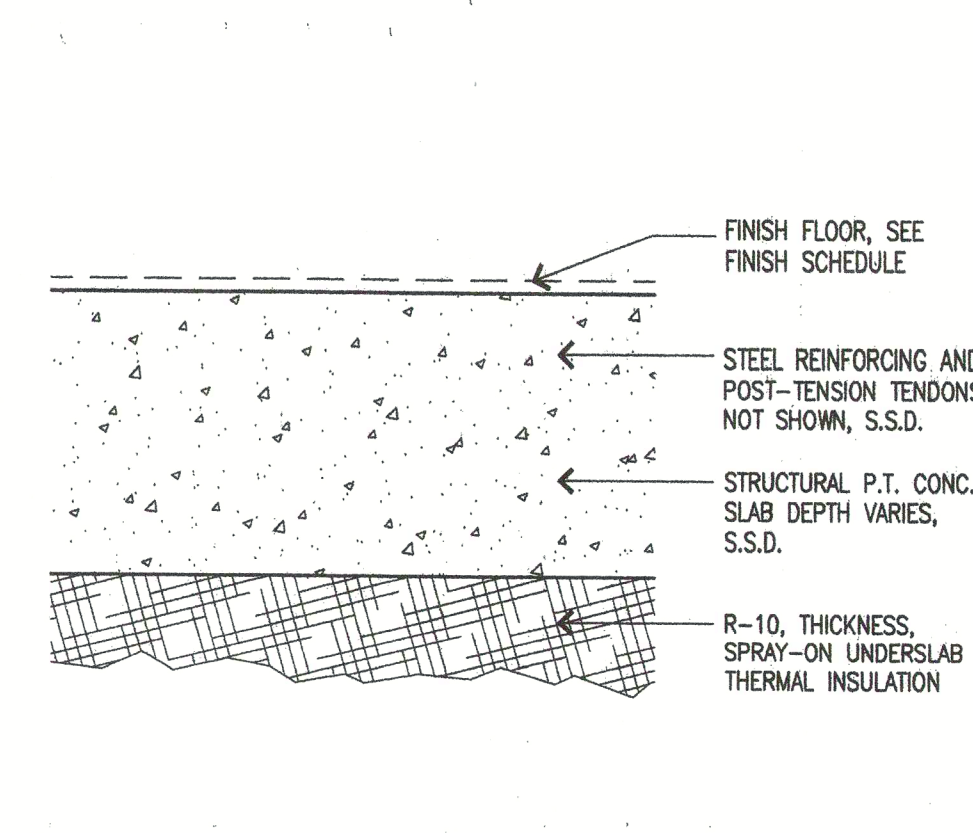
NON-RATED ASSEMBLY TYPICAL

2 SLAB ON GRADE - INT. @ FIRST FLOOR (SEE NOTE) 3" = 1'-0"



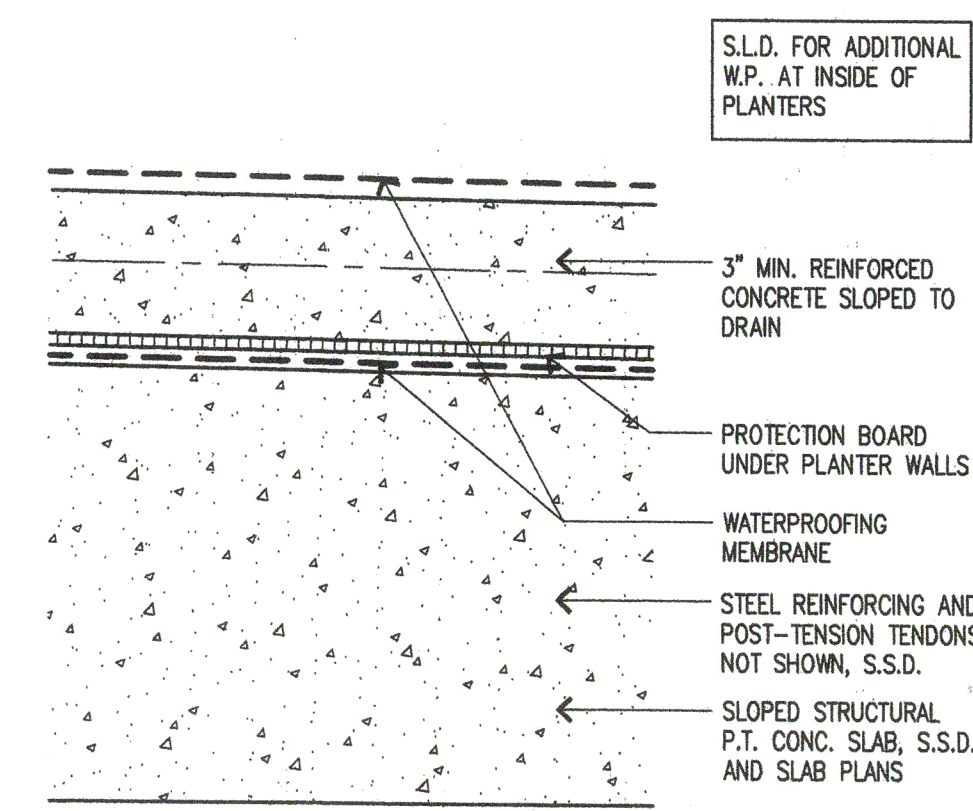
NON-RATED ASSEMBLY TYPICAL

1 SLAB ON GRADE - EXT. TYPICAL AT 1ST FLOOR 3" = 1'-0"



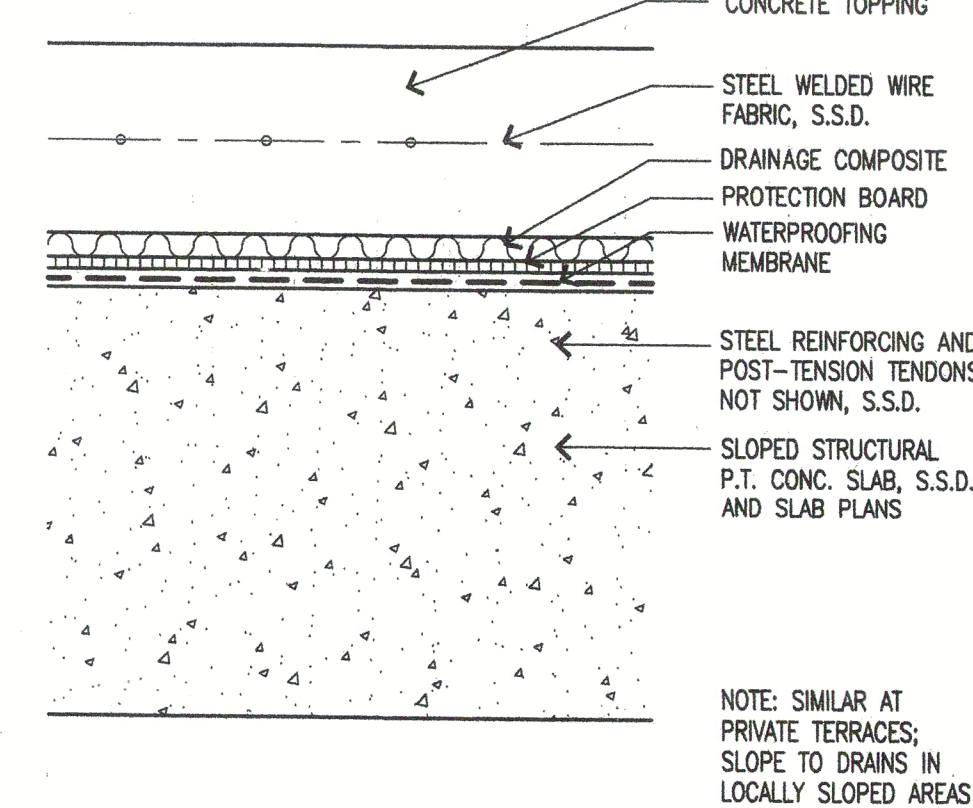
NON-RATED ASSEMBLY

8 FLOOR - CEILING ASSEMBLY - EXT. PODIUM CONDITIONED OVER GARAGE 3" = 1'-0"



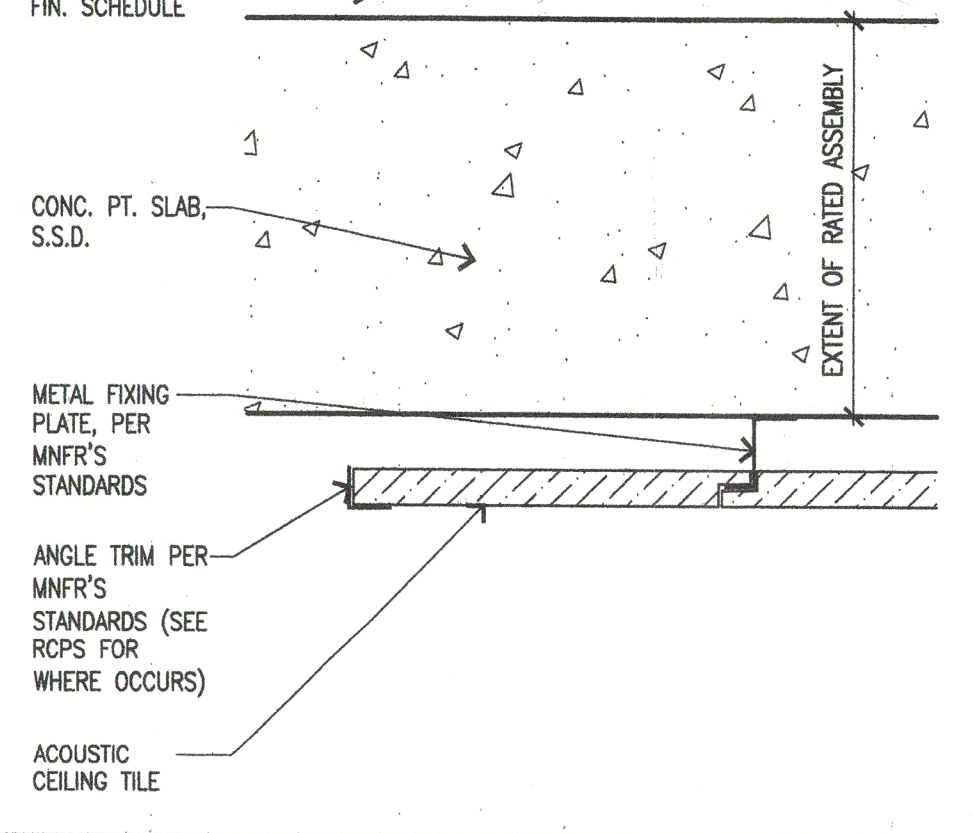
4 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

7 FLOOR - CEILING ASSEMBLY - EXT. AT TREE PLANTERS ONLY - TYP. 3" = 1'-0"



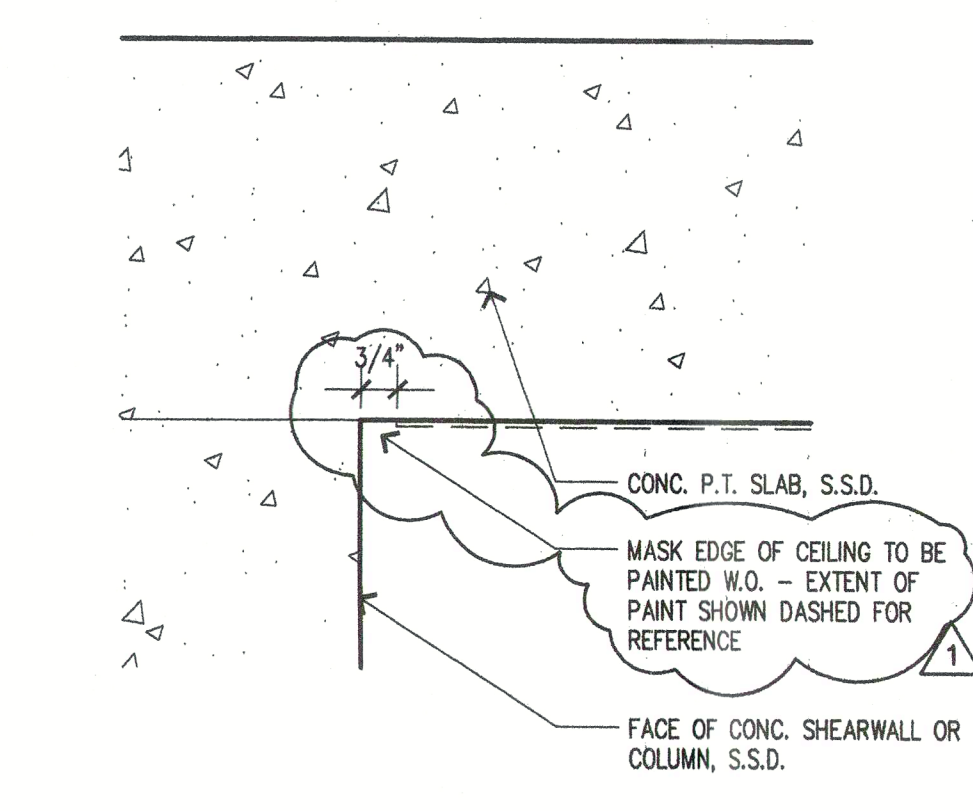
4 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

6 FLOOR - CEILING ASSEMBLY - EXT. AT PODIUM TERRACES 3" = 1'-0"



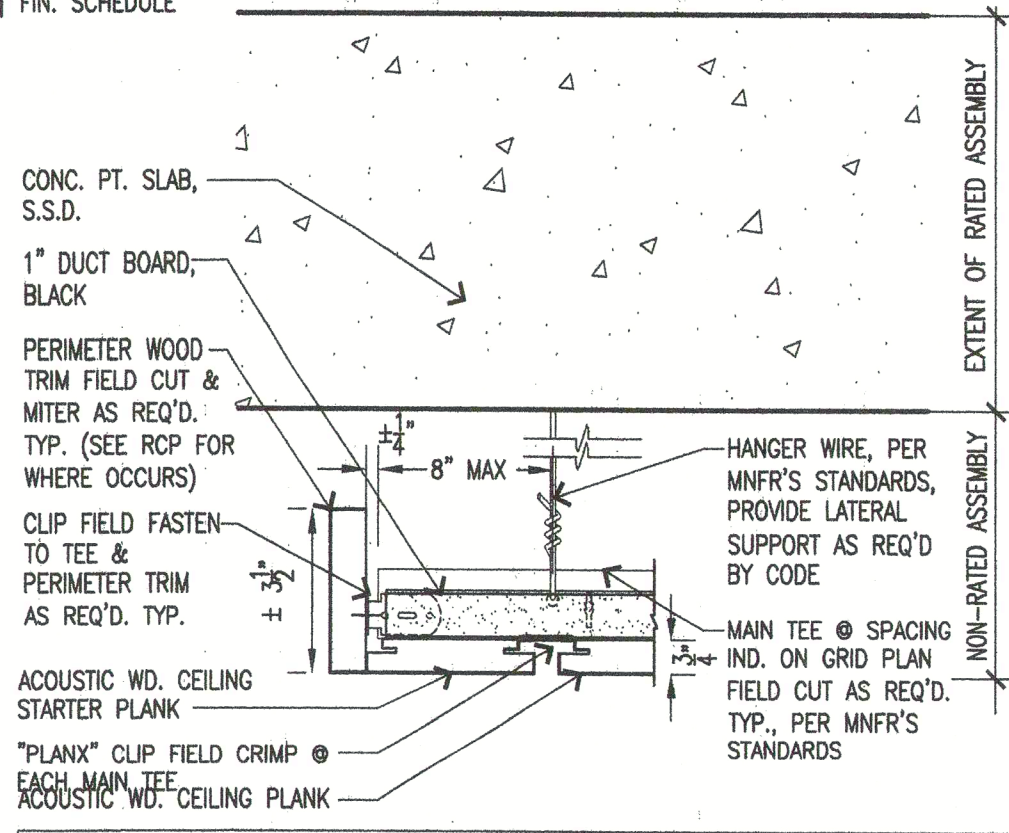
NON-RATED ASSEMBLY

12 FLOOR - CEILING ASSEMBLY ACoustic CEILING TILE 3" = 1'-0"



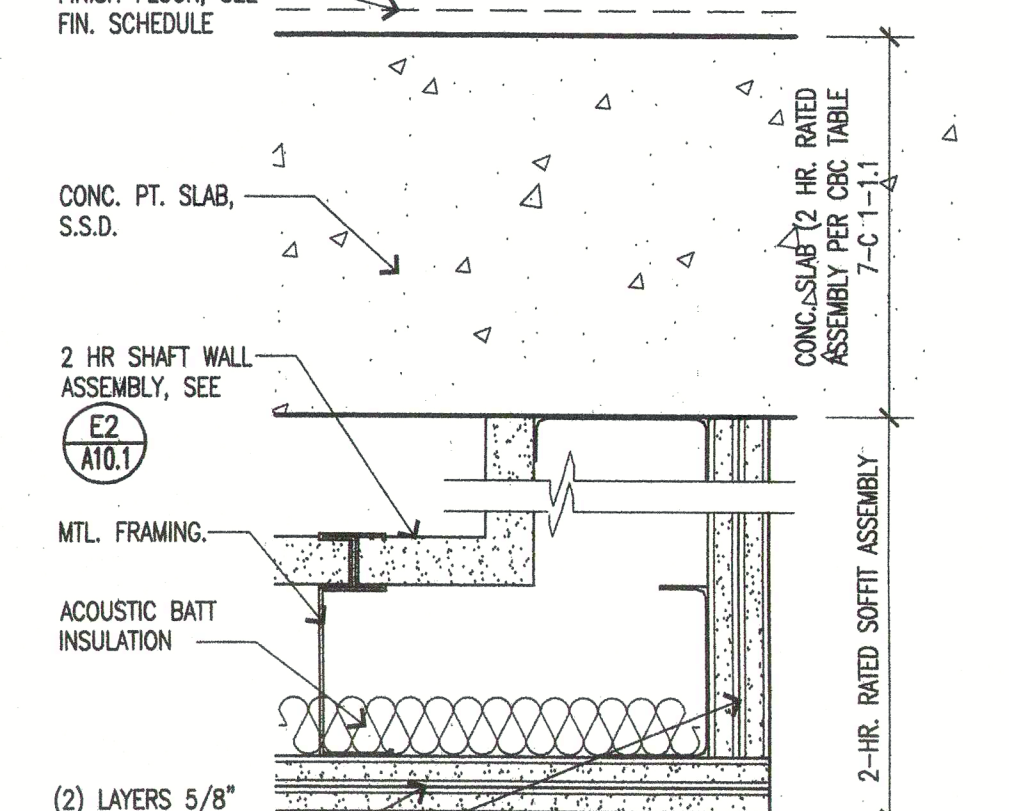
4 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

11 FLOOR-CEILING JOINT @ CONC. TYPICAL THROUGHOUT 3" = 1'-0"



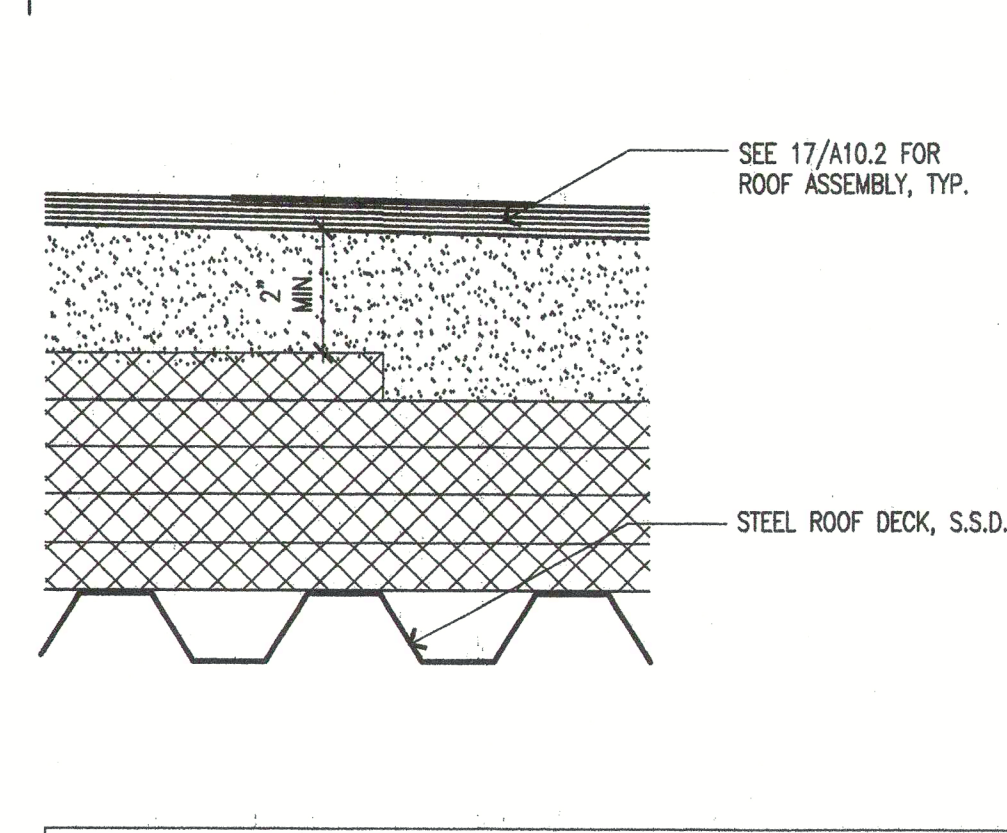
NON-RATED ASSEMBLY

16 FLOOR - CEILING ASSEMBLY ACoustic WOOD CEILING 3" = 1'-0"



2 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

15 FLOOR - PLENUM ASSEMBLY - INT. W/ GYP. RATED PLENUM 3" = 1'-0"



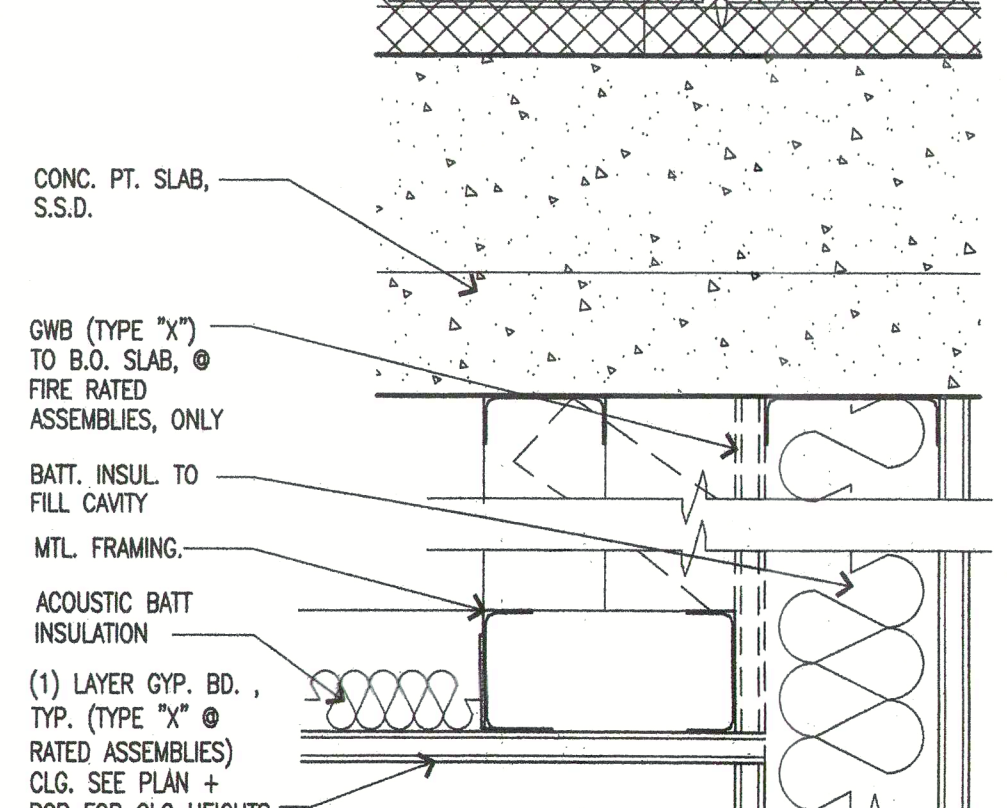
1 HR. - PER CBC TABLE 6A

20 ROOF - CEILING ASSEMBLY AT ELEV. PENTHOUSE (NON-VENTED) 3" = 1'-0"



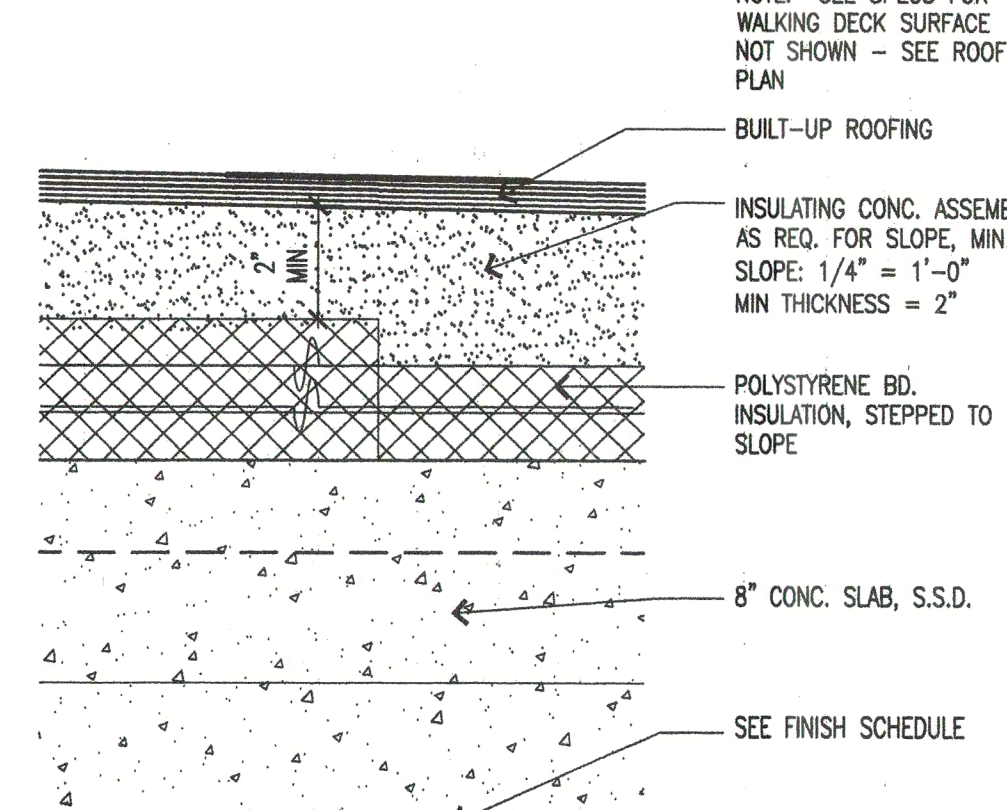
2 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

23 ROOF - CEILING ASSEMBLY W/ GYP. CEILING/ SOFFIT 3" = 1'-0"



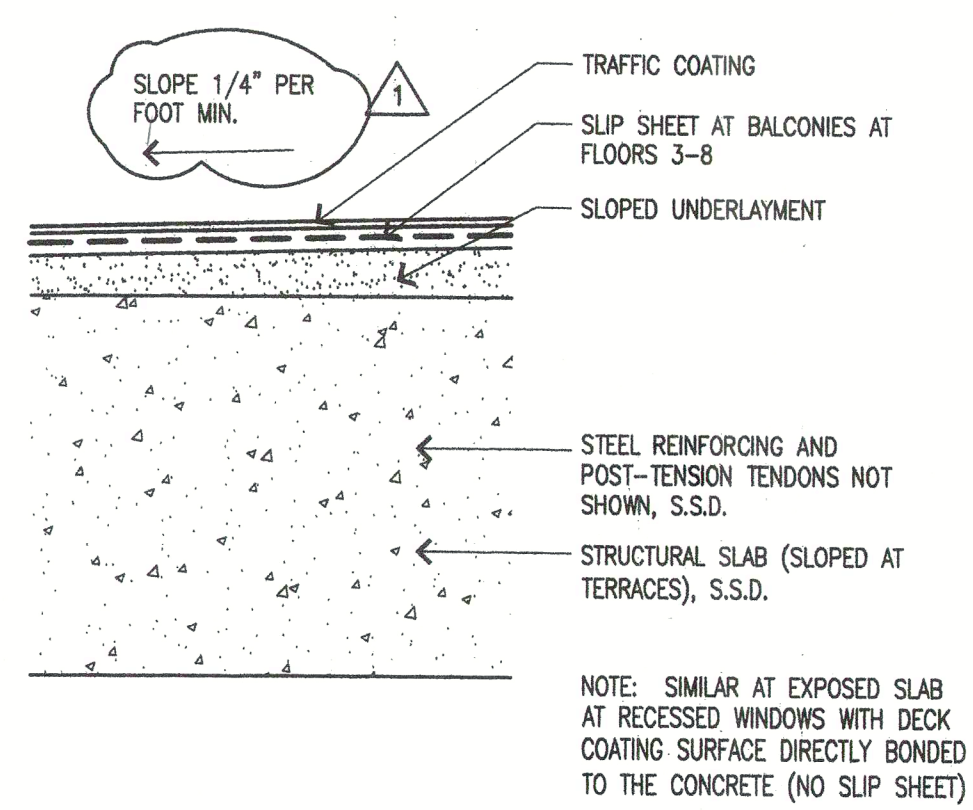
2 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

18 ROOF - CEILING ASSEMBLY W/ GYP. CEILING/ SOFFIT 3" = 1'-0"



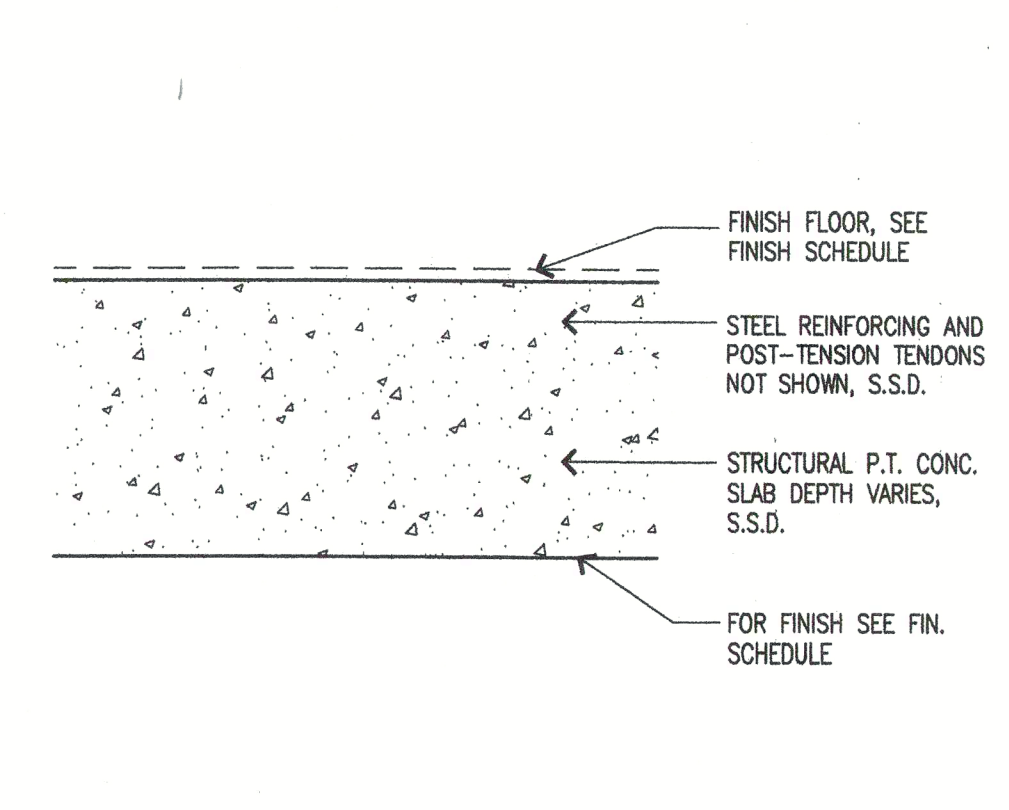
1 HR. - PER CBC TABLE 6A

17 ROOF - CEILING ASSEMBLY TYPICAL (VENTED) 3" = 1'-0"



NON-RATED ASSEMBLY AT FLOORS 3-7 2 HR. - AT 8TH FLOOR BALCONY OVER UNITS - PER CBC TABLE 6A

9 FLOOR - CEILING ASSEMBLY - EXT. AT COMMON BALCONY FLR. 3-8 3" = 1'-0"



2 HR. - PER CBC TABLE 7-C 1-1.1 STC 54 MIN. (EQUIVALENT TO REINFORCED CONCRETE SLAB PER H.U.D. FORM-750)

13 FLOOR - CEILING ASSEMBLY - INT. W/ GYP. TYPICAL 3" = 1'-0"

21 ROOF - CEILING ASSEMBLY TYPICAL (VENTED) 3" = 1'-0"

APPENDIX C

DATA SHEETS FOR STEGO® WRAP VAPOR BARRIER



Stego® Wrap Vapor Barrier

STEGO INDUSTRIES, LLC



Vapor Retarders
07 26 00, 03 30 00

1. Product Name
Stego Wrap Vapor Barrier

2. Manufacturer
Stego Industries, LLC
216 Avenida Fabricante, Suite 101
San Clemente, CA 92672
Sales, Technical Assistance
Ph: (877) 464-7834
Fx: (949) 257-4113
www.stegoindustries.com

3. Product Description
USES: Stego Wrap Vapor Barrier is used as a below-slab vapor barrier.

COMPOSITION: Stego Wrap Vapor Barrier is a multi-layer plastic extrusion manufactured with only high grade prime, virgin, polyolefin resins.

ENVIRONMENTAL FACTORS:
Stego Wrap Vapor Barrier can be used in systems for the control of soil gases (radon, methane), soil poisons (oil by-products) and sulfates.

5. Installation
UNDER SLAB: Unroll Stego Wrap Vapor Barrier over an aggregate, sand or tamped earth base. Overlap all seams a minimum of six inches and tape using Stego Tape or Crete Claw® Tape. All penetrations must be sealed using a combination of Stego Wrap and Stego accessories.

For additional information, please refer to Stego's complete installation instructions.

6. Availability & Cost
Stego Wrap Vapor Barrier is available nationally via building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' sales department.

7. Warranty
Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are

accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. NO WARRANTY, EXPRESS, IMPLIED OR STATUTORY, IS GIVEN AS TO THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE WITH RESPECT TO THE PRODUCTS REFERRED TO. Please see www.stegoindustries.com/legal.

8. Maintenance
None required.

9. Technical Services
Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries' technical assistance department or via the website.

10. Filing Systems

- Stego Industries' website
- Buildsite



4. Technical Data

TABLE 1: PHYSICAL PROPERTIES OF STEGO WRAP VAPOR BARRIER

PROPERTY	TEST	RESULTS
Under Slab Vapor Retarders	ASTM E1745 Class A, B & C – Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	Exceeds Class A, B & C
Water Vapor Permeance	ASTM F1249 – Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.0086 perms *0.0036 WVTR
Puncture Resistance	ASTM D1709 – Test Methods for Impact Resistance of Plastic Film by Free-Falling Dart Method	2266 grams
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	70.6 lbf/in.
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.0098 perms 0.0091 perms 0.0097 perms 0.0095 perms
Methane Transmission Rate	ASTM D1434 – Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting	**192.8 GTR mL(STP)/m ² *day
Radon Diffusion Coefficient	K124/02/95	8.8 x 10 ⁻¹² m ² /second
Thickness		15 mils
Roll Dimensions		14 ft. wide x 140 ft. long or 1,960 ft ²
Roll Weight		140 lbs.

Note: perm unit = grains/(ft² *hr* in.Hg) * WVTR = Water Vapor Transmission Rate ** GTR = Gas Transmission Rate

