September 12, 2016

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Attention: Keith Nowell

Subject: Draft Conceptual Remedial Action Plan
411 West MacArthur Boulevard, Oakland, California
ACEH RO#0003192; Global ID: T10000007937

Ladies and Gentlemen:

Attached please find a copy of the *Draft Conceptual Remedial Action Plan* prepared by Applied Remedial Services. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,

Joseph A. Hernon (Manager)
411 W. MacArthur LLC.

ARS INC.
Applied Remedial Services, Inc.

P.O. BOX 5086
Walnut Creek, California 94596
Phone (925)943-7742, Fax (925) 943-7714

September 12, 2016

Mr. Keith Nowell
Ms. Dilan Roe
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Subject: Draft Conceptual Remedial Action Plan
411 West MacArthur Boulevard, Oakland, California
ACEH RO#0003192; Global ID: T10000007937

Dear Mr. Nowell and Ms. Roe:

ARS is pleased to submit this Draft Conceptual Remedial Action Plan (RAP) on behalf of 411 West MacArthur LLC for the planned residential development at 411 West MacArthur Boulevard in Oakland, California (the "Site"). The Site is currently in the planning stages of redevelopment that will include construction of a five-story residential building with 20 apartments and a 3,000 sf commercial establishment on the eastern portion of the property. Subsurface investigations performed at the Site have identified Total Petroleum Hydrocarbons as Gasoline (TPHg), BTEX constituents, and methane in soil vapor that pose a potential risk to indoor air quality. This RAP describes the proposed mitigation measures to protect indoor air quality.

Please do not hesitate to call us if you need any further assistance. In addition to the office I can be reached at (707) 567-2202 and Jim at (707) 631-1505.

Respectfully Submitted,

Michael Kara
Principal Toxicologist

James E. Gribi
Professional Geologist
California No. 5843

CERTIFICATION

We, Michael F. Kara and James E. Gribi P.G., certify under penalty of law that this document entitled "Draft Conceptual Remedial Action Plan" dated September 12, 2016 which was prepared for the 411 West MacArthur Boulevard project in the City of Oakland, was personally researched and prepared by us. The completed RAP was conducted under our supervision and direction in accordance with a system designed to assure that the information submitted was properly gathered and evaluated by qualified personnel. This information is, to the best of our knowledge and belief, true, accurate, complete and satisfies the scope of work prescribed by the client. We are aware that there are significant penalties for submitting false information.

Furthermore, we certify and declare that, to the best of our professional knowledge and belief, we meet the definition for Environmental Professionals as specified in 40 CFR Part 312.10. We have the specific qualifications, based on education, training, and experience, to assess and remediate a property of the nature, history, and setting of this Site.

Michael Kara

September 12, 2016

Michael F. Kara — Date

Principal Toxicologist
USEPA Environmental Professional
Registered Environmental Property Assessor # 386340
Registered Lead Sampling Technician #21985

September 12, 2016

James E. Gribi — Date

Registered Geologist
California No. 5843

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DRAFT CONCEPTUAL REMEDIAL ACTION PLAN

411 W. MACARTHUR BOULEVARD, OAKLAND, CALIFORNIA
ACEH RO#0003192; Global ID: T10000007937

1.0 INTRODUCTION

On behalf of 411 West MacArthur LLC (the Client), Applied Remedial Services, Inc. (ARS) is pleased to submit this Draft Conceptual Remedial Action Plan (RAP) for the planned residential development at 411 West MacArthur Boulevard in Oakland, California (the "Site"). The Site is currently in the planning stages of redevelopment that will include construction of a residential structure on the property which is comprised of 20 apartments and a 3,000 sf commercial space at the ground floor on the eastern corner of the property. Subsurface investigations performed at the Site have identified Total Petroleum Hydrocarbons as Gasoline (TPHg), BTEX constituents, and methane in soil vapor that pose a potential risk to indoor air quality. This RAP describes the proposed mitigation measures to protect indoor air quality.

The Site comprises an approximately 7,800-square foot parcel on the southwest corner of West MacArthur Boulevard and Webster Street (Figures 1 and 2). A gas station (Unocal #3538, Chevron #351642) occupied the Site in the past. Two generations of fuel station facilities have been removed from the Site: the first in 1989 and the second in 1998. The station building and canopy were left in place following station decommissioning (Figure 3). A significant amount of environmental investigation and remediation has been conducted for the Site. These activities have resulted in residual hydrocarbons remaining in soil and groundwater on the Site in two locations: (1) A small area measuring approximately 30 feet by 10 feet along the east edge of the Site; and (2) A small area measuring approximately 20 feet by 10 feet on the south side of the Site, south of the former fuel dispenser islands (see Figures 4 through 9). Soil vapor sampling in these locations generally showed elevated TPHg and relatively low concentrations of BTEX constituents (see Figure 10). On August 19, 2015, Alameda County Department of Environmental Health (ACEH) granted regulatory closure for commercial land uses only.

The current Site owner, 411 W MacArthur LLC, plans to redevelop the Site for residential land use and has entered into agreement with ACEH to conduct additional tasks to allow for residential land use. The planned Site development will consist of a five-story apartment

building with approximately 20 living units. The building will include a concrete-encased parking and storage basement on the west side of the building. The ground floor will include parking over the basement area on the west side and concrete-floored commercial use on the east side of the building. The second through fifth floors will include residential apartments. An elevator shaft on the south side of the building will extend from the basement up to the fifth floor.

ARS recently completed a Human Health Risk Assessment for the Site that generally indicated that indoor air TPHg/BTEX inhalation risks from non-mitigated residual hydrocarbons are in the neighborhood of 10^{-5} to 10^{-6} for lifetime excess cancer risk and 0.6 for cumulative non-cancer risk. Based on these results and on discussions with Alameda County Environmental Health (ACEH) staff, it has tentatively been agreed that mitigative measures to include a sub-slab depressurization system (SSDS) and a vapor barrier will provide adequate protection against potential vapor intrusion into the planned development structure.

2.0 ADMINISTRATIVE PROCESS AND REGULATORY REQUIREMENTS

Several administrative and regulatory actions will be required to provide assurances that an acceptable, fully-functioning vapor mitigation system (VMS) is operating on the Site. These requirements are summarized as follows:

1. **Short Term Management Plan:** Due to the potential to encounter and excavate contaminated soil during installation of foundation elements (including basement and elevator pit), a Short Term Site Management Plan (SMP) must be generated and must be approved by ACEH in order to provide protocols for excavation oversight, collection of confirmatory analytical samples, and potentially manage and dispose of any impacted soil at an appropriate permitted landfill facility. The Short Term SMP will include procedures to follow should contaminated soil be encountered and will include a project-specific Health and Safety Plan (HASP). The purpose of the Short Term SMP is two-fold:

    - To provide for communication primarily with contractors who will be redeveloping the site; and
    - To document removal of potential contaminated soil in accordance with regulatory guidelines and statutes.

2. **VMS Basis of Design Report:** The VMS Basis of Design Report will include the following elements:

   - Detailed system construction plans and specifications, including specific vapor barrier products and specifications;
   - Construction Quality Assurance Plan (CQAP) for installation of the VMS, to include qualifications and experience of contractors and inspectors involved in the construction of the VMS, procedures for construction monitoring and documentation including responsibility and authority, construction inspections (i.e. smoke testing, etc.), and as-built documentation;
   - Construction Sequencing Plan (CSP), to include details on construction measures and sequencing events, designed to protect the VMS during site development activities; and
   - Operation and Maintenance Plan (O&MP), to include measures to be implemented both during and after VMS installation to insure the integrity and long-term effectiveness of the VMS.

   The VMS Basis of Design Plan must be approved by ACEH prior to beginning construction activities.

3. **VMS Building Permit Approvals:** The ACEH-approved VMS design plans (from the specialized engineering design firm) will be incorporated into the construction drawings to be submitted with the building permit application to the City of Oakland Planning and Building Department (OPBD). To insure ACEH participation during the building permit approval process, the following steps will be taken:

   - A duplicate full set of construction drawings will be submitted to ACEH at the same time that the building permit application drawings are submitted to OPBD;
   - ACEH will be notified of any planned changes to the construction drawings;
   - Any pending changes to the VMS design and/or construction drawings required by OPBD must also be approved by ACEH; and
   - Prior to construction, a letter from the VMS design engineer must be submitted to ACEH stating that he/she has reviewed and approves the final construction drawings

4. **VMS Record Report of Construction:** Following VMS construction and prior to tenant occupancy, a VMS Record Report of Construction must be submitted and approved by ACEH. This report will include as-built drawings, copies of permits, construction monitoring and documentation, post-construction sub-slab and vent riser sampling results verifying system integrity, and other information relevant to the installation of the VMS.

5. **Land Use Covenants (LUCs), Activity Use Limitations (AULs), and Codes, Covenants, and Restrictions (CCRs):** These documents will provide long-term legal and regulatory requirements for the Site. To minimize contact with impacted media, the recorded LUCs / AULs, and CCRs will prohibit alteration, disturbance, or removal of any component of the VMS. Additional components of the LUCs / AULs, and CCRs will include but may not be limited to:
   - Notification to the City of Oakland Planning and Building Department of the VMS and the potential flagging of the property such that ACEH will be notified if building permits are to be issued (to prevent impacting the VMS);
   - Prohibition of new construction activities that could encounter or breach the VMS without the express knowledge of ACEH and the City of Oakland Planning and Building Department, including for utility repair and installation;
   - Lease documents that include CCRs that will serve as the primary communication tool for the site's business occupants, including fact sheets; and
   - The provision to maintain inspection and monitoring records associated with VMS.

3.0 VAPOR MITIGATION SYSTEM CONCEPTUAL DESIGN

Engineering controls will be installed during site development, to include installation of a sub-slab passive venting system and installation of a vapor barrier. The purpose of the vapor intrusion mitigation system is to prohibit the intrusion of TPHg, BTEX, and methane vapors from the subsurface to indoor air at concentrations that may pose a risk to human health. To provide a redundant system, the following elements will be included:

- **Sub-Slab Depressurization System (SSDS):** A passive vapor venting system will be installed beneath the foundation/slab on the east side of the Site building (see Figure 11 and Figure 12). Slotted piping will be installed in sufficiently permeable materials and at sufficient spacing to allow for passive venting of the entire area underlying the at-grade

commercial area on the east side of the Site building. Sub-slab slotted piping will be connected to solid vertical piping located within walls/chases. Vertical pipes will exit the roof at safe distances from any roof top use areas and any building openings or air intakes. Vent risers will be clearly marked to indicate that the pipe may contain VOC vapors.

- **Vapor Barrier:** A vapor barrier will be installed beneath the foundation/slab on the east side of the Site building. The vapor barrier will have a minimum final thickness of at least 100 millimeters. The vapor barrier will be placed between the bottom of the floor slab and the underlying subgrade. Seams will be over lapped and sealed, and the edges will be fastened/sealed to footings and trenches.

Installation of the vapor venting system and vapor barrier shall be monitored by qualified personnel under the direction of a California-registered Professional Engineer. To remain effective, the venting system and vapor barrier must be intact and operational. In the event that the venting system is damaged or the vapor barrier is punctured or damaged, the damaged components will be repaired by a qualified contractor.

Conceptual design elements for the SSDS and vapor barrier are depicted on Figures 11 and 12. Note that the design elements depicted in these figures are not exact and may change during the system design phase.

4.0 CLOSING

The goal of this RAP has been to provide a general plan to mitigate potential vapor intrusion concerns associated with the specific planned residential redevelopment of the Site. The conceptual mitigation measures (installation of a sub-slab depressurization system and vapor barrier under the western portion of the planned development) have been approved in principle by ACEH. This RAP provides step-wise milestone requirements to be implemented to successfully implement the plan. In turn, the following key milestone submittals are required from ACEH for the project to proceed:

- **Upon ACEH approval of this RAP:** ACEH will provide written approval to the City of Oakland Planning and Building Department (OPBD) for the planned change of use from commercial to residential land use.
- **Upon ACEH approval of the successful installation of the VMS:** ACEH will grant “no further action” status for this case.

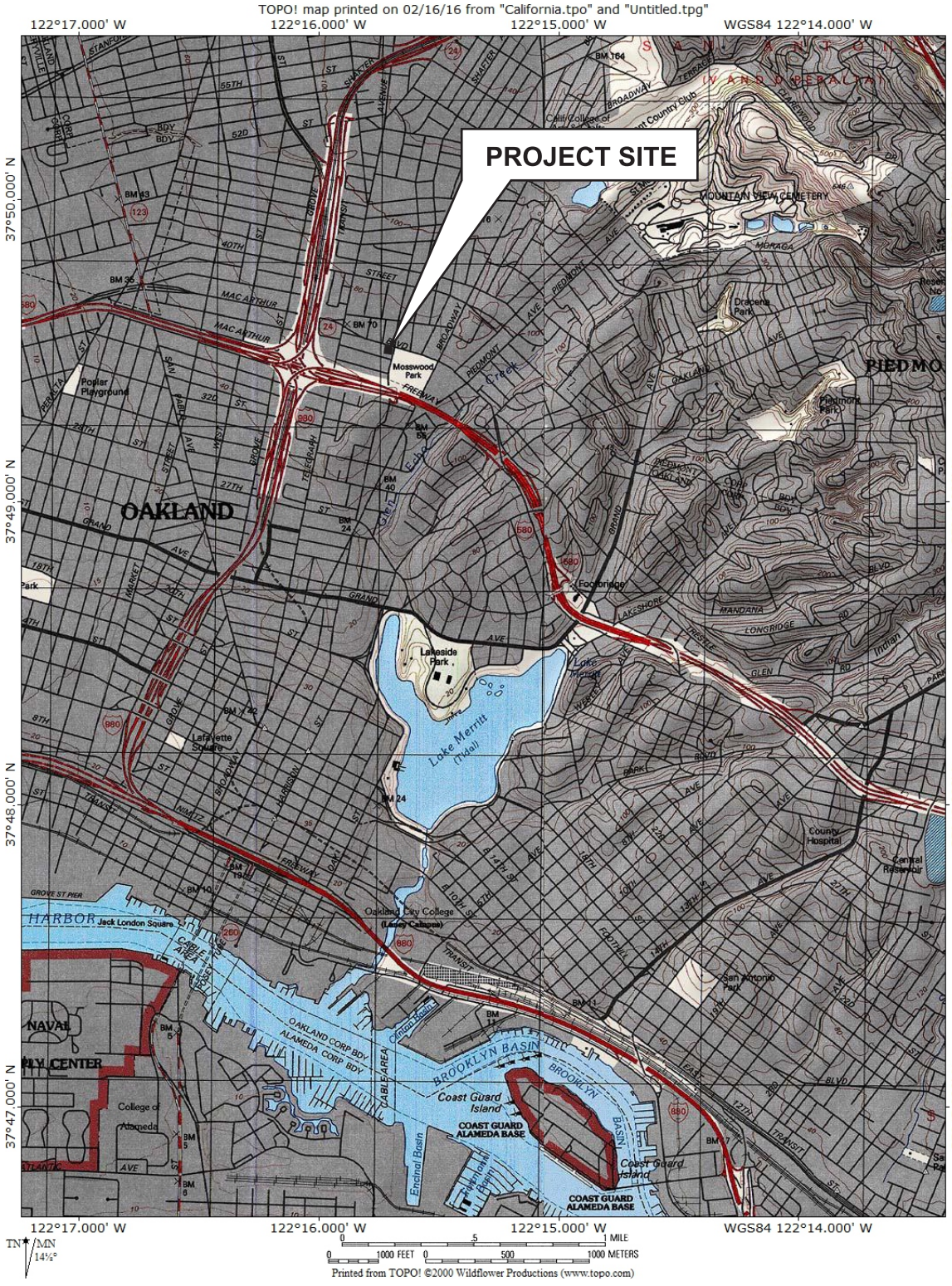
5.0 REFERENCES

San Francisco Regional Water Quality Control Board. Feb 2016 Update to Environmental Screening Levels. California Regional Water Quality Control Board, San Francisco Bay Region.

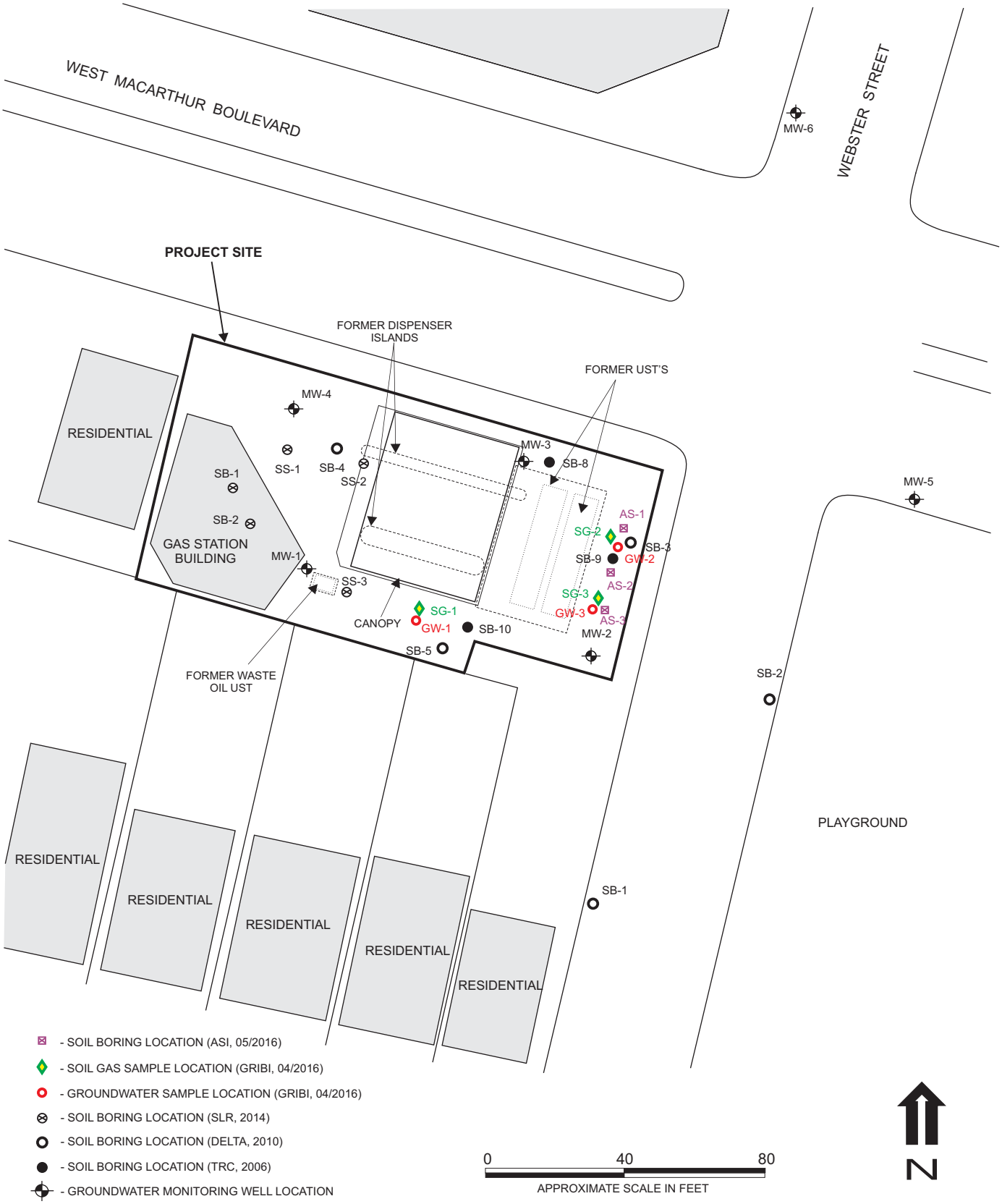
Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). Department of Toxic Substances Control. October 2011.

Advisory – Active Soil Gas Investigations. Jointly issued by the Regional Water Quality Control Board, Los Angeles Region, San Francisco Region, and the Department of Toxic Substances Control. April 2012.

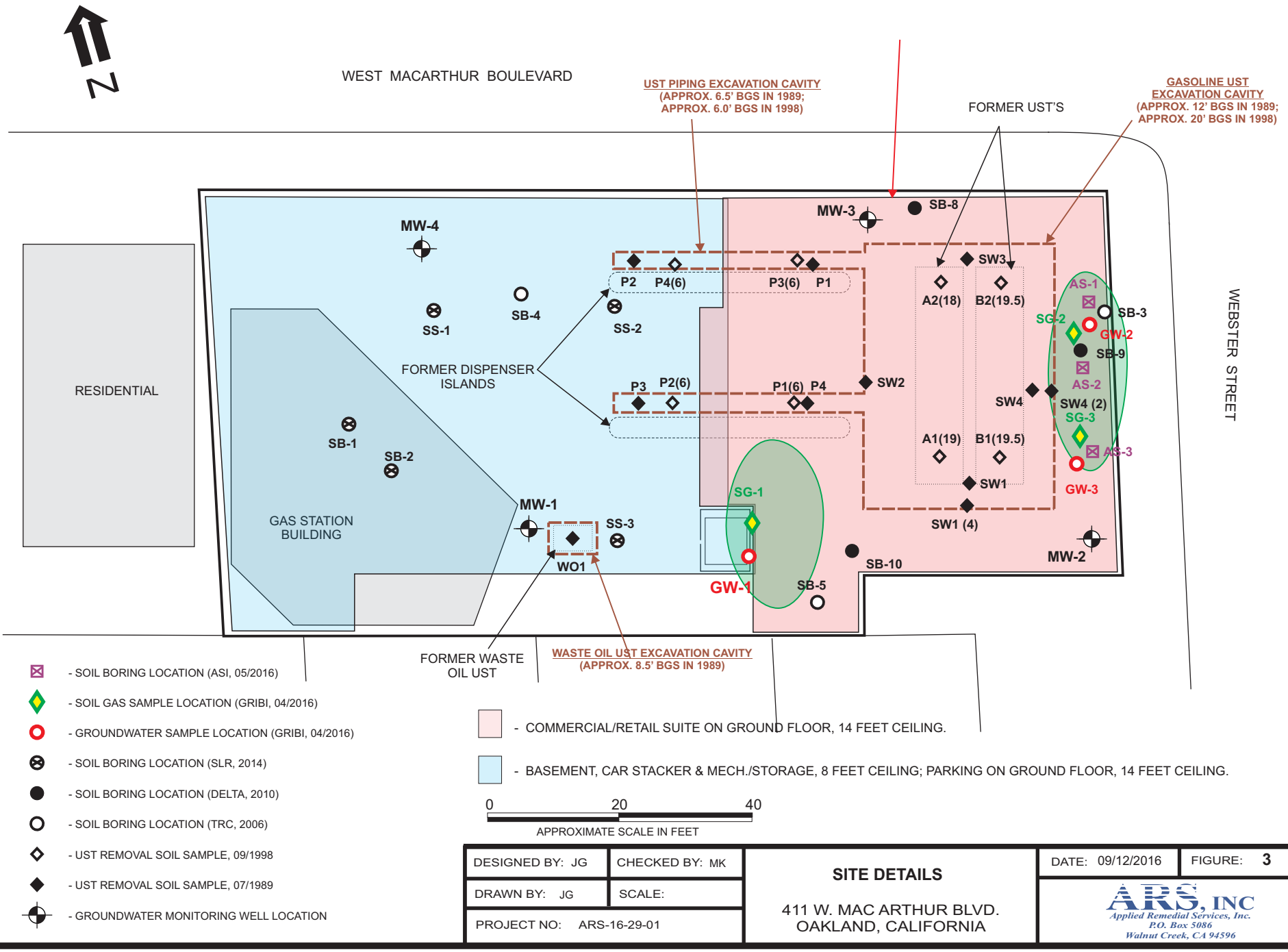
FIGURES



DESIGNED BY: JG	CHECKED BY: MK	**SITE VICINITY MAP**	DATE: 09/12/2016	FIGURE: **1**
DRAWN BY: JG	SCALE:	411 WEST MACARTHUR BLVD. OAKLAND, CALIFORNIA	ARS, INC Applied Remedial Services, Inc. P.O. Box 5086 Walnut Creek, CA 94596	
PROJECT NO: ARS-16-29-01				

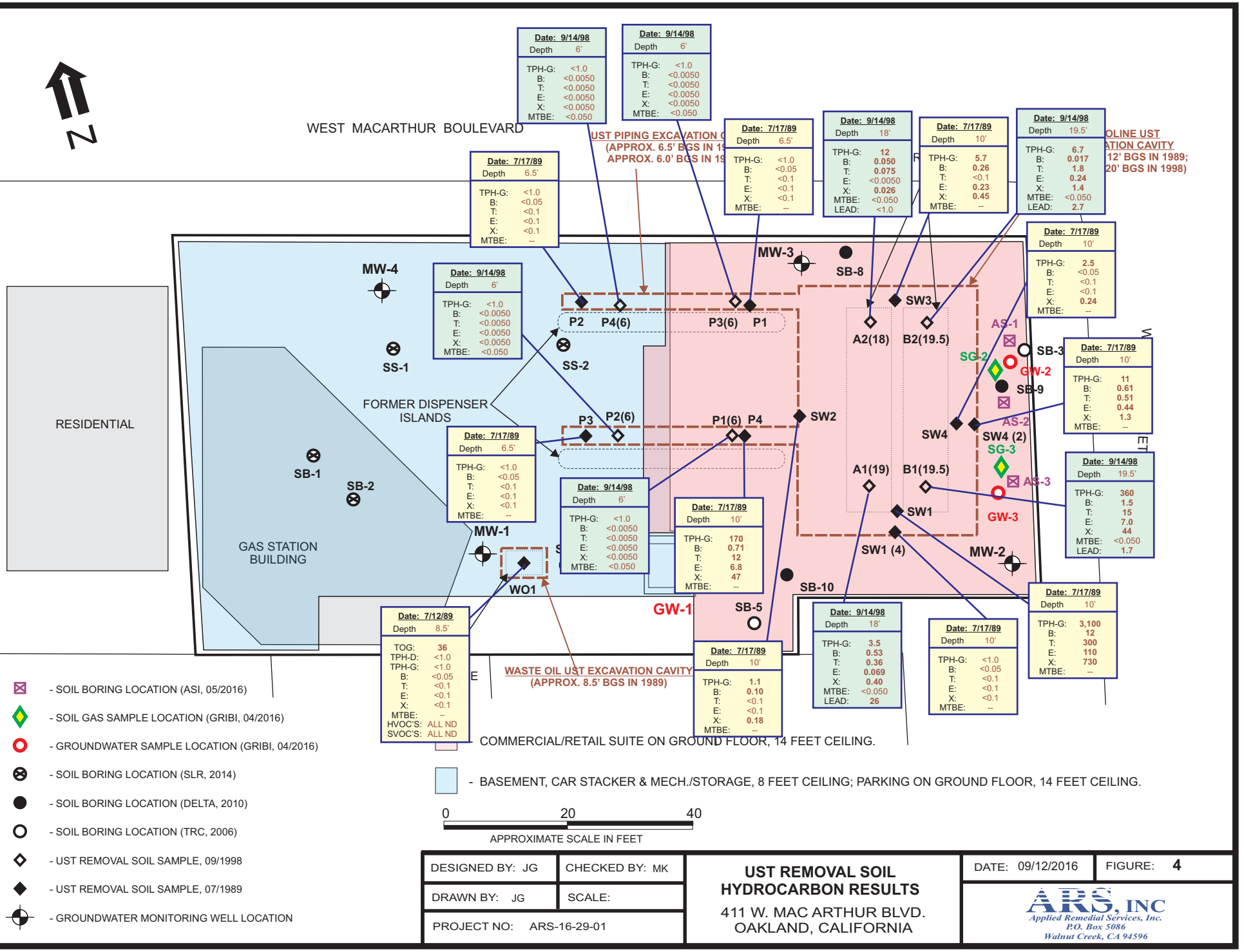


DESIGNED BY: JG	CHECKED BY: MK	**SITE PLAN**	DATE: 09/12/2016	FIGURE: **2**
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	ARS, INC Applied Remedial Services, Inc. P.O. Box 5086 Walnut Creek, CA 94596	
PROJECT NO: ARS-16-29-01				



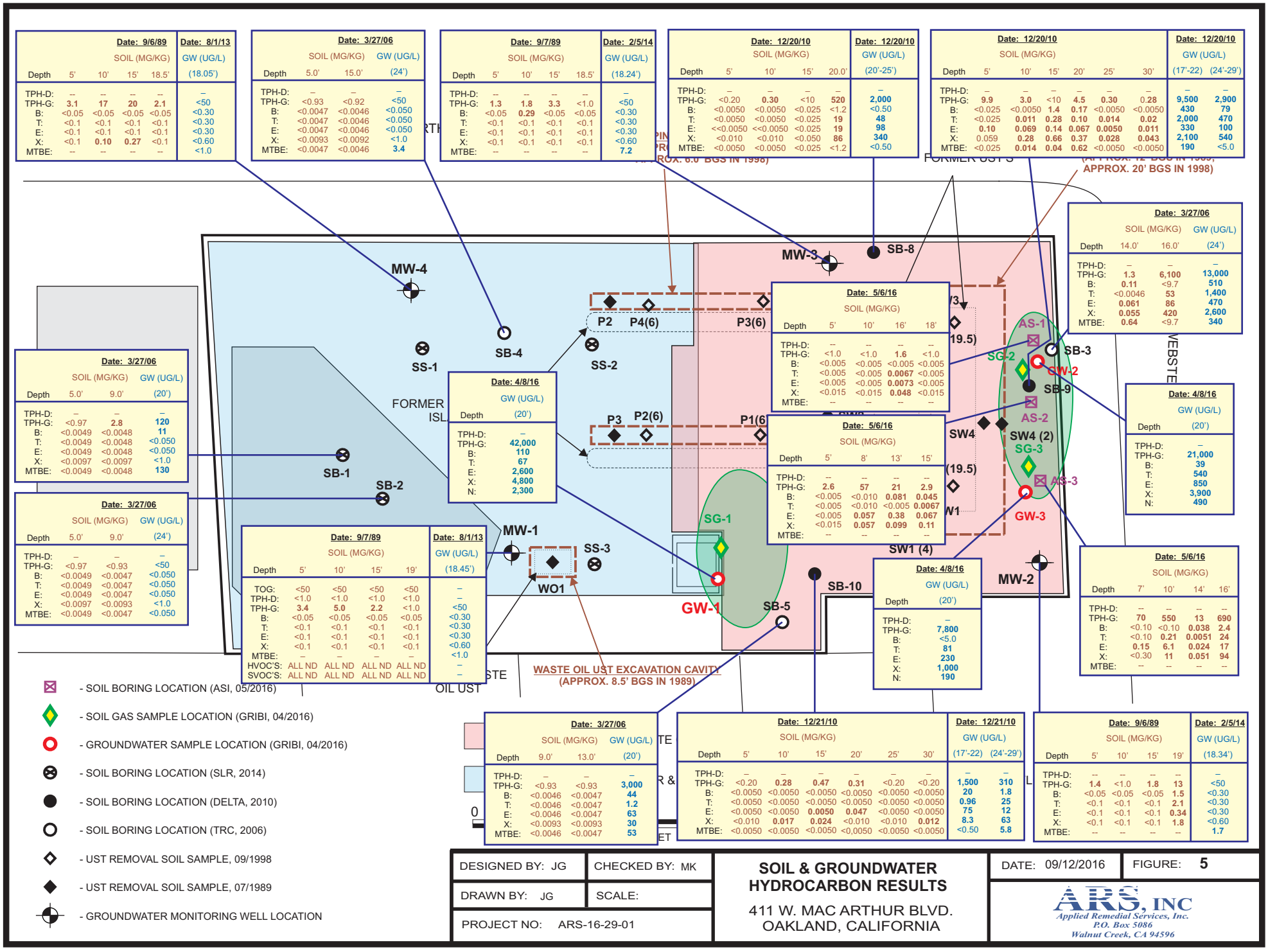
DESIGNED BY: JG	CHECKED BY: MK	**SITE DETAILS**	DATE: 09/12/2016
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	FIGURE: 3
PROJECT NO: ARS-16-29-01			

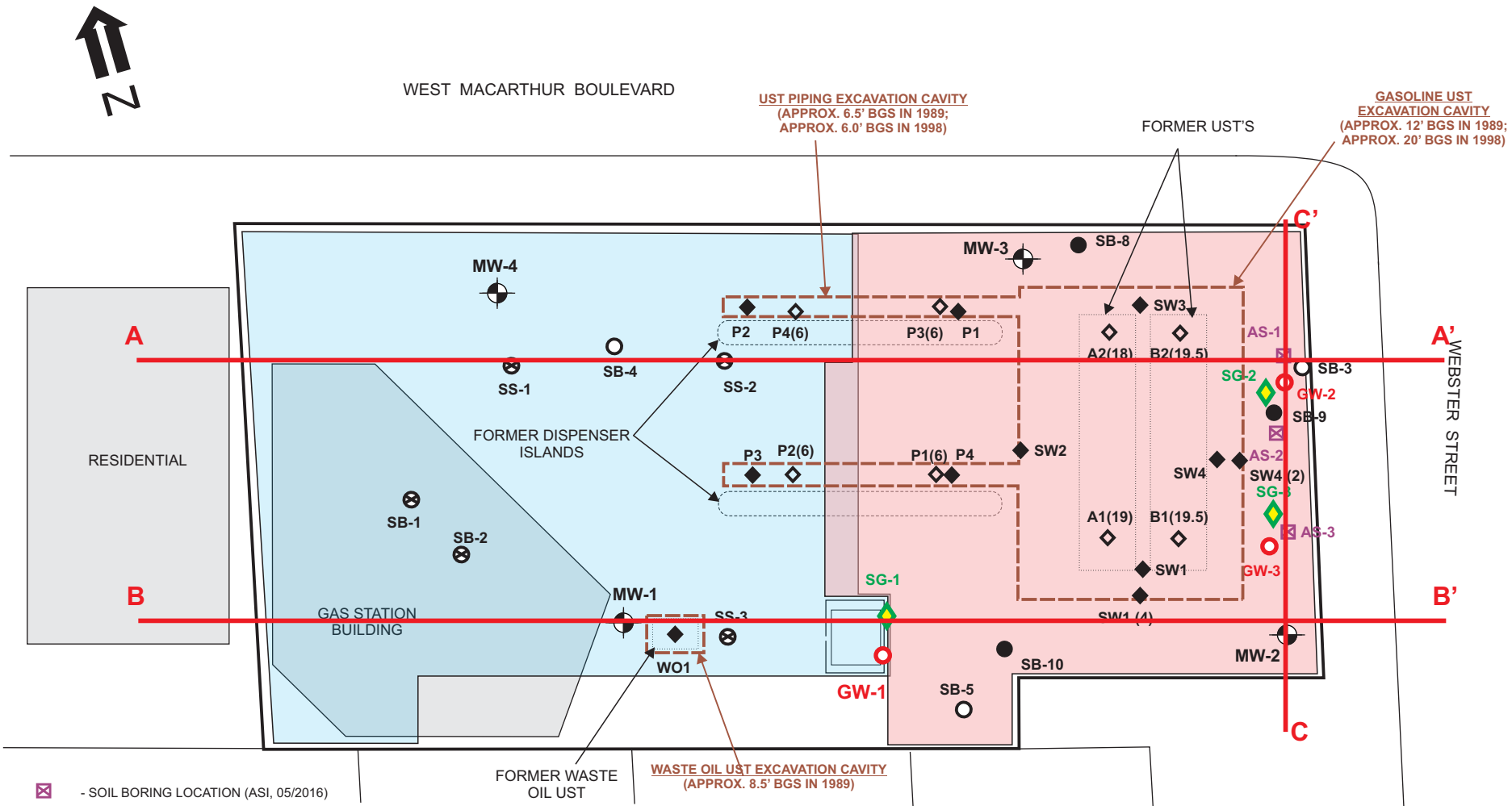
ARS, INC
Applied Remedial Services, Inc.
P.O. Box 5086
Walnut Creek, CA 94596



DESIGNED BY: JG	CHECKED BY: MK	**UST REMOVAL SOIL HYDROCARBON RESULTS**	DATE: 09/12/2016
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	FIGURE: 4
PROJECT NO: ARS-16-29-01			

ARS, INC
Applied Remedial Services, Inc.
P.O. Box 5086
Walnut Creek, CA 94596


Date: 9/6/89 | Date: 8/1/13
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 18.5' | (18.05')
TPH-D: – – – – | –
TPH-G: 3.1 17 20 2.1 | <50
B: <0.05 <0.05 <0.05 <0.05 | <0.30
T: <0.1 <0.1 <0.1 <0.1 | <0.30
E: <0.1 <0.1 <0.1 <0.1 | <0.30
X: <0.1 0.10 0.27 <0.1 | <0.60
MTBE: – – – – | <1.0
Date: 3/27/06
SOIL (MG/KG) | GW (UG/L)
Depth 5.0' 15.0' | (24')
TPH-D: – – | –
TPH-G: <0.93 <0.92 | <50
B: <0.0047 <0.0046 | <0.050
T: <0.0047 <0.0046 | <0.050
E: <0.0047 <0.0046 | <0.050
X: <0.0093 <0.0092 | <1.0
MTBE: <0.0047 <0.0046 | 3.4
Date: 9/7/89 | Date: 2/5/14
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 18.5' | (18.24')
TPH-D: – – – – | –
TPH-G: 1.3 1.8 3.3 <1.0 | <50
B: <0.05 0.29 <0.05 <0.05 | <0.30
T: <0.1 <0.1 <0.1 <0.1 | <0.30
E: <0.1 <0.1 <0.1 <0.1 | <0.30
X: <0.1 <0.1 <0.1 <0.1 | <0.60
MTBE: – – – – | 7.2
Date: 12/20/10 | Date: 12/20/10
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 20.0' | (20'-25')
TPH-D: – – – – | –
TPH-G: <0.20 0.30 <10 520 | 2,000
B: <0.0050 <0.0050 <0.025 <1.2 | <0.50
T: <0.0050 <0.0050 <0.025 19 | 48
E: <<0.0050 <<0.0050 <0.025 19 | 98
X: <0.010 <0.010 <0.050 86 | 340
MTBE: <0.0050 <0.0050 <0.025 <1.2 | <0.50
Date: 12/20/10 | Date: 12/20/10
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 20' 25' 30' | (17'-22') (24'-29')
TPH-D: – – – – – – | – –
TPH-G: 9.9 3.0 <10 4.5 0.30 0.28 | 9,500 2,900
B: <0.025 <0.0050 1.4 0.17 <0.0050 <0.0050 | 430 79
T: <0.025 0.011 0.28 0.10 0.014 0.02 | 2,000 470
E: 0.10 0.069 0.14 0.067 0.0050 0.011 | 330 100
X: 0.059 0.28 0.66 0.37 0.028 0.043 | 2,100 540
MTBE: <0.025 0.014 0.04 0.62 <0.0050 <0.0050 | 190 <5.0
Date: 3/27/06
SOIL (MG/KG) | GW (UG/L)
Depth 14.0' 16.0' | (24')
TPH-D: – – | –
TPH-G: 1.3 6,100 | 13,000
B: 0.11 <9.7 | 510
T: <0.0046 53 | 1,400
E: 0.061 86 | 470
X: 0.055 420 | 2,600
MTBE: 0.64 <9.7 | 340
Date: 3/27/06
SOIL (MG/KG) | GW (UG/L)
Depth 5.0' 9.0' | (20')
TPH-D: – – | –
TPH-G: <0.97 2.8 | 120
B: <0.0049 <0.0048 | 11
T: <0.0049 <0.0048 | <0.050
E: <0.0049 <0.0048 | <0.050
X: <0.0097 <0.0097 | <1.0
MTBE: <0.0049 <0.0048 | 130
Date: 3/27/06
SOIL (MG/KG) | GW (UG/L)
Depth 5.0' 9.0' | (24')
TPH-D: – – | –
TPH-G: <0.97 <0.93 | <50
B: <0.0049 <0.0047 | <0.050
T: <0.0049 <0.0047 | <0.050
E: <0.0049 <0.0047 | <0.050
X: <0.0097 <0.0093 | <1.0
MTBE: <0.0049 <0.0047 | <0.050
Date: 4/8/16
GW (UG/L)
Depth (20')
TPH-D: –
TPH-G: 42,000
B: 110
T: 67
E: 2,600
X: 4,800
N: 2,300
Date: 5/6/16
SOIL (MG/KG)
Depth 5' 10' 16' 18'
TPH-D: – – – –
TPH-G: <1.0 <1.0 1.6 <1.0
B: <0.005 <0.005 <0.005 <0.005
T: <0.005 <0.005 0.0067 <0.005
E: <0.005 <0.005 0.0073 <0.005
X: <0.015 <0.015 0.048 <0.015
MTBE: – – – –
Date: 5/6/16
SOIL (MG/KG)
Depth 5' 8' 13' 15'
TPH-D: – – – –
TPH-G: 2.6 57 21 2.9
B: <0.005 <0.010 0.081 0.045
T: <0.005 <0.010 <0.005 0.0067
E: <0.005 0.057 0.38 0.067
X: <0.015 0.057 0.099 0.11
MTBE: – – – –
Date: 4/8/16
GW (UG/L)
Depth (20')
TPH-D: –
TPH-G: 21,000
B: 39
T: 540
E: 850
X: 3,900
N: 490
Date: 4/8/16
GW (UG/L)
Depth (20')
TPH-D: –
TPH-G: 7,800
B: <5.0
T: 81
E: 230
X: 1,000
N: 190
Date: 5/6/16
SOIL (MG/KG)
Depth 7' 10' 14' 16'
TPH-D: – – – –
TPH-G: 70 550 13 690
B: <0.10 <0.10 0.038 2.4
T: <0.10 0.21 0.0051 24
E: 0.15 6.1 0.024 17
X: <0.30 11 0.051 94
MTBE: – – – –
Date: 9/7/89 | Date: 8/1/13
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 19' | (18.45')
TOG: <50 <50 <50 <50 | –
TPH-D: <1.0 <1.0 <1.0 <1.0 | –
TPH-G: 3.4 5.0 2.2 <1.0 | <50
B: <0.05 <0.05 <0.05 <0.05 | <0.30
T: <0.1 <0.1 <0.1 <0.1 | <0.30
E: <0.1 <0.1 <0.1 <0.1 | <0.30
X: <0.1 <0.1 <0.1 <0.1 | <0.60
MTBE: – – – – | <1.0
HVOC'S: ALL ND ALL ND ALL ND ALL ND | –
SVOC'S: ALL ND ALL ND ALL ND ALL ND | –
Date: 3/27/06
SOIL (MG/KG) | GW (UG/L)
Depth 9.0' 13.0' | (20')
TPH-D: – – | –
TPH-G: <0.93 <0.93 | 3,000
B: <0.0046 <0.0047 | 44
T: <0.0046 <0.0047 | 1.2
E: <0.0046 <0.0047 | 63
X: <0.0093 <0.0093 | 30
MTBE: <0.0046 <0.0047 | 53
Date: 12/21/10 | Date: 12/21/10
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 20' 25' 30' | (17'-22') (24'-29')
TPH-D: – – – – – – | – –
TPH-G: <0.20 0.28 0.47 0.31 <0.20 <0.20 | 1,500 310
B: <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 | 20 1.8
T: <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 | 0.96 25
E: <0.0050 <0.0050 0.0050 0.047 <0.0050 <0.0050 | 75 12
X: <0.010 0.017 0.024 <0.010 <0.010 0.012 | 8.3 63
MTBE: <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 <0.0050 | <0.50 5.8
Date: 9/6/89 | Date: 2/5/14
SOIL (MG/KG) | GW (UG/L)
Depth 5' 10' 15' 19' | (18.34')
TPH-D: – – – – | –
TPH-G: 1.4 <1.0 1.8 13 | <50
B: <0.05 <0.05 <0.05 1.5 | <0.30
T: <0.1 <0.1 <0.1 2.1 | <0.30
E: <0.1 <0.1 <0.1 0.34 | <0.30
X: <0.1 <0.1 <0.1 1.8 | <0.60
MTBE: – – – – | 1.7
MW-1
MW-2
MW-3
MW-4
SB-1
SB-2
SB-3
SB-4
SB-5
SB-8
SB-9
SB-10
SS-1
SS-2
SS-3
WO1
P2
P4(6)
P3(6)
P3
P2(6)
P1(6)
AS-1
AS-2
AS-3
SG-1
SG-2
SG-3
SW4
SW4 (2)
SW1 (4)
GW-1
GW-2
GW-3
FORMER ISL
FORMER USTS
(APPROX. 20' BGS IN 1998)
WASTE OIL UST EXCAVATION CAVITY
(APPROX. 8.5' BGS IN 1989)
OIL UST
- SOIL BORING LOCATION (ASI, 05/2016)
- SOIL GAS SAMPLE LOCATION (GRIBI, 04/2016)
- GROUNDWATER SAMPLE LOCATION (GRIBI, 04/2016)
- SOIL BORING LOCATION (SLR, 2014)
- SOIL BORING LOCATION (DELTA, 2010)
- SOIL BORING LOCATION (TRC, 2006)
- UST REMOVAL SOIL SAMPLE, 09/1998
- UST REMOVAL SOIL SAMPLE, 07/1989
- GROUNDWATER MONITORING WELL LOCATION
DESIGNED BY: JG
CHECKED BY: MK
DRAWN BY: JG
SCALE:
PROJECT NO: ARS-16-29-01
SOIL & GROUNDWATER HYDROCARBON RESULTS
411 W. MAC ARTHUR BLVD.
OAKLAND, CALIFORNIA
DATE: 09/12/2016
FIGURE: 5
ARS, INC
Applied Remedial Services, Inc.
P.O. Box 5086
Walnut Creek, CA 94596



DESIGNED BY: JG	CHECKED BY: MK	**CROSS SECTION LOCATION MAP** 411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	DATE: 09/12/2016 FIGURE: 6
DRAWN BY: JG	SCALE:		
PROJECT NO: ARS-16-29-01			

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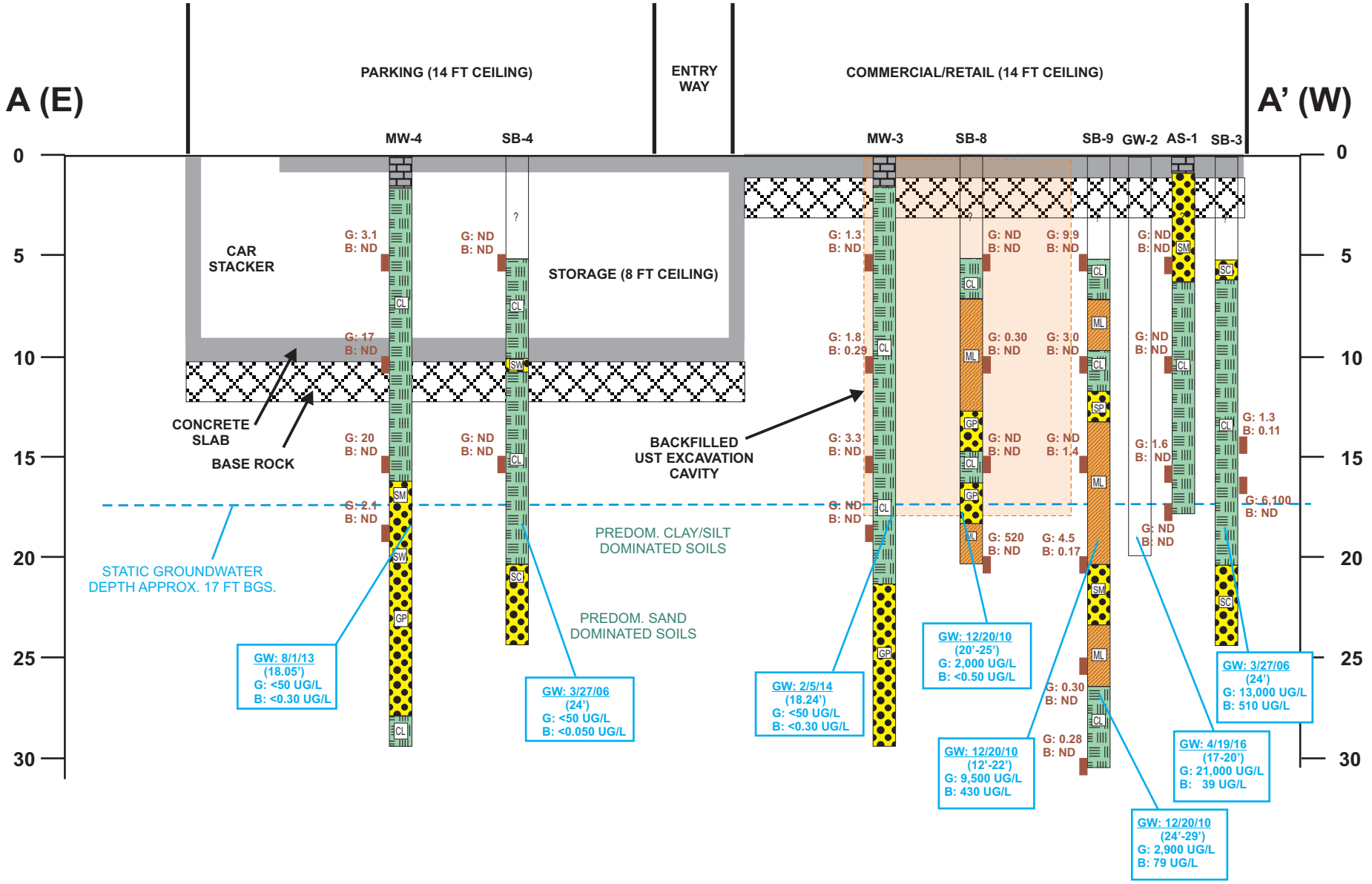

DESIGNED BY: JG	CHECKED BY: MK	**CROSS SECTION A-A'**	DATE: 09/12/2016
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	FIGURE: 7
PROJECT NO: ARS-16-29-01			

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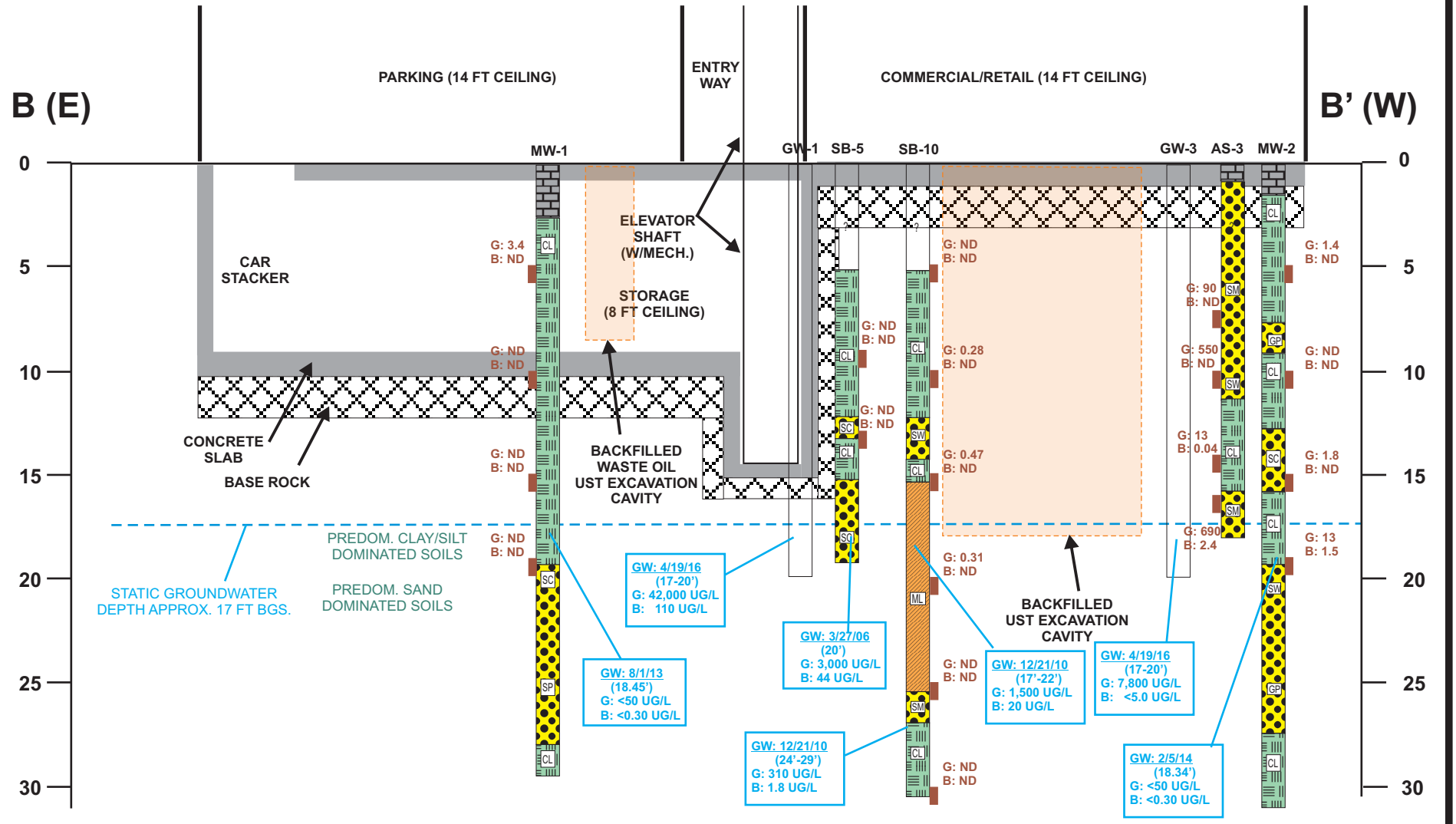

0 20 40

APPROXIMATE HORIZONTAL SCALE IN FEET

DESIGNED BY: JG	CHECKED BY: MK	CROSS SECTION B-B'	DATE: 09/12/2016
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	FIGURE: 8
PROJECT NO: ARS-16-29-01			

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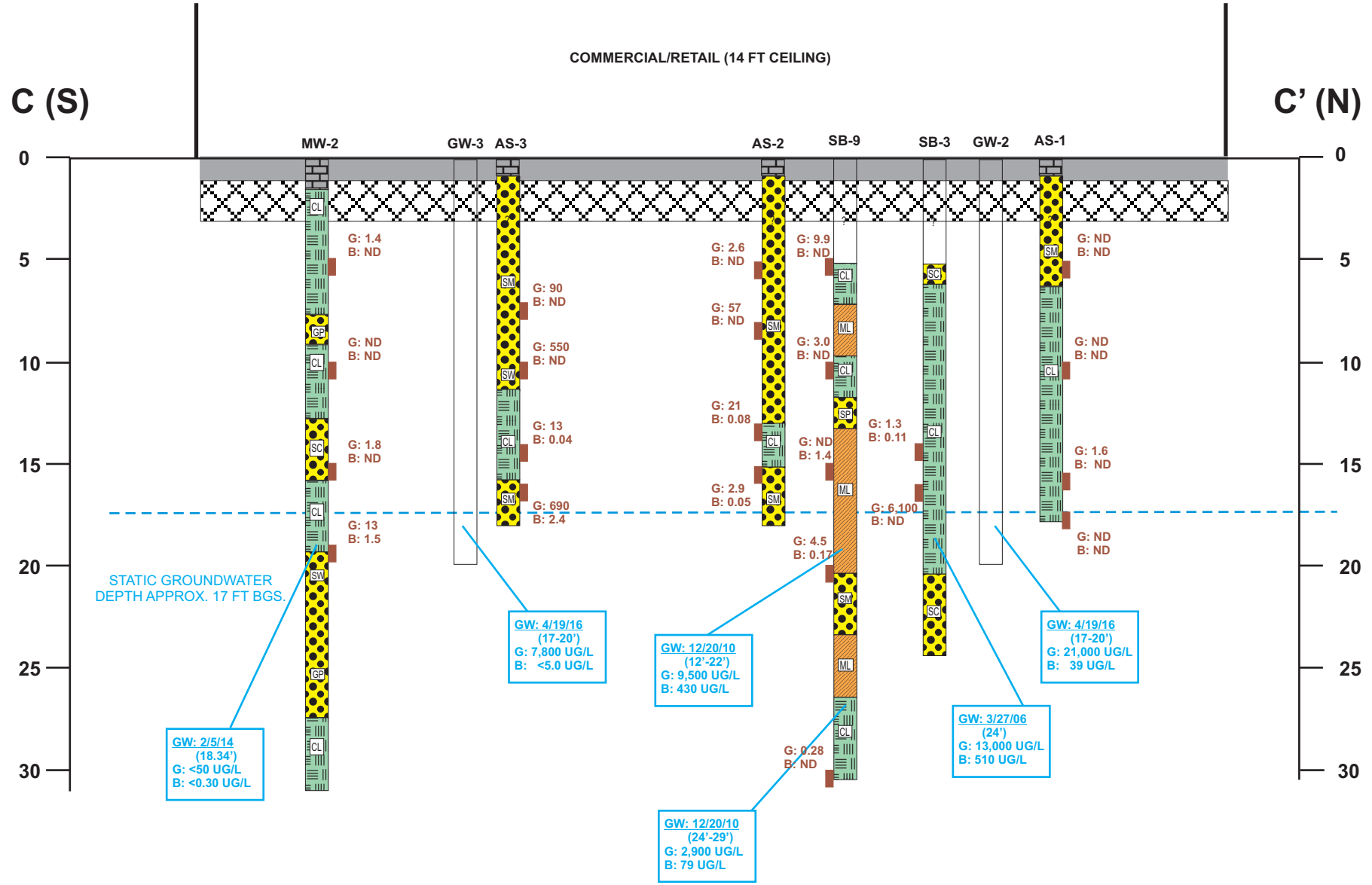

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APPROXIMATE HORIZONTAL SCALE IN FEET

DESIGNED BY: JG	CHECKED BY: MK	**CROSS SECTION B-B'**	DATE: 09/12/2016
DRAWN BY: JG	SCALE:	411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	FIGURE: 9
PROJECT NO: ARS-16-29-01			

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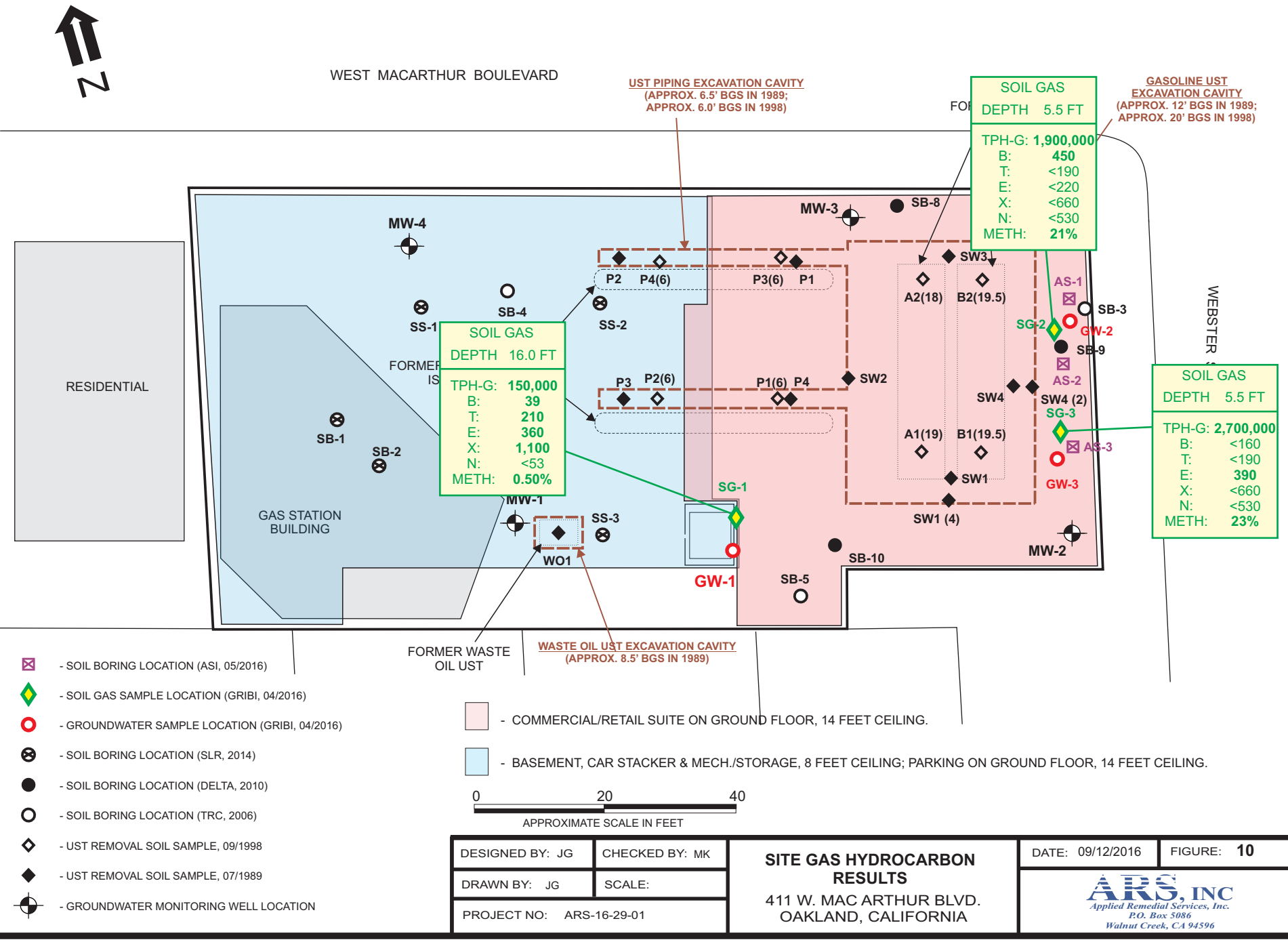

DESIGNED BY: JG	CHECKED BY: MK
DRAWN BY: JG	SCALE:
PROJECT NO: ARS-16-29-01	

SITE GAS HYDROCARBON RESULTS

411 W. MAC ARTHUR BLVD.
OAKLAND, CALIFORNIA

DATE: 09/12/2016 | FIGURE: 10

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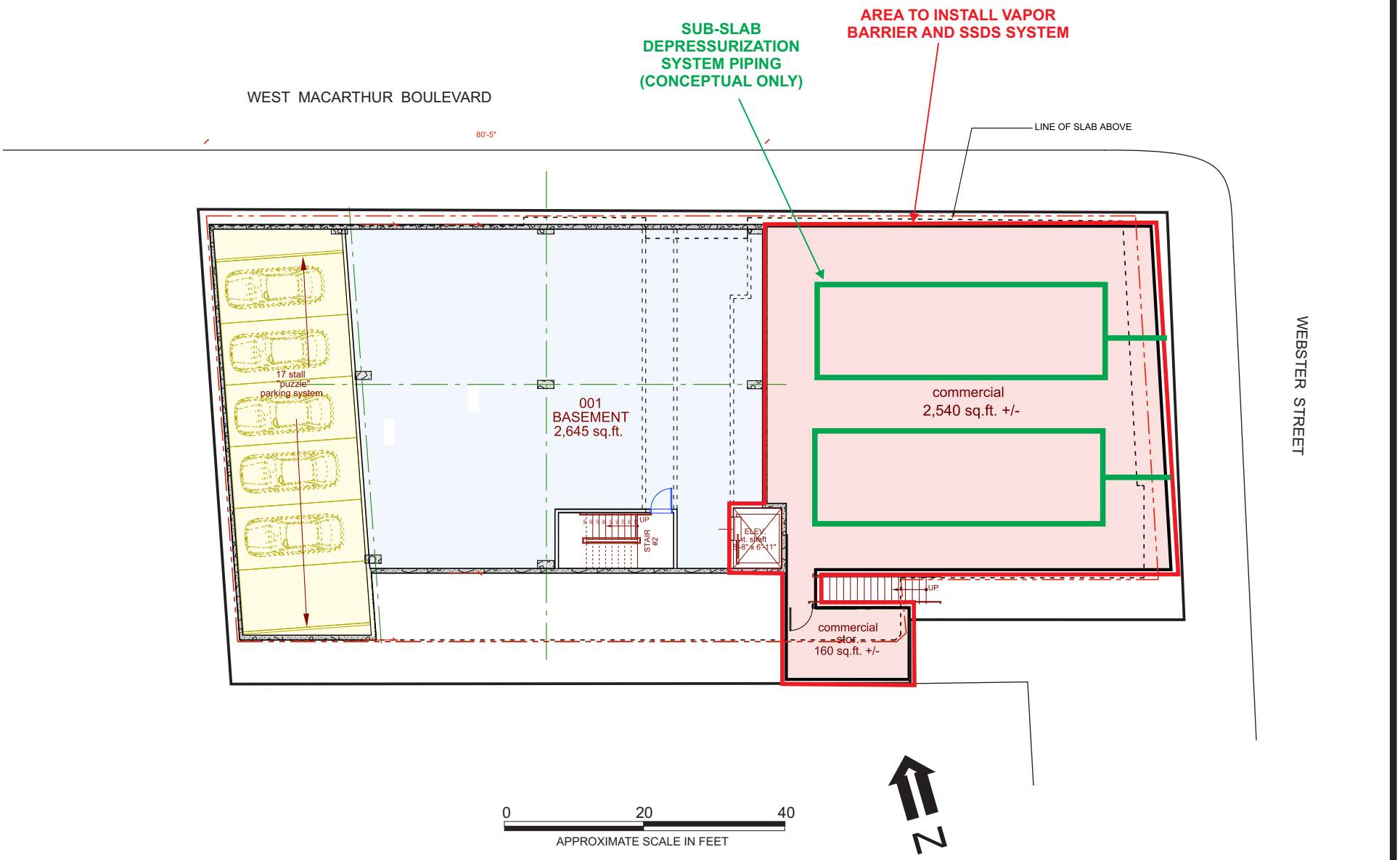

DESIGNED BY: JG	CHECKED BY: MK	**CONCEPTUAL SITE MITIGATION SYSTEM DESIGN SITE PLAN** 411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	DATE: 09/12/2016 FIGURE: **11**
DRAWN BY: JG	SCALE:		
PROJECT NO: ARS-16-29-01			

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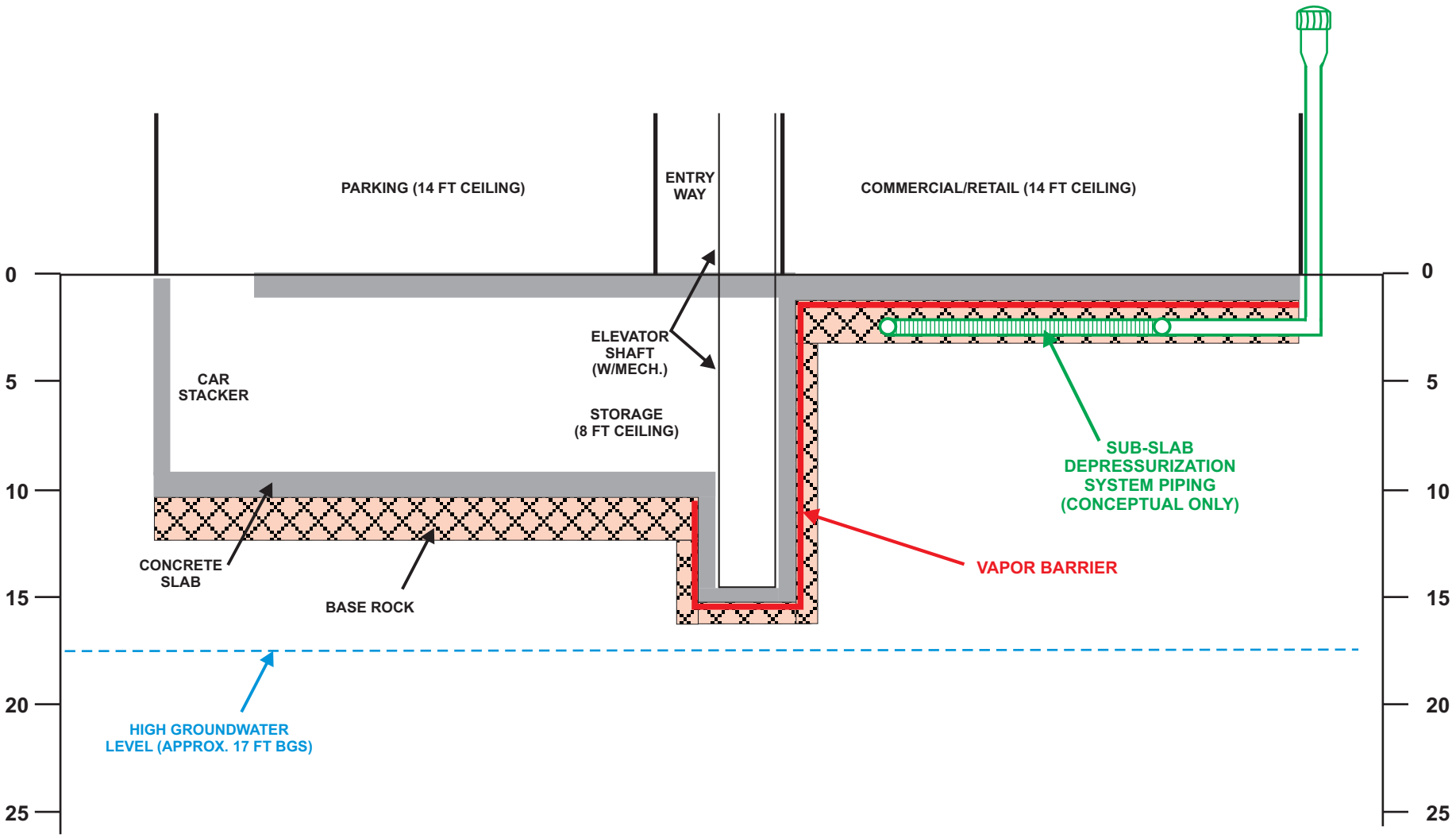

DESIGNED BY: JG	CHECKED BY: MK	CONCEPTUAL SITE MITIGATION SYSTEM DESIGN CROSS SECTION	DATE: 09/12/2016 FIGURE: 12
DRAWN BY: JG	SCALE:		
PROJECT NO: ARS-16-29-01		411 W. MAC ARTHUR BLVD. OAKLAND, CALIFORNIA	

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