

Shannon Graham

From: Beda Dondi <bdondi@epacinc.com>
Sent: Tuesday, December 24, 2013 9:44 AM
To: Vanlandingham, David; 'Jziegler'
Cc: Michael O'Brien (michaelo@fortlauderdalecc.com); Todd Hiteshew; Stephen K. Tilbrook; DJ Williams-Persad; Owens, Michael; Brannon, Meredith; Veronica Pickett
Subject: RE: Fort Lauderdale Country Club, Maintenance Facility Site, 415 E Country Club Circle
Attachments: Figure5_Soil_8Ft (Black 1 20 12).pdf; Figure2_Soil_2Ft (Black 1 20 12).pdf; Figure3_Soil_4Ft (Black 1 20 12).pdf; Figure4_Soil_6Ft (Black 1 20 12).pdf

David, the following responses are offered regarding your December 13, 2013 email, below. Please let me know this resolves the potential issues and I will respond immediately.

Beda



Beda C. Dondi, P.G.
bdondi@epacinc.com
(954) 974 7055

From: Vanlandingham, David [<mailto:DVANLANDINGHAM@broward.org>]
Sent: Friday, December 13, 2013 9:38 AM
To: Beda Dondi; 'Jziegler'
Cc: Michael O'Brien (michaelo@fortlauderdalecc.com); Todd Hiteshew; Stephen K. Tilbrook; DJ Williams (djwilliams-persad@fortlauderdale.gov) (djwilliams-persad@fortlauderdale.gov); Owens, Michael; Brannon, Meredith
Subject: Fort Lauderdale Country Club, Maintenance Facility Site, 415 E Country Club Circle
Importance: High

Beda and Joe,

I just received the Remedial Action Plan Addendum II (Modification) for the Fort Lauderdale Country Club Maintenance Facility. In an effort to quickly resolve any issues and expedite review, I am reaching out to you to request the following pieces of additional information that I need to issue approval:

- 1) I need a new estimate of the volume or tonnage of contaminated soils that are now to be removed from the site. Based on a revised 12 mg/kg standard, new maps of the contaminated soil areas indicates a total soil quantity of 1905 cubic yards of soil to be removed. Please understand that this figure will likely be higher as the exact extent of contamination will prove itself during the excavation process.
- 2) I need a figure that shows me the new estimated boundaries of excavation based upon assessment data, drawn to scale and showing site features. See Attached figures 2, 3, 4 and 5.
- 3) While I have no objection to a field screening methodology (item 6 of the Modification) to determine arsenic sampling locations, there should still be a specified minimum discrete sampling protocol for confirmatory sampling. Please provide a paragraph to expound upon this methodology, addressing the minimum number of

discrete samples to be collected, the sampling depths (we would expect this to include 0 to 6 inch surface sampling in keeping with 62-780, F.A.C.), and the maximum distance between each discrete sampling point. While field screening is a useful tool, there should be enough data at the end of the day to not only correlate the effectiveness of the field screening, but also to demonstrate in a technically defensible manner that remaining soils do, in fact, meet the 12mg/kg threshold. **Field screening will be used only as a precursor to normal laboratory analysis. Discreet soil samples will be taken post excavation at the excavation wall and if clean, perimeter sampling will be conducted outside the excavation area. The sampling protocol will consist of the following:**

- 1) Samples will be taken vertically in two foot increments and horizontally at 10 ft. intervals along the excavation wall. The samples will proceed from 2 ft to the maximum 8 ft depth.
- 2) Sampling outside the excavation, will be 5 ft. from the excavation edge and also every 10 ft. along the perimeter of the excavation. The first sample will commence from the surface down 6 inches and then from there on at 2 foot intervals down to 8 feet. Any analysis exhibiting elevated levels will be followed by additional excavation and the complimentary confirmation sampling.
- 4) Please provide a fugitive dust mitigation protocol.

Based on the lithology observed, which was a coarse grain well sorted sand, we do not expect an appreciable issue of dust emissions. However, during the excavation process, the site supervisor will provide dust suppression using a fine water mist from a garden hose and the facility water supply system. If this should prove inadequate, the process will be upgraded to a misting system using perforated PVC along the excavation boundary.

You can provide these items to me via email if you like, and I will treat it as supplemental information to the Modification you've submitted.

Thank you,

David



David Vanlandingham, P.E., Engineer IV
Pollution Prevention, Remediation and Air Quality Division (PPRAQD)
1 North University Drive, Ste. 203
Plantation, Florida 33324
Office: 954-519-1478
www.broward.org

The Pollution Prevention, Remediation and Air Quality Division values your feedback as a customer. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the PPRAQ Customer Survey](#). Thank you.

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LEGEND

⊕ SOIL BORING

JUNE 8, 2011 SB-1 THROUGH SB-24
 JUNE 10, 2011 SB-25 THROUGH SB-60
 AUG 9, 2011 SB-61 THROUGH SB-81

SCTL for Arsenic: 2.1mg/kg -12 mg/kg
 NADC for As in GW: 0.010 mg/L

SCALE: 1"=50'-0"

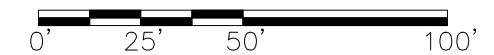
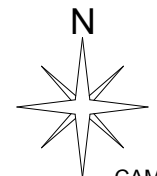


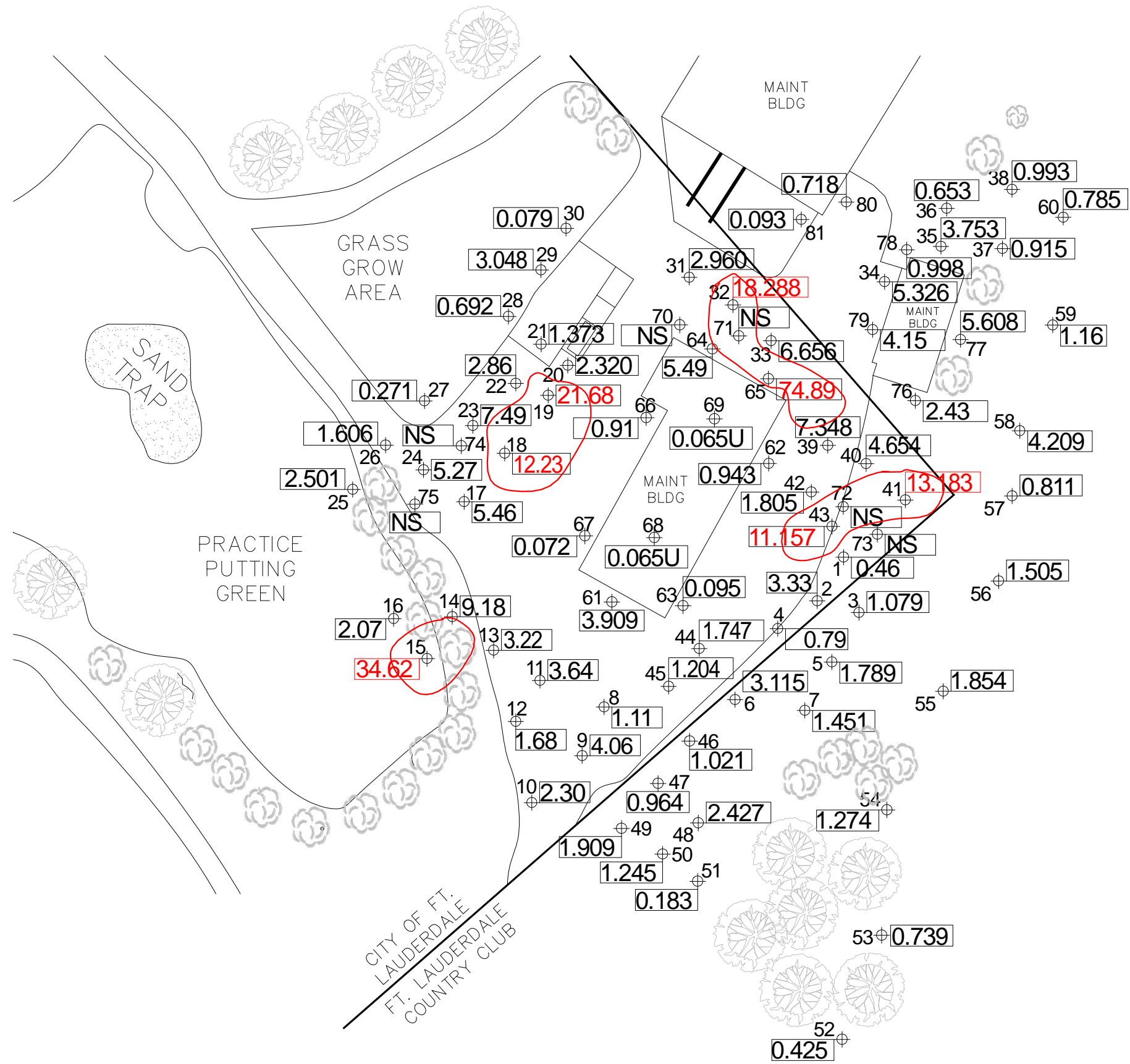
FIGURE 5
ARSENIC CONTAMINANT SOIL BORING LOCATIONS / RESULTS: 8-FEET
 FORT LAUDERDALE COUNTRY CLUB/CITY OF FORT LAUDERDALE
 415 E. COUNTRY CLUB CIRCLE/5050 W BROWARD BLVD
 PLATATION, BROWARD COUNTY, FLORIDA 33317



ENGINEERED ENVIRONMENTAL SOLUTIONS, INC.
 601 N EAST COAST AVE
 LANTANA, FL 33462
 TELE: (561) 721-0062

EPAC Project #: 2077167
 Drawn By: VP
 Date: 10-10-11
 Addendum: 01-27-12





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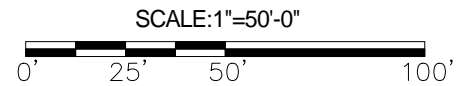
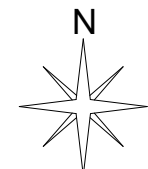


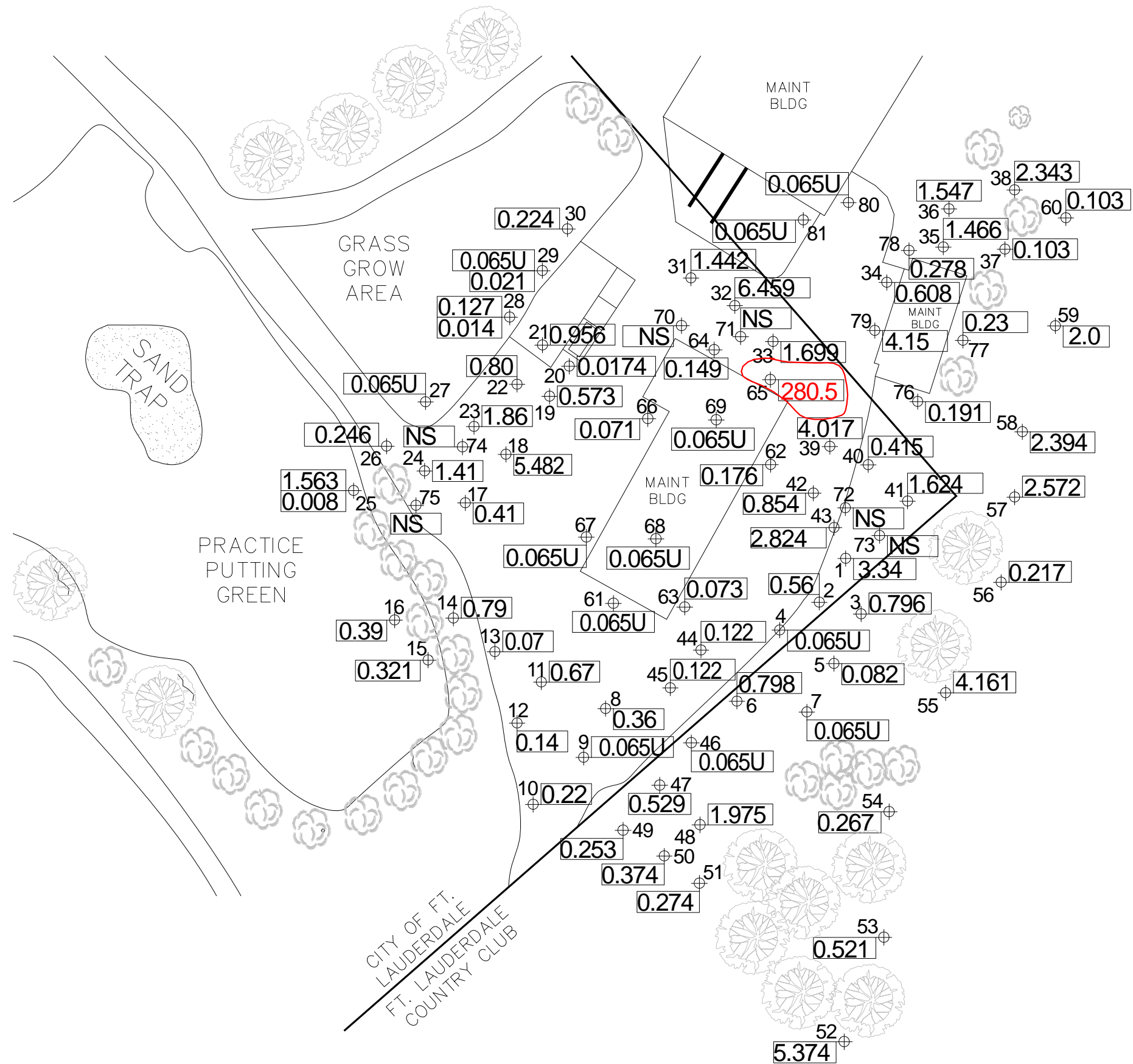
FIGURE 2
ARSENIC CONTAMINANT SOIL BORING LOCATIONS / RESULTS: 2-FEET
 FORT LAUDERDALE COUNTRY CLUB/CITY OF FORT LAUDERDALE
 415 E. COUNTRY CLUB CIRCLE/5050 W BROWARD BLVD
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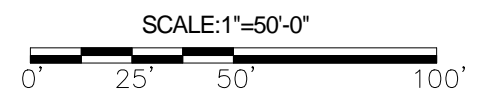
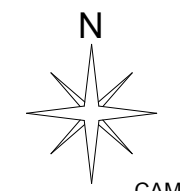


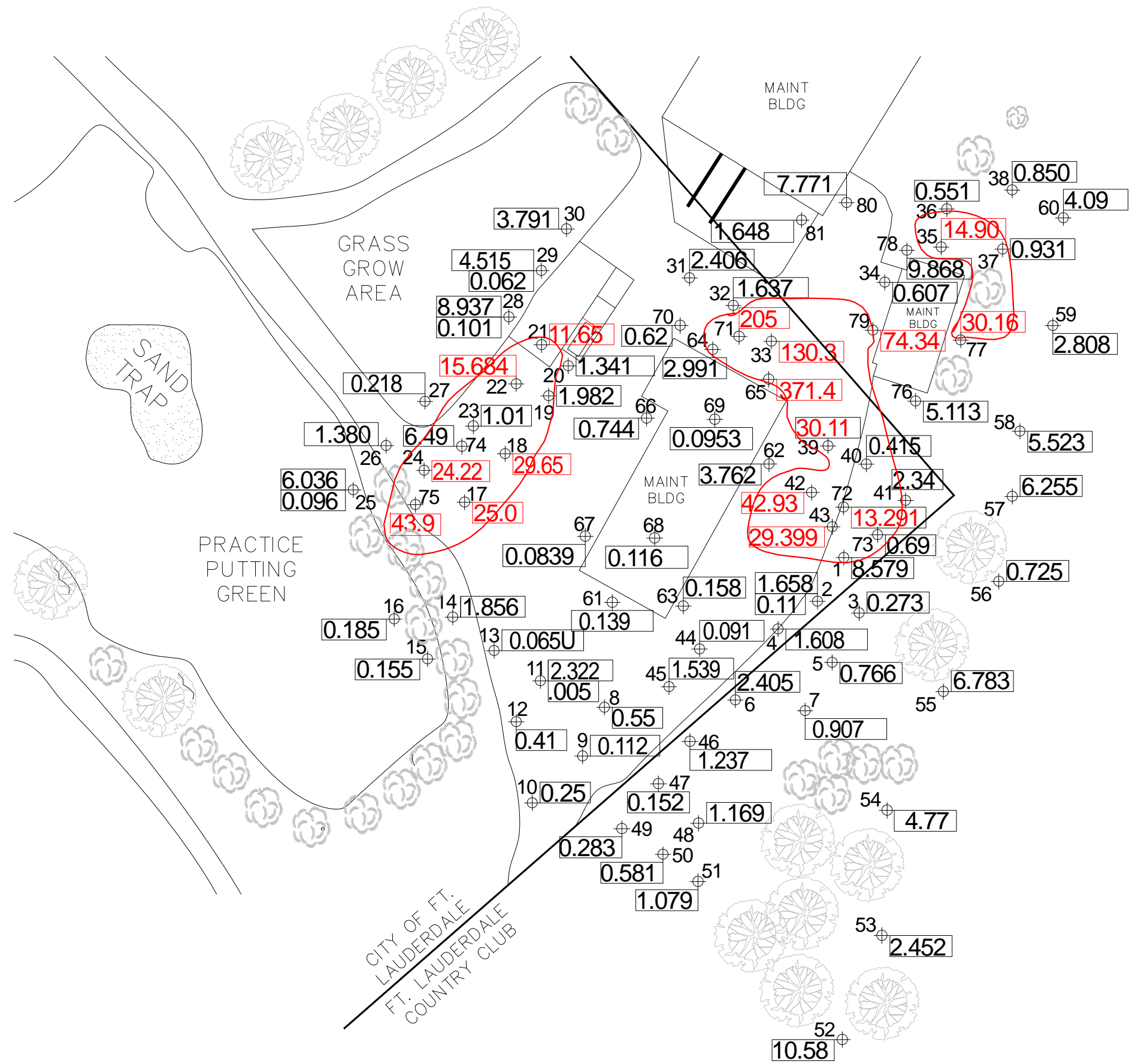
FIGURE 3
ARSENIC CONTAMINANT SOIL BORING LOCATIONS / RESULTS: 4- FEET
 FORT LAUDERDALE COUNTRY CLUB/CITY OF FORT LAUDERDALE
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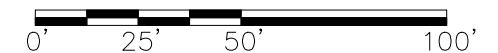


FIGURE 4
ARSENIC CONTAMINANT SOIL BORING LOCATIONS / RESULTS: 6-FEET
 FORT LAUDERDALE COUNTRY CLUB/CITY OF FORT LAUDERDALE
 415 E. COUNTRY CLUB CIRCLE/5050 W BROWARD BLVD
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