

September 5, 2019

Mr. Tory Gunsolley, President & CEO
Houston Housing Authority
2640 Fountain View Drive, Ste. 400
Houston, Texas 77057

RE: Environmental, Geotechnical and Due Diligence Findings

Environmental Due Diligence

NRP has retained an environmental consulting company to complete a Phase I Environmental Site Assessment (Phase I ESA) for the proposed project area, which also included a review of all seller-provided environmental records and a review of available State and Federal regulatory records. The proposed project area consists of three main tracts of land consisting of a northwest tract (5.121 acres – closed and capped landfill site, currently grass covered land), a central tract (21.680 acres – former industrial development, currently grass covered land), and a northeast tract (1.658 acres – former unauthorized landfill site, currently wooded land).

Past occupants of various portions of the project area (dating back to the 1890s through 2009) consist of a cotton compress, gin and storage facility, a paper product and container warehouse, a fertilizer warehouse, a paint warehouse, an automotive warehouse, an oil and lubricant cannery, a refrigerated goods storage warehouse, and former municipal and commercial waste disposal/landfill areas.

Numerous environmental investigations, remediation activities, and regulatory closure activities have been completed for various portions of the proposed project area. The northwest tract (5.121 acres – closed and capped landfill site) has gone through the TCEQ Voluntary Cleanup Program (VCP). As part of this tract going through the VCP, the TCEQ has indicated that this tract could be developed so long as the existing 6-foot thick clay cap is maintained. Any proposed modifications to the cap from site development, installation of subsurface utilities, foundations, or permanent structures must first receive preapproval from the TCEQ. Based on the environmental constraints (and geotechnical constraints discussed below), this portion of the project area appears to be suitable for park/recreation areas, parking lot areas, and possibly low-density housing.

The central tract (21.680 acres – former industrial development) has undergone several phases of corrective action measures to remedy environmental contamination concerns. The corrective action measures, which were completed to comply with proposed residential redevelopment standards, have received No Further Action (NFA) status from the TCEQ. This portion of the project area appears to be acceptable for residential redevelopment without any regulatory restrictions. However, it should be noted that residual contamination does remain present on this portion of the project area.

The northeast tract (1.658 acres – former unauthorized landfill site) appears to contain significant contamination issues which remain unresolved. This tract of land is not suitable for any type of development at this time. Future owners of this property should completely understand the unresolved environmental issues and potential long term liability concerns associated with purchasing this tract. NRP requests to be excluded from any potential ownership interests in this tract.

Geotechnical Due Diligence

NRP has retained a geotechnical consulting company to complete a Preliminary Geotechnical Investigation for portions of the project area. The Preliminary Geotechnical Investigation included drilling and sampling on the central tract (21.680 acres – former industrial development area). It also included a review of available drilling data and previous reports completed for the northwest tract (5.121 acres – closed and capped landfill site). The Preliminary Geotechnical Investigation excluded the northeast tract (1.658 acres – former unauthorized landfill site).

Based on the results of the Preliminary Geotechnical Investigation, the central 21.680 tract does appear to be suitable for redevelopment with minimal to slightly moderate geotechnical concerns. The results of this study indicate that disturbed soils and/or fill materials range in thickness from 2 to 22-feet across this tract. The most significant fill thickness (10 to 22-feet) are located in the southeast quadrant of the first phase I development. The remaining portions of both phases contain disturbed soil/fill thicknesses of approximately 2-feet, with slightly deeper disturbed soil/fill thicknesses of 4-feet at the north end of phase 2. The geotechnical report does conclude that the disturbed soil/fill materials, where sampled, do appear to be re-usable as engineered fill on-site. The geotechnical engineer has provided several standard pavement recommendations and foundation recommendations for residential buildings and parking structures at the site that take into account the existing disturbed soil/fill materials being compacted at the site.

The northwest 5.121 acre tract has more significant geotechnical constraints due to the existence of the regulated landfill clay cap and buried waste materials. All proposed impacts to the clay cap must first receive preapproval from the TCEQ. Additionally, special considerations will have to be developed for building foundations, buried utilities, and grading activities. As such, this tract appears to be suitable for park/recreation areas, parking lot areas, and possibly low-density housing.

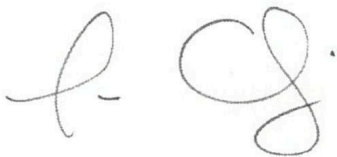
Civil Feasibility Study

Please find the list below of critical issues identified in the civil site feasibility study.
(see attached exhibit)

1. Potential ROW dedication and extension of Kennedy through the site. (yellow highlighted)
 - a. The total block length starting at Engelke is over the 1400' maximum and thus would require a variance to exceed. Jones and Carter (project civil engineer) is fairly confident we would get this approved through Planning Commission and they are researching other cases that establish a precedence. In their initial findings, it looks like other projects had to provide additional sidewalks, trees, etc... as a tradeoff for the variance approval. J&C will be contacting Planning to gain a better understanding.
2. Storm Sewer Easement (green highlight)
 - a. This easement will need to be relocated or vacated as it conflicts with the current Phase I site plan. It is not clear whether an active line exists in this easement, however, the City's GIS and as-builts did not show any lines. J&C is verifying whether an actual swale or ditch exists onsite.
3. Floodway Easement (orange highlight)
 - a. There will be a requirement to dedicate an easement off of Buffalo Bayou for drainage. It is not clear exactly what the distance will be at this time, however, it will likely be to the top of bank of the bayou.
4. Middle St Extension (blue highlight)

- a. This public street will need to be extended north with utilities over 500' with a cul-de-sac
5. Fill Requirement (unknown at this time)
- a. City of Houston requires finish floor elevations to be 2' above the 500 year floodplain. Refer to the above under Geotechnical for more detail regarding fill.
6. Potential Nationwide Permit (USACE) - Required for draining directly into Buffalo Bayou
- a. An outfall structure may be constructed within Buffalo Bayou without notification to the USACE if the following criteria are met: 1) the outfall pipe or box culvert is located above the Ordinary High Water Mark (OHWM) of Buffalo Bayou; 2) any erosion control fill, i.e. rip-rap, slope paving etc., is limited to less than 200 linear feet along the bank below the OHWM; and 3) the fill volume for erosion control fill is limited to less than one cubic yard of fill per linear foot of project area below the OHWM.
 - b. If the outfall pipe or box culvert for drainage outfall is to be located below the OHWM or if any of the threshold limits described above are exceeded, a Nationwide Permit Pre-Construction Notification (PCN) will need to be submitted to the USACE for review and approval.

Sincerely,



Jason Arechiga
Senior Vice President of Development
The NRP Group