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Director de Planeación Evaluación y Vinculación
Grupo Aeroportuario de la Ciudad de México (GACM)
Insurgentes Sur 2453, Piso 2
Col. Tizapán, Del. Álvaro Obregón
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México

Subject: Technical Letter: Review of Polígono con Ampliación por Pistas 5 y 6

Dear Ing. Lavin:

During MITRE's visit to Mexico City on 15-16 February 2017 to meet with officials from GACM and other stakeholders, the MITRE team received a paper copy of the drawing entitled "Polígono con Ampliación por Pistas 5 y 6", dated 8 April 2015. Note that MITRE previously received from Aeropuertos y Servicios Auxiliares (ASA) an electronic copy of the same drawing in AutoCAD in June 2015. Among other key data, the drawing depicts the official property boundary for the Nuevo Aeropuerto Internacional de la Ciudad de México (NAICM) and acquisition information regarding parcels of land within and adjacent to the NAICM site boundary.

MITRE reviewed the above-mentioned drawing (both the paper version from GACM and the electronic version from ASA) to obtain a better understanding of land acquisition matters to accommodate Runway 5 and Runway 6, including their associated Approach Lighting Systems (ALSs) at NAICM. Therefore, the objective of this letter is to provide feedback to GACM on the appropriateness of land acquisition matters to accommodate Runway 5 and Runway 6 and their associated ALSs.

Figure 1 shows a scanned version of the paper drawing that was provided to MITRE. The yellow hatched area indicates the land to be used for accommodating Runway 5 and Runway 6. MITRE noticed that several parcels within and adjacent to the NAICM site boundary had yet to be acquired. Based on the symbology in the drawing, parcels 1039, 1062, 1090, 1053, and 1068, which are located within the yellow hatched area, have yet to be acquired. These parcels are in important areas in relation to Runway 5 and Runway 6. Parcels 1053 and 1068 are critical as they are located along the extended centerline of Runway 5. **Therefore, MITRE would like to receive confirmation that each of the five above-mentioned parcels have or have not been acquired.**

In addition, there are areas in the drawing, which are depicted in Figure 2 below, that lack any symbology or classification regarding their acquisition status or have been labeled as "parcelas sin trámite de pago." **It is important that MITRE understands if these areas and parcels have been acquired, or when they will be acquired.**

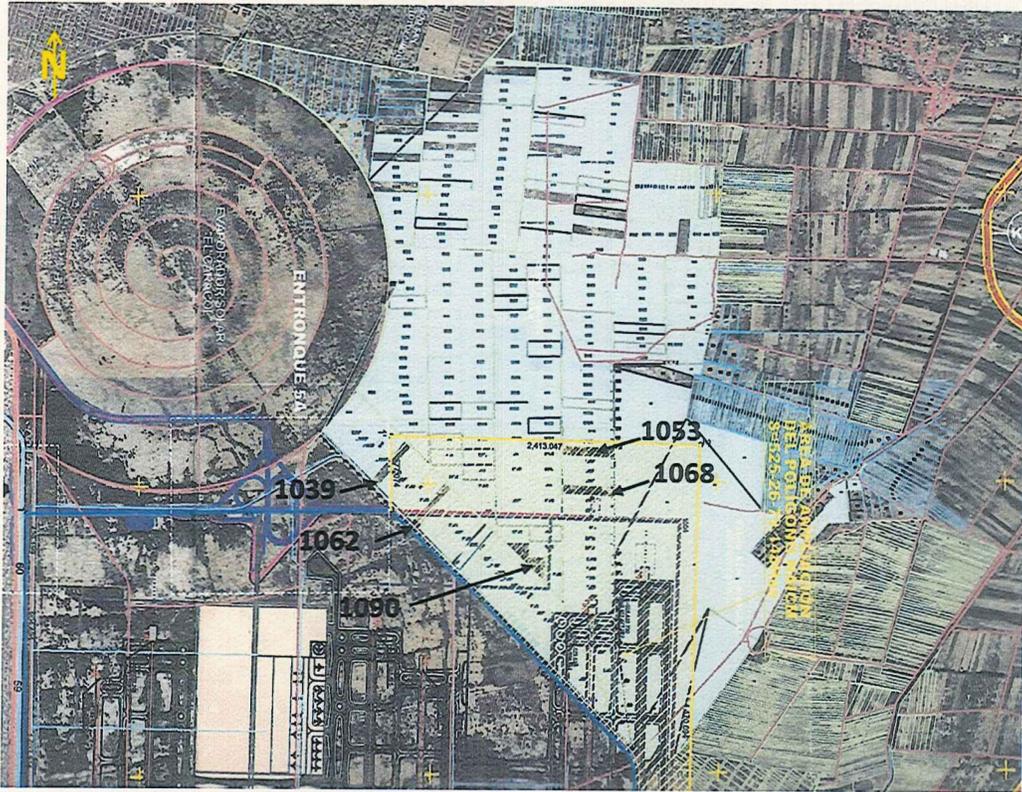


Figure 1. Parcels Requiring Confirmation of Acquisition

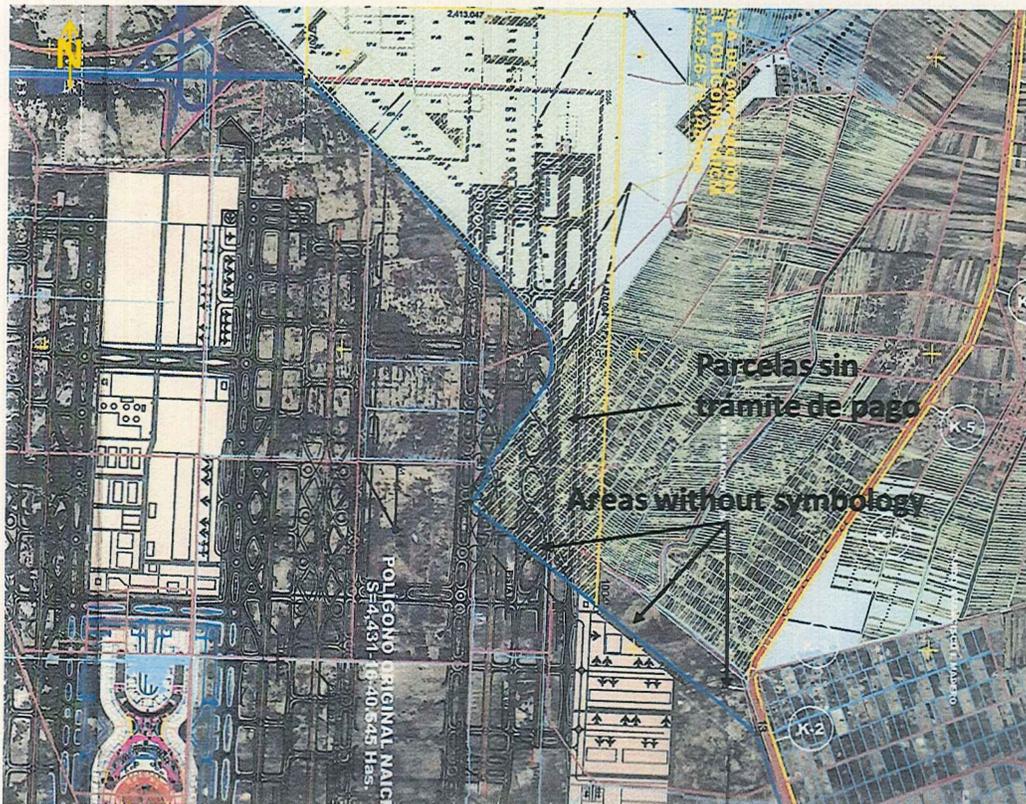


Figure 2. Parcels and Areas Lacking Symbology

Another key observation about the drawing is that **it does not show the latest runway locations**. In June 2015, after the date that this drawing was produced, the previous Master Planner (i.e., ARUP) shifted the proposed runways at NAICM. Runways 1 and 2 (as counted from west to east) were shifted 10 m to the west and Runways 3, 4, 5, and 6 were shifted 10 m to the east, resulting in new runway threshold coordinates.

Additionally, there is a difference in the location of Runway 5 (which was proposed by the previous Master Planner) and MITRE's recommended runway configuration. Figure 3, below, shows MITRE's recommended runway configuration with a comparison of Runway 5 that was proposed by the previous Master Planner. It is important to note that MITRE has never examined the feasibility of the location of Runway 5 that was proposed by the previous Master Planner, which is shifted 267 m south of MITRE's Runway 5. Also, to be clear, MITRE is not indicating that the Runway 5 location should be the one in MITRE's recommended runway configuration. MITRE is only pointing out that the location proposed by a previous Master Planner was never examined by MITRE.

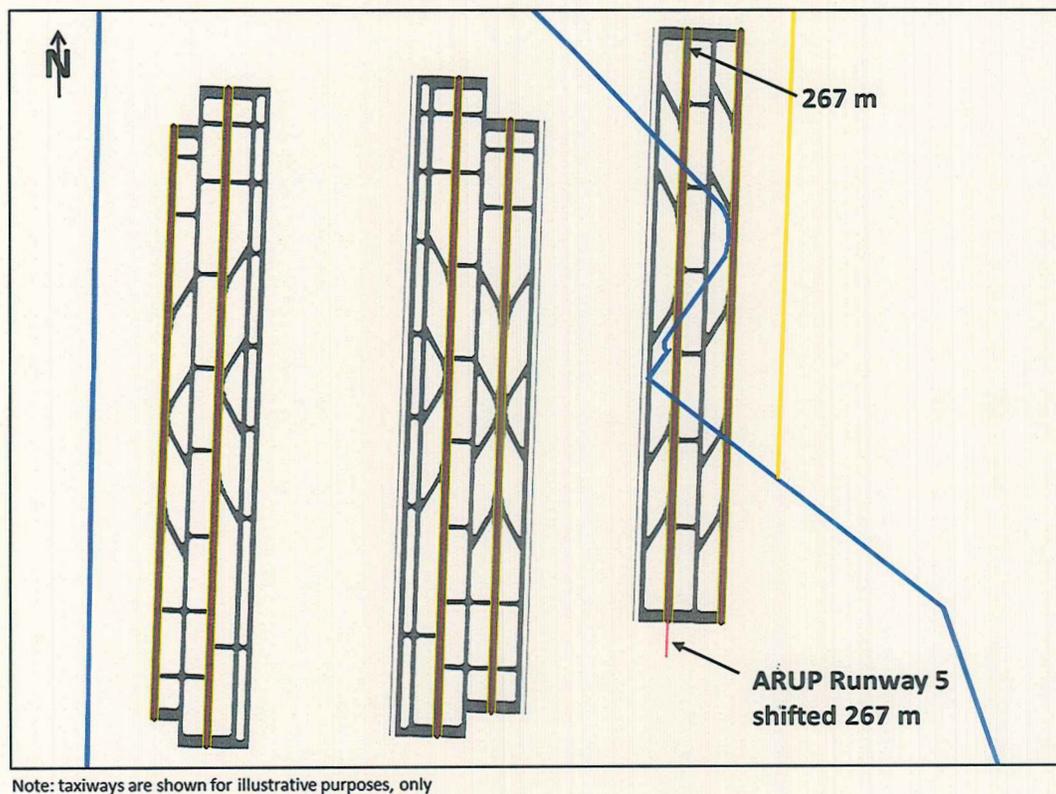
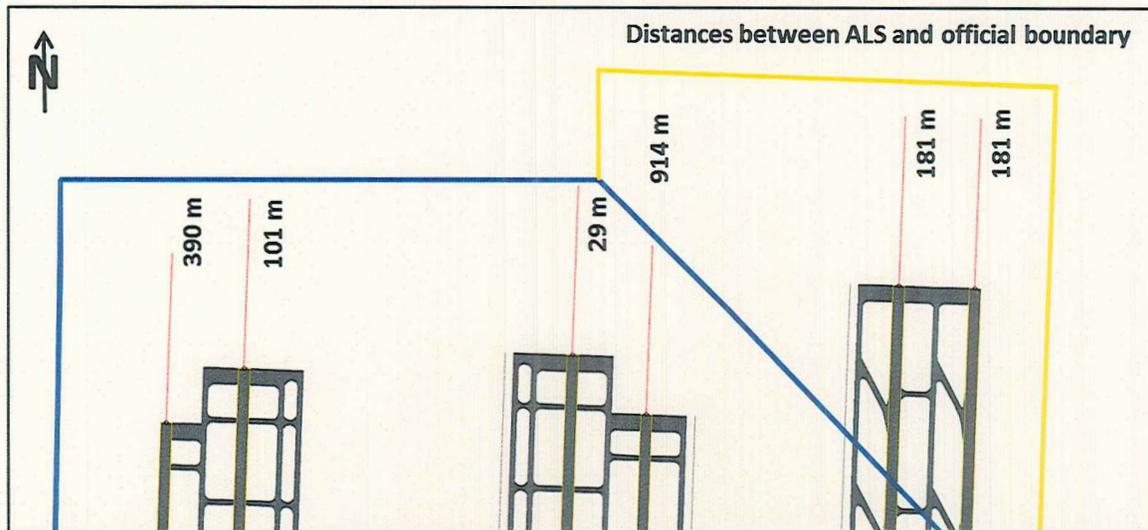


Figure 3. MITRE's Recommended Runway Configuration

Using MITRE's recommended runway configuration, MITRE analyzed whether the official boundary at NAICM allows for sufficient space to locate the ALSs to the north of all runways. In doing so, an ALS with a length of 900 m from the physical end of each runway was assumed for planning purposes. Figure 4 shows the distances from all ALSs on the northern runway ends (shown in red) to the official boundary. It is important to note that all ALSs appear to be located within the NAICM official boundary, as depicted

in the figure below. The figure also shows the distance from the northern end of the ALSs to the NAICM official boundary.



Note: taxiways are shown for illustrative purposes, only

Figure 4. MITRE's Recommended Runway Configuration with ALSs

In closing, GACM should confirm the status of parcel acquisition as described above. Any parcels that have not been fully acquired should be acquired as soon as possible. **This can become a difficult problem if not taken care of.** MITRE requests to be informed when any remaining parcels are acquired. In addition, MITRE recommends that GACM updates their property boundary drawing to reflect the latest runway locations, as well as the latest status on parcel acquisition. Once updated, that drawing (preferably geo-referenced in AutoCAD) should be provided to MITRE.

Please do not hesitate to contact me if you need any clarification or assistance.

Sincerely,

Ing. Robert W. Kleinhans
Project Technical Coordinator

cc: Dr. Bernardo Lisker, MITRE