

**Construction Management of the Jordan School Expansion Project (JSEP)
and the Schools for a Knowledge Economy Project (SKEP)**

Site Visit Report Form

FTR # QR 330

A. BASIC DATA

(Trigon staff shall complete this field trip report within 48 hours after returning from the field and ensure that it is sent properly distributed within 72 hours after leaving the construction site)

Program (JSEP or SKEP): SKEP **PHASE:** III **PACKAGE:** 2
School Name: Jumana Bint Abi Taleb Basic Mixed School
Supervisory Engineer (SE) Name: Wahib Medanat
Construction Contractor (CC) Name: Dijlah Contracting Co.
Date and Time of Field Trip: April 05, 2021 10:20 AM
Date of Report: April 07, 2021
Weather During Visit: Sunny 17 °
Report Submitted By: Osama Obeid and Talid Hamdan.

PURPOSE OF VISIT

General Site Inspection (Quality) Handover (First Inspection)
 Corrective Action (CA) Review Report Second Final Inspection
 Health & Safety (H&S) OTHER (list below)
 Site Meeting
 Substantial Completion Inspection

PERSONNEL ON TRIP

| No. | Name | Title | Agency |
|-----|--------------|-----------------------------|--------|
| 1 | Osama Obeid | Sr. Construction Manager | Trigon |
| 2 | Talid Hamdan | Intern Architect | Trigon |
| 3 | Will Baker | Intern Construction Manager | Trigon |

PERSONNEL AT SITE *(if a site meeting or a final inspection, use attachment to list other participants)*

| No. | Name | Title | Agency |
|-----|---------------------|-------------------|---------------|
| 1 | Natheer Amareen | Project Manager | Wahib Medanat |
| 2 | Sawsan Al-Yousef | Resident Engineer | Wahib Medanat |
| 3 | Yousef Omar | Site Engineer | Wahib Medanat |
| 4 | Mohammad Moubaydeen | Safety Engineer | Wahib Medanat |
| 5 | Wesam Al-Louzi | Fresh Graduate | Wahib Medanat |
| 6 | Amer Yousef | Deputy Manager | Dijlah |

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| | | | |
|---|------------------|-----------------|--------|
| 7 | Sahar Suleiman | Site Engineer | Dijlah |
| 8 | Moheeb Al-Wahidi | Safety Engineer | Dijlah |

B. QUALITY, SCHEDULE AND H&S FINDINGS CHECKLIST

(For any “No” answer in this section, the Observer shall provide a narrative explanation in Section C. of this Report including corrective action requested) **NA-Not Applicable, DC-Didn’t Check**

| | <u>Construction Contractor</u> | <u>Supervisory Engineer</u> |
|---|--------------------------------|-----------------------------|
| A. <u>SITE DOCUMENTATION</u> | | |
| 1. Drawings and Specifications on site? (Y/N) | Y | Y |
| 2. CC Safety Plan on site? (Y/N) | Y | Y |
| 3. CC QC Plan on site? (Y/N) | Y | Y |
| 4. Shop Drawings up to date? (Y/N) | Y | Y |
| 5. Request for Information/Inspection up to date? (Y/N) | Y | Y |
| 6. Sampling and Testing Tracking Log? (Y/N) | Y | Y |
| 7. Hard copy files neat and up to date? (Y/N) | Y | Y |
| 8. Inspector’s Daily Journal up to date? (Y/N) | Y | Y |
| 9. Non-Conformance Report up to date? (Y/N) | Y | Y |
| B. <u>SCHEDULE</u> | | |
| • SE has up to date CC Schedule on site? (Y/N) | Y | |
| • CC has up to date CC Schedule on site? (Y/N) | | Y |
| C. <u>EXIT OBSERVATIONS</u> | | |
| • What time does CC start work each morning on average? | 7:00 AM | |
| • What time does CC stop work each day on average? | 4:00 PM | |
| • What is the average # of working hours each day? | 8 Hours | |

C. DESCRIPTION OF FINDINGS

(State if fact or opinion. Use attachments, maps, sketches if necessary)

A. SITE DOCUMENTATION

- All documents are available and are neatly saved on site.
- The SE has produced several drawings illustrating the accessibility route and the areas of possible hazards.

B. HEALTH & SAFETY

- Covid-19 safety precautions were taken, and a hygiene station was available on site.
- Flagman at site fostering safety and managing the flow of cars coming into the work zone.

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- Construction materials are stacked and stored safely.
- Access and egress routes are clear.
- Ladder frame scaffolding is used as a safety measure.
- The height of a handrail above the floor, shall be between 900mm and 1100mm.
- Using mushroom caps for protection from exposed rebars.

C. **GENERAL QUALITY OBSERVATIONS**

- Stair's risers and treads are hand drawn on site to make sure the measurements are right.
- Good workmanship for concrete works was noticed (only a small spot of concrete roughness was observed that needs treatment)

D. **SCHEDULE**

- Cast in place SOG works are done and ground column works are ongoing.
- % of work completed: According to Medanat, 23.3 % of the work is completed.
- The average number of workers working daily on site in the past week is 20.

E. **STATUS OF UTILITY CONNECTIONS / OTHER OUTSTANDING ISSUE**

1. **Water Supply**: Not connected yet
2. **Wastewater**: Not connected yet
3. **Electricity**: Not connected yet
4. **Other Issue**: Excavation near the boundary wall conflict remains unsolved

ATTACHMENTS – as marked below

- a. **QUALITY CHECKLIST**
- b. MEETINGS / INSPECTION MINUTES
- c. HEALTH & SAFETY ATTACHMEN

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E. PHOTOS



FIGURE #01:
Project ID Sign on site.
Photo credit: Talid Hamdan
April 5th, 2021

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FIGURE #02& 03:

The project consists of a five floors building, in addition to other site works. The project has an internal area of 5460.0 m² and external area of 5529.0 m².

*Photos credit: Osama Obeid and
Talid Hamdan
April 5th, 2021*

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FIGURE #04& 05:

Covid-19 hygiene stations and visitor's log are available on site.

Flagman at site fostering safety and managing the flow of cars coming into the work zone

*Photos credit: Talid Hamdan
April 5th, 2021*



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FIGURE #06& 07:

Construction materials are stacked and stored safely.

Access and egress routes are clear.

*Photos credit: Talid Hamdan
April 5th, 2021*



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FIGURE #08& 09:

Cast in place SOG works are done and ground column works are ongoing.

*Photos credit: Talid Hamdan
April 5th, 2021*



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FIGURE #10& 11:

De-shuttering of columns formwork is ongoing,

Used materials are gathered on site in a neat manner.

*Photos credit: Talid Hamdan
April 5th, 2021*

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FIGURE #12& 13:

Ladder frame scaffolding is used as a safety measure.

*Photos credit: Talid Hamdan
April 5th, 2021*



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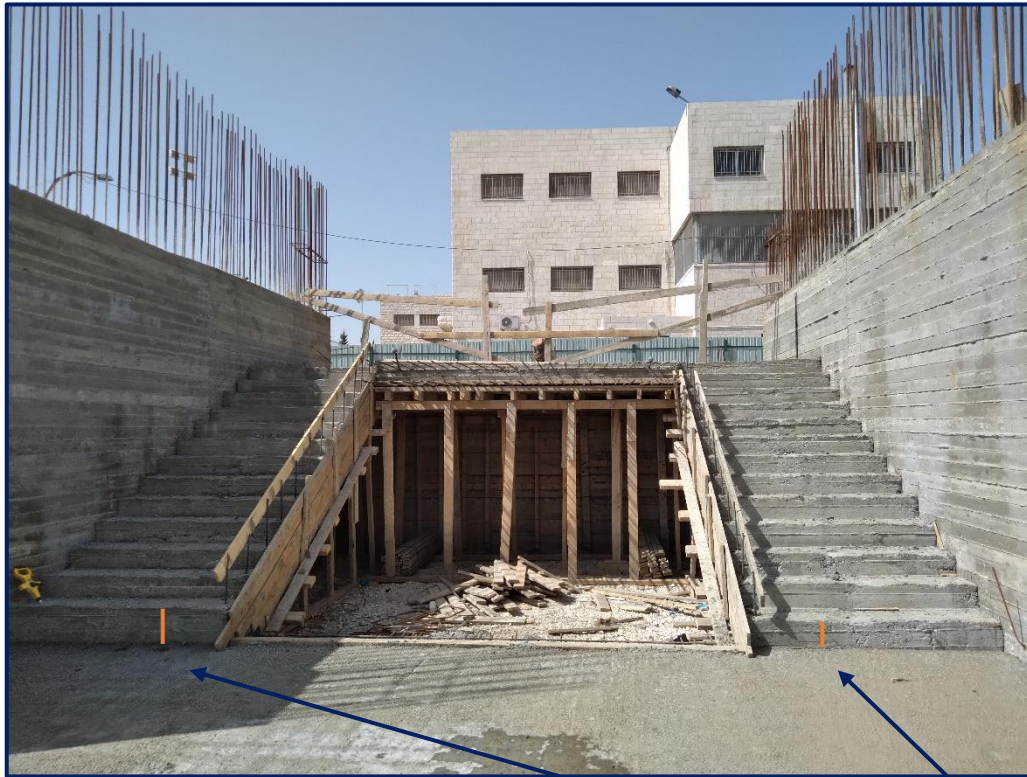


FIGURE #14& 15:

Attention should be given to the height of the stairs' first step when tiling works are ongoing.

Hand drawn sketches were seen on site to make sure the stairs' risers and treads are equal.

*Photos credit: Talid Hamdan
April 5th, 2021*



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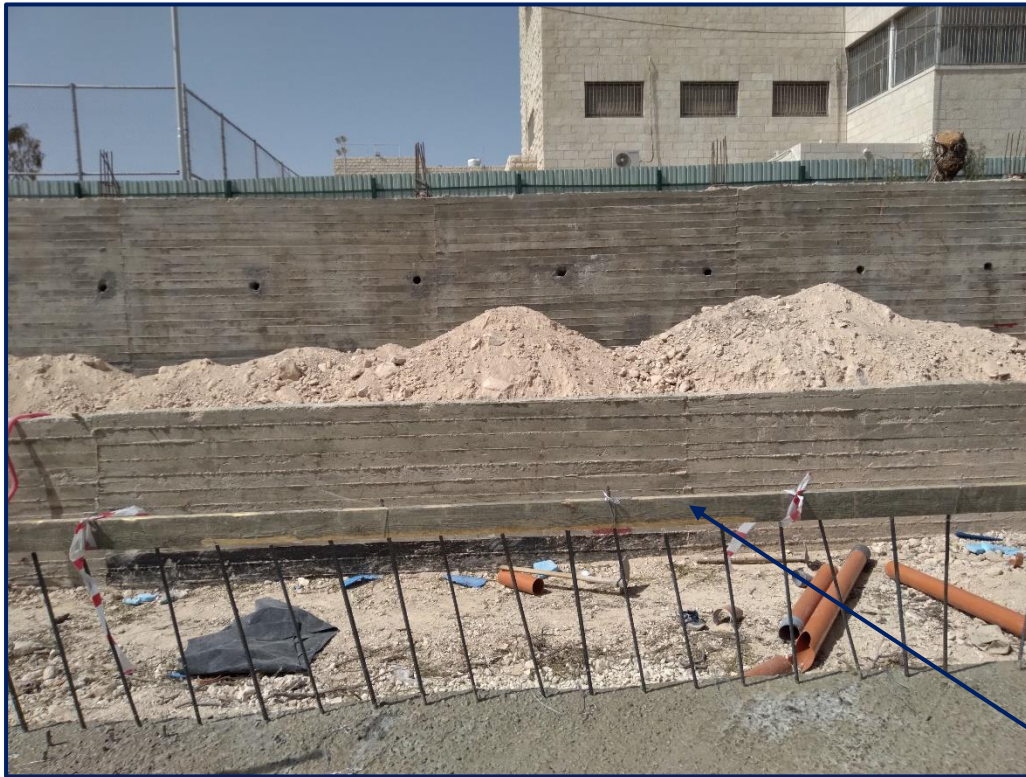


FIGURE #16& 17:

The height of a handrail above the floor, shall be between 900mm and 1100mm.

Using mushroom caps for protection from exposed rebars.

*Photos credit: Talid Hamdan
and Will Baker
April 5th, 2021*



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FIGURE #18:

Untreated roughness in
concrete seen on the
school's wall.

*Photos credit: Talid Hamdan
April 5th, 2021*

Trigon Quality Field Trip Report Attachment
Notes:

Date: 5/4/2021
 School Name: Jumana Bint Abi Taleb Basic Mixed School
 Location: Amman
 Program / Phase / Package: SKEP III Package 2
 Prepared by: Osama Obeid and Talid Hamdan

| # | Task / Activity | Observations (Y/N) | Findings | Recommendations / Corrective Actions |
|--|---|--------------------|--|--|
| A. Excavation | | | | |
| B. Backfilling | | | | |
| C. SubStructural, Concrete, Foundations | | | | |
| 1 | Steel Bar | | | |
| 2 | Footings | | | |
| 3 | Ground beams | | | |
| 4 | Tie beams | | | |
| 5 | Column neck | | | |
| 6 | Column | | | |
| 7 | waterproofing(Insulation) | | | |
| 8 | Slab on grade | | | |
| D. SuperStructural, Concrete, Masonry works | | | | |
| 1 | Columns | | Concrete roughness was noticed | It is recommended to treat the roughness |
| 2 | Beams | | | |
| 3 | Slabs | | | |
| 4 | Stairs | | Stairs risers and treads are hand drawn on site to make sure the measurements are right. | |
| 5 | Roof | | | |
| 6 | Hollow Concrete Block (internal) | | | |
| 7 | Hollow Concrete Block (external) | | | |
| 8 | C-Channel | | | |
| 9 | Clading Natural Stones | | | |
| 10 | Electrical conuits/ sleeves | | | |
| 11 | Mechanical pipes/sleeves | | | |
| E. Civil Works | | | | |
| 1 | Access /Gates | | Access and egress routes are clear. | |
| 2 | Doors | | | |
| 3 | Wooden Doors | | | |
| 4 | Aluminum Windows | | | |
| 5 | Plastering (Internal) | | | |
| 6 | Plastering (External) | | | |
| 7 | Wall Paint | | | |
| 8 | Ceiling Paint | | | |
| 9 | Wall tiles | | | |
| 10 | Floor tiles (Internal) | | | |
| 11 | External Floor tiles (Interlock /Stone) | | | |

| # | Task / Activity | Observations (Y/N) | Findings | Recommendations / Corrective Actions |
|----------------------------|--|--------------------|----------|--------------------------------------|
| 15 | Facades, Roof parapet | | | |
| 16 | PVC | | | |
| 17 | Carpet | | | |
| 18 | Expansion joint | | | |
| 19 | Roof insulation (waterproofing membrane) | | | |
| F. Electrical Works | | | | |
| 1 | Wiring - conduits | | | |
| 2 | Electrical sockets | | | |
| 3 | Lighting fixtures | | | |
| 4 | Electrical Distribution Board | | | |
| 5 | Fire Alarm System | | | |
| 6 | Public Address | | | |
| 7 | Air Conditioning Units | | | |
| 8 | CCTV | | | |
| 9 | Manhole | | | |
| 10 | Electrical Earthing | | | |
| 11 | Wall Fan | | | |
| 12 | Elevator | | | |
| 13 | Electrical Room | | | |
| G. Mechanical Works | | | | |
| 1 | Rest Rooms, Toilets, WC | | | |
| 2 | Wall tiles | | | |
| 3 | Floor tiles | | | |
| 4 | Water Mixer | | | |
| 5 | Water Cooler | | | |
| 6 | Boiler,HVAC,Pumps | | | |
| 7 | Drainage | | | |
| 8 | Manholes, Clean-outs | | | |
| 9 | Fire Extinguisher | | | |
| 10 | Ventilation, AC Duct | | | |
| 11 | Emergency shower | | | |
| 12 | Septic Tank | | | |
| 13 | Kitchen Sink | | | |
| H. External Works | | | | |
| 1 | Boundary walls | | | |
| 2 | C-Channel Finishings | | | |
| 3 | Fence | | | |
| 4 | Epoxy paint | | | |
| 5 | Landscaping | | | |
| 6 | External Paint | | | |
| 7 | Football/ Basketball Playground | | | |
| 8 | Sand playground for KG | | | |
| 9 | Plants area | | | |
| 10 | Car Park/Asphalt | | | |

Disclaimer : Trigon field trip reports include information and findings based upon those parts of the construction sites we visit. Our visits and our contract scope of work do not include Trigon to carry out first tier Quality Control/Assurance, i.e., reviewing submittals, drawings and specifications, reviewing contract compliance, or in any way carrying out close supervision of the works. Therefore our field-trip reports include cursory quality, health & safety and schedule information and its entry on our reports is intended to provide the reader only with a sense of our general observations of that part of the job site we have visited



CMTO Quality/Workmanship FTR Attachment #2

Construction Quality is carrying out work according to the Drawings and Specifications - Yes/No. This is the duty of the Contractor and the Supervisory Engineer. Quality Assurance (QA) is a check to ensure that the Contractor and Supervisory Engineer is working according to the Drawings and Specifications and observing and reporting generally on basic ongoing and/or completed construction workmanship and work quality. This report is a QA report and as such is an observational view of Contractor and Supervisory Engineer overall Quality Control management.

Date / Time of Field Trip: 4/5/2021 10:20 AM

School Name: Jumana Bint Abi Taleb Basic
Mixed School

Location: Amman

Program/Phase/Package: SEKP III/2

Name of Contractor : Al-Ajjour engineering &
contracting Co.

Name of Sup. Engineer: Wahib Medanat

Prepared by: Osama Obeid and Talid
Hamdan

I. GRADE KEY (Quality Observations)

3 Very Good

2 Acceptable

1 Poor

2. General Observations : (Yes = 2 / No = 1)

| # | General QC Management Observations (33% of Grade) | STATUS | GRADE |
|------------------|--|-------------|-----------|
| 1 | QC Plan Approved By Supervising Engineer | yes | 2 |
| 2 | QC Plan on-Site and Used by Construction Contractor | yes | 2 |
| 3 | Approved Schedule On Site | yes | 2 |
| 4 | Approved Shop Drawings On Site | yes | 2 |
| 5 | Approved Material Submittals On Site | yes | 2 |
| 6 | Material Acceptance/Rejection Forms Used On Site | yes | 2 |
| 7 | Material Acceptance/Rejection Tracking Log in Monthly Report | | - |
| 8 | Hard Copy Drawings/Specifications On Site | yes | 2 |
| 9 | Hard Copy Drawings Marked Up Daily to Be As-Built | yes | 2 |
| 10 | Supervisory Engineer Has and Uses Specification Testing Plan | yes | 2 |
| Sub-Total | | 100% | 18 |

| # | Activity Quality/Workmanship Observations (67% of Grade) | STATUS | GRADE |
|----------------------------------|---|------------|----------|
| 1 | Excavation and Backfilling Works | Acceptable | 2 |
| 2 | Reinforced Concrete (forming, steel, placing, final result, curing) | Very Good | 3 |
| 3 | External Wall Façade | | - |
| 4 | Floor Tiles Installation | | - |
| 5 | Internal Plastering | | - |
| 6 | External Plastering | | - |
| 7 | Doors and Windows | | - |
| 8 | Mechanical and Plumbing (HVAC, Water Supply, Wastewater) | | - |
| 9 | Electrical Works and Elevators | | - |
| 10 | Internal Wall Tiling | | - |
| 11 | Roof Waterproof Membrane | | - |
| 12 | Internal and External Painting | | - |
| 13 | Site Works | | - |
| 14 | Protection of Completed Works | | - |
| Sub-Total | | 83% | 5 |
| Quality Indicator Grade % | | 89% | |

NOTES

1
2
3