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Assessment on Debris Removal from Two Locations Specified by Sinjar Municipality

Assessment Date: Jan-23rd-20

Done by: Chemonics

1-Debris removal from culvert near Sinjar water pumping station to clean stream of water specially in flood times, because this debris effect water pumping station and surrounding area to be flood by water since the debris had clogged culvert and its object water flow.

On the other side of culvert, the culvert foundation has been excavated trough erosion because of water and this need to be fixed by concrete

The work requirement for debris removing from the culvert:

a- Excavator to excavate and clean the valley for 8 days
b- Three (3) dump truck to move debris for 8 days
c- Wheal loader to elevate the valley for 3 days

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2- Debris removal from Civil Defence

a- Excavator to excavate and clean the valley for 7 days
b- Three (3) dump truck to move debris for 7 days
c- Wheal loader to elevate the valley for 5 days
d- Electric cutter might be required for exist steel in order to remove debris

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Type of Debris: reinforced concrete with steel bars, deferent types of metal, stones (remaining of building structures, reinforced concrete slab, reinforced concrete columns, reinforced wall, steel doors, steel windows parts, stones and plastic materials

Estimate of the debris to be removed:

1- Culvert:
   A- South side of culvert: 3m x 5m x 5 m x 2 parts (HxLxW)
   = 150 m3 x 2.5 (density of reinforced concrete with ton) =350 ton

   B- North side: 24m x 25m x 3.5m = 2100 m2 x 2.5 = 5250 ton

2- Self-defense building:

50m x 44m x 1.2m (LxWxH) = 2640m3 x 2.5= 6,600 Ton

Total weight of debris (approximately)= 5600+6,600 = 12,200 Ton