

350 PFINGSTEN ROAD, SUITE 106 NORTHBROOK, ILLINOIS 60062 TELEPHONE: 847-559-0085

FAX: 847-559-0181

April 27, 2009

Ms. Sharon Sears
Interactive Designs
308 West Eric Street, Suite 506
Chicago, Illinois 60610

RE: Powell Replacement Elementary School, CPS, 7500 South Drive, Chicago, Illinois

Dewatering Due Diligence Report by GeoSyntec Dated February 19, 2009

Dear Ms. Sears:

We have reviewed the GeoSyntec Report of February 19, 2009. We note that their comments relate to our draft report of June 23, 2008 which was superseded by our final report of July 3, 2008. Some of their comments had been addressed in our final report. Our response to their other comments are as follows:

- 1. Environmental assessment of the site was beyond the scope of our services. Phase one Environmental Assessment Study was performed by others.
- 2. It is not necessary to remove all the fill in the pavement areas or below the floor slab. In our opinion, 1.5 ft. of fill removal as recommended in our report is considered adequate. Proof to detect the detect the existence of hard spots from buried objects and old footings or to detect the zones of overly loose or soft soils. Only local excavation is needed to remove hard objects and loose soils, if encountered.
- 3. New fill and base coarse in paved areas should be as per IDOT gradation CA-6. In the floor slab area the recommended new fill is the same i.e., CA-6. The top 6 inches of the fill under the floor slab should be as per IDOT gradation CA-7 which is a clean fill and is intended to act as a capillary cut off layer and thus to minimize dampness in the floor slab.

- 4. Boring B-10 with deep fill is outside the building area. It is not anticipated that full removal of fill will be needed in the area outside the building and at the location of boring B-10. Boring number B-6 is in the building area. If footing excavation requires a deeper cut in this area, to property.
- 5. The permeability rates given in the final report of July 3, 2008 agree with the rates given in our letter of July 3, 2008.

If there are any questions on this response please do not hesitate to contact us.

Very truly yours,

GROUND ENGINEERING CONSULTANTS, INC.

Safdar A. Gill, Ph. D., P.E.

Consultant

SAFDAR A. M. SAFDA

Exp. 11.30.10



FAX TRANSMISSION SHEET

TO: Ms Tharon Sears
COMPANY: Intersoline Design
FAX NO. 312 - 482 - 9904
DATE: 2. 26.09

FROM: Safdar A. Gill Ground Engineering Consultants, Inc. 350 Pfingsten Road, Unit 106 Northbrook, Illinois, 60062-2032 FAX NO. 847 - 559 - 0181 PHONE NO. 847 - 559 - 0085 TOTAL NO. OF PAGES:

Re: Powell Replacement Elementary School:

De Watering Due Diligence Report by Geosyntec

Chated 2.19.09.

Own final geotechnical seport is dated July 3, 2008. Georgatec comments relate to report of June 23, 2008 relate is superseded by the July 3, 2008 Report.

The permeability rates given in the final report agree with the rates given in our letter of July 3, 2008.

Compaction density of 95% is for the Joshing Subgrade.

of 90% for the floor Stab Subgrade.

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350 PFINGSTEN ROAD, SUITE 106 NORTHBROOK, ILLINOIS 60062 TELEPHONE: 847-559-0085

FAX: 847-559-0181

April 30, 2009

Ms. Sharon Sears Interactive Designs 308 West Erie Street, Suite 506 Chicago, Illinois 60610

RE: Powell Replacement Elementary School, CPS, 7500 South Shore Drive, Chicago, Illinois

Site Preparation

Dear Ms. Sears:

It is our understanding that the first phase of construction of the school will relate to site preparation work only. To this end the site preparation drawing has been prepared by Terra Engineering. Inc. which shows removal of unsuitable soils and backfilling with approved compacted fill for the construction of footings and the base slab. We were requested to clarify our recommendations contained in our Geotechnical Report relating to the extent of site preparation including the depth of excavation for the removal of unsuitable soils and backfilling. A summary of our recommendations is as follows:

- 1. In the floor slab area the existing fill and old footings should be removed to a depth of 1.5 ft. below the bottom of the floor slab.
- 2. In the footing area, if the existing footing top is within 1.5 to 3 ft. below the base of the new footing, the fill above the existing footing must be removed. The existing footing below that level can be left in place.
- 3. If the footings are deeper and the top of the existing footing is deeper than 3 ft. from the base of the new footing then the fill only needs to be removed to 3 ft. depth below the bottom of the proposed footing. The remaining fill and any footing which is deeper can be left in place. The 3 ft. of new fill will provide a bridging for the remaining fill and for support of the new footing.

4. The pool slab and foundations will not need to be removed provided they are a minimum of 3 ft. from the bottom of the proposed footings and the compaction requirements for the subgrade as outlined in our geotechnical report and as mentioned below can be met.

All new fill must be compacted to 95% of ASTM D-1557 maximum density for the footing area and to 90% of ASTM D-1557 maximum density in the floor slab area. Regarding the fill material to be placed in the excavated areas, non organic native sandy soils from the site are considered suitable. However, the available soils should be observed by a soil engineer and tested for Proctor density for controlling the fill density. We had recommended placing a 6 inch layer of clean drainage layer, such as CA-7 gradation, under the floor slab for minimizing dampness. It is desirable that this layer be placed at the time of floor slab construction otherwise it could get contaminated from other construction activities prior to slab construction.

If ground water is encountered during excavation for removal of deep footings or unsuitable fill soils, the over excavation can be backfilled with clean stone such as CA-1, in 9 to 12 inch layers within the water table and choked with CA-6. Once the fill is above the water level, it should be compacted in layers as described above.

It is our understanding that there may be some delay in the start of construction of the foundations following the site preparation work. It is likely that during this period the top portion of the fill may loosen from weathering, precipitation, freeze-for effects and from construction activities. We estimate that this disturbance may extend to a depth of about 6 inches from the finished grade during the site preparation work. When the general contractor starts the construction it will be necessary to re-compact the disturbed soil. The re-compaction must be checked by a Soil Engineer prior to placing the concrete.

If there are any questions on the subject please do not hesitate to contact us.

Very truly yours,

GROUND ENGINEERING CONSULTANTS, INC.

Safdar A. Gill, Ph.D., P.E.

Safdon A. Gill

Consultant

* SAFDAR A. SAFD

Exp. 11.30.10

PARTITION TYPES

ТҮРЕ	LAYER DESCRIPTION	WIDTH A=ACTUAL P=PLAN	STUDS	INSULATION	RATING	U.L./TEST NUMBER
62	(1) LAYER 5/8" GYPSUM BOARD EA SIDE (FULL HEIGHT)	A=4 7/8" P=4 7/8"	3 5/8" METAL C 25 GA	2" MINERAL FIBER BLANKET	1 HOUR STC-49	N465
(C2A)	(1) LAYER 5/8" ABUSE-RESISTANT GYPSUM BOARD EA SIDE (FULL HEIGHT)	A=4 7/8" P=4 7/8"	3 5/8" METAL C	2" MINERAL FIBER BLANKET	NONE (NONE
63	(1) LAYER 5/8" GYPSUM BOARD ONE SIDE (FULL HEIGHT) & (2) LAYERS 5/8" GYPSUM BOARD OPPOSITE SIDE (FULL HEIGHT)	A=7 7/8" P=7 7/8"	6" METAL C	5 1/2" MINERAL FIBER BLANKET	NONE	NONE
)	(1) LAYER 5/8" ABUSE-RESISTANT GYPSUM BOARD EA SIDE (FULL HEIGHT)	SEE PLAN	3 5/8" METAL C	2" MINERAL FIBER BLANKET) NONE	NONE
G6CR	(1) LAYER 5/8" TYPE 'X' GYPSUM BOARD (FULL HEIGHT) EACH SIDE & (1) LAYER 5/8" TYPE 'X' ABUSE RESISTANT GYPSUM BOARD EACH SIDE (FULL HEIGHT)	SEE PLAN	6" METAL C 25 GA	5–1/2" MINERAL FIBER BLANKET	1+2 HOUR STC-50	U420
(G12R)	(2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD EACH SIDE (FULL HEIGHT)	A=8 1/2" P=8 1/2"	6" METAL C 25 GA	5–1/2" MINERAL FIBER BLANKET	1+2 HOUR STC-55	N411
G13R	(1) LAYER 5/8" TYPE 'X' GYPSUM BOARD (FULL HEIGHT) EACH SIDE & (1) LAYER 5/8" TYPE 'X' ABUSE RESISTANT GYPSUM BOARD EACH SIDE (FULL HEIGHT)	A=8 1/2" P=8 1/2"	6" METAL C 25 GA	5-1/2" MINERAL FIBER BLANKET	1+2 HOUR STC-50	U411
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POWELL REPLACEMENT ELEMENTARY SCHOOL 7511 S. SHORE DRIVE CHICAGO, IL 60649

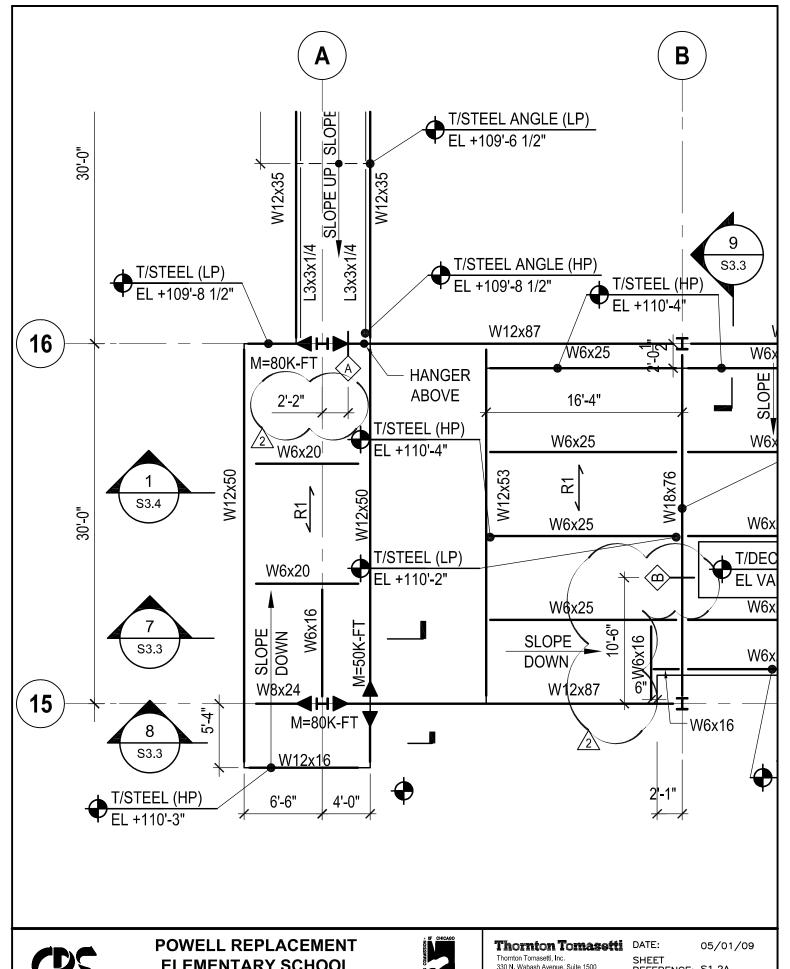
 InterActive Design
 DATE:
 05/01

 308 W. Enis Street, Suite 506
 SHEET
 Chicago, Illinois 60654

 P: 312-482-8866 F: 312-482-8866

05/01/09 SKETCH NUMBER:

ASK-040





ELEMENTARY SCHOOL

7511 S. SHORE DRIVE CHICAGO, IL 60649



Thornton Tomasetti, Inc. 330 N. Wabash Avenue, Suite 1500 Chicago, IL 60611 T 312.596.2000 F 312.596.2001

SHEET REFERENCE: S1.2A SKETCH NUMBER: SSK-001

BEAM WEB PENETRATION SCHEDULE

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NOTES:

- THE MINIMUM CLEAR SPACE BETWEEN TWO ADJACENT PENETRATIONS SHALL BE GREATER OF THE LARGEST PENETRATION DIMENSION OR TWO TIMES THE BEAM DEPTH UON.
- SEE STRUCTURAL DRAWINGS FOR QUANTITY AND LOCATIONS OF PENETRATIONS. ALL BEAM ARCHITECT/ENGINEER. NO PENETRATIONS SHALL BE MADE WITHOUT PRIOR REVIEW PENETRATIONS SHALL BE SHOWN ON THE SHOP DRAWINGS FOR REVIEW BY THE **OF THE ARCHITECT/ENGINEER.** က

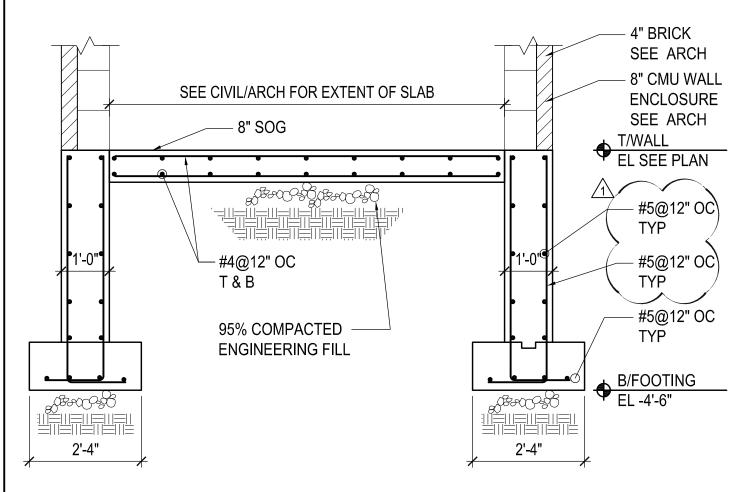


POWELL REPLACEMENT **ELEMENTARY SCHOOL** 7511 S. SHORE DRIVE CHICAGO, IL 60649

Incinion Tomassée Date: Thomton Tomasetti, Inc. 330 N. Wabash Avenue, Suite 1500 Chicago, IL 60611 T 312.596.2000 F 312.596.2001

05/01/09 SHEET REFERENCE: S3.1 SKETCH NUMBER:

SSK-002









7511 S. SHORE DRIVE CHICAGO, IL 60649



Thornton Tomasetti DATE:

Thornton Tomasetti, Inc. 330 N. Wabash Avenue, Suite 1500 Chicago, IL 60611 T 312.596.2000 F 312.596.2001 DATE: 05/01/09 SHEET

REFERENCE: S2.1

SKETCH NUMBER: SSK-003