

GEOTECH FOUNDATION COMPANY - WEST

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PROJECT DESCRIPTION

PROJECT: New Gymnasium – Grants Pass High School

LOCATION: Grants Pass, Oregon

DESIGN TEAM: Architect: Dull/Olsen/Weeks Architects

Structural Engineer: KPFF Consulting Engineers
Geotechnical Engineer: Marquess & Associates

CONTRACTOR: Hoffman Construction Company



DESCRIPTION:

- Tall one and two story gymnasium
- Column loads up to 330 kips
- Bearing wall loads up to 6.5 kips/foot

The project geotechnical investigation revealed widely differing soil conditions to depths up to 20'. Soils ranged from soft sandy clays to loose clayey and silty sands. Relatively dense soils and gravel underlie the upper soft and loose soils.

Structural replacement fill was installed beneath perimeter bearing walls and minor columns. However, the heavily loaded main roof support columns, and columns supporting the grandstands, required more substantial foundation support. Options considered for the columns included 30' to 40' long piles and the Geopier® System. Rammed Aggregate Pier® (RAP) were selected as a cost-effective solution, and because the settlement performance of RAP-supported footings was considered most compatible with that of structural fill-supported footings.

A total of 56 compression RAP's with 30" diameters were installed to support the critical columns. The piers were about 13' to 14' in length.

REFERENCES:

Mr. Rick Jenkins Hoffman Construction Company (503) 221-8811 Mr. Ed Quesenberry, P.E. KPFF Consulting Engineers (503) 227-3251 Mr. Rick Swanson, P.E. Marquess & Associates (541 772-7115