ELEVATION

PLAN

TABLE OF GRS ABUTMENT STATIONS AND ELEVATIONS

NOTES

- CHANGES SHALL NOT BE SCALE.

- ALL GRS ABUTMENT STATIONS AND OFFSETS ARE GIVEN AT THE FRONT FACE OF THE ALIGNMENT KEYS BLOCK. SEE SECTIONS A-A AND B-B ON STANDARD 7.02 FOR LOCATION OF THE ALIGNMENT KEYS BLOCK.

- MAXIMUM ALLOWABLE WALL SLOPE IS 1 VERTICAL TO 1 HORIZONTAL OR 45 DEGREES.

- PROTECT MODULAR BLOCK DURING PLACEMENT OF HEAVY RIPRAPE.

- SEE SECTIONS A-A AND B-B AND TABLE OF MODULAR BLOCK INFORMATION ON STANDARD 7.02 FOR REQUIRED LENGTH OF GEOTEXTILE REINFORCEMENT.

- PROVIDE CORNER BLOCKS AND/OR DETAILS COMPATIBLE WITH THE SELECTED MODULAR BLOCK SYSTEM. ROUNDED CORNERS ARE ALLOWABLE.

- TEMPORARY FALSEWORK NOT TO BE SUPPORTED ON THE GRS ABUTMENT UNLESS APPROVED BY THE BUREAU OF STRUCTURES DEVELOPMENT SECTION.

DESIGNER NOTES

- THE USE OF GRS ABUTMENTS IS SUBJECT TO PRIOR APPROVAL BY THE BUREAU OF STRUCTURES.

- PROVIDE AN EAGLE HEAD MARKER FOR GROUND DETAIL ELEVATION MARKERS. MINIMUM DEPTH SHALL BE 5" FROM FRONT FACE OF WALL TO FRONT FACE OF WALL. MAXIMUM DEPTH SHALL BE 5".

- THE TOP OF THE CONTRAST-COLORED BLOCKS SHALL BE 2-3 BLOCK COURSES BELOW THE TOP OF RIPRAPE ELEVATION.

- NAME PLATE TO BE LOCATED ON THE OUTSIDE OF THE FIRST RIGHT GRS ABUTMENT AND TRAVELING WESTERLY FOR OPEN RAILINGS.

- THE DRAWING SHOWS THE LOCATION OF THE GRS ABUTMENT STEEL REINFORCEMENT, ALLOWED WITHIN THE SPECIAL PROVISIONS, GEOTEXTILE REINFORCED SOIL ABUTMENT.

- THE MINIMUM REQUIRED TENSILE STRENGTH OF THE GEOTEXTILE REINFORCEMENT SHALL BE SHOWN WITHIN THE SPECIAL PROVISIONS, GEOTEXTILE REINFORCED SOIL ABUTMENT.

- WHEN TRAVELING UPSTATION (FOR OPEN RAILINGS)

- FACTORED BEARING RESISTANCE OF XX PSI AT BOTTOM OF REINFORCED SOIL FOUNDATION.

- MAXIMUM ALLOWABLE WALL SLOPE IS 1 VERTICAL TO 1 HORIZONTAL OR 45 DEGREES.

- PROVIDE CORNER BLOCKS AND/OR DETAILS COMPATIBLE WITH THE SELECTED MODULAR BLOCK SYSTEM. ROUNDED CORNERS ARE ALLOWABLE.

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- TEMPORARY FALSEWORK NOT TO BE SUPPORTED ON THE GRS ABUTMENT UNLESS APPROVED BY THE BUREAU OF STRUCTURES DEVELOPMENT SECTION.
NOTES

1. PROVIDE A SUITABLE LIFTING DEVICE FOR THE PRECAST CAP AND COLUMN UNITS.

2. CAST-IN-PLACE ALTERNATIVE IS NOT ALLOWED.

3. STEEL SHIMS AT THE TOP AND BOTTOM OF THE COLUMN.

DESIGNER NOTES

1. PIER CAPS SHALL BE SUPPORTED AT A MINIMUM OF 2 COLUMNS. WHEN MULTIPLE CAPS ARE USED EACH COLUMN SHALL BE SUPPORTED BY A MINIMUM OF 2 COLUMNS.

2. THE FOLLOWING SPECIFICATIONS MAY BE OVERSIZED TO ALLOW FOR ADDITIONAL LATERAL LOADS.

3. DIMENSIONS PRIOR TO DESIGN.

4. LARGER DIAMETER COUPLER SLEEVES.

5. THE MAXIMUM WEIGHT OF EACH PRECAST ELEMENT SHALL BE 90 KIP.

6. THE MAXIMUM DIAMETER OF COUPLER SLEEVE FOR COLUMN REINFORCEMENT DESIGN.

7. STANDARD WISDOT PRACTICE IS TO OVERSIZE COUPLER SLEEVES BY 1 BAR SIZE. ADJUST SHEAR STIRRUPS AS NECESSARY TO ACCOUNT FOR TOLERANCE IN THE FIELD.

8. STANDARD IS TO OVERSIZE COUPLER SLEEVES TO ALLOW FOR ADDITIONAL LATERAL LOADS.

9. PROVIDE A SUITABLE LIFTING DEVICE FOR THE PRECAST CAP AND COLUMN UNIT(S).

MATERIAL PROPERTIES:

\( f_y = 60,000 \text{ P.S.I.} \)

\( f_c' = 3,500 \text{ P.S.I.} \)

\( f_c = 3,000 \text{ P.S.I.} \)

\( f_c' = 3,500 \text{ P.S.I.} \)

\( f_y = 60,000 \text{ P.S.I.} \)

\( f_c = 3,000 \text{ P.S.I.} \)

\( f_c' = 3,500 \text{ P.S.I.} \)

\( f_y = 60,000 \text{ P.S.I.} \)

\( f_c = 3,000 \text{ P.S.I.} \)

\( f_c' = 3,500 \text{ P.S.I.} \)
GROUTED COUPLER NOTES

GROUTED SPLICE COUPLER CONNECTION SEQUENCE

1. Cut the bar extensions to the required length based on the survey and the coupler manufacturer's recommendations for coated bars. The ends of the bars shall be re-coated.

2. blouse the bar extensions using extra bar lengths.

3. Install group in couplers following the manufacturer's written procedures. If the coupler is keyed into the joint, coupler group can be floated into place after element erection but prior to filling of couplers.

4. Install upper element to within the specified elevation tolerances indicated in the special provisions, member testing data from filling and couplers.

5. Install upper group utilizing setting operation. Upper group that is installed on caps that developed in the upper joint using steel tools.

6. Once the upper element, install group in couplers following the manufacturer's written procedures. If the coupler is keyed into the joint, coupler group can be floated into place after element erection.

7. Installation of subsequent elements above a connection shall not commence until the connection was in place and before the column footing group was nonwetted.

8. Brace the upper element.

9. Install group in couplers following the manufacturer's written procedures. If the coupler is keyed into the joint, coupler group can be floated into place after element erection.

10. Erection of subsequent elements above a connection shall not commence until the connection was in place and before the column footing group was nonwetted. Post tensioning of the elements and the timing of subsequent construction steps shall be specified in the bridge assembly plan.

NOTE: THIS BILL OF BARS IS SHOWN FOR INFORMATION ONLY. PAYMENT FOR REINFORCEMENT IN PRECAST COLUMNS AND PRECAST CAPS IS INCLUDED IN THE PRECAST BID ITEMS 'PRECAST PIER COLUMN AND PRECAST PIER CAPS.'
CONTRACTOR NOTES

The contractor shall follow the standards when precast piers are used in lieu of the cast-in-place piers. The Pier Reference Section shall be followed when precast piers are used. The contractor shall follow the standards for precast piers and columns when precast piers are used.

All precast elements shall be in accordance with the manufacturer's instructions. The contractor shall provide a suitable lifting device for the precast cap, column, and bearing block unit.

The contractor may use precast elements at their discretion when plans indicate allowance or with approval by the Bureau of Structures.

The pier cap, column, and bearing block unit shall only be used when plans indicate allowance or with approval by the Bureau of Structures.

See standard 7.07 for cast-in-place bearing block details and additional notes.

DESIGNER NOTES

Include the following note on at least one pier sheet for each pier:

"The contractor may use precast elements at their discretion when plans indicate allowance or with approval by the Bureau of Structures."
PARTIAL TRANSVERSE SECTION
AT DIAPHRAGM PIER
(not shown in typical & plan view)
**DESIGNER NOTE**

See Section 7.1.4.1.2 for additional precast pier guidance.

**CONTRACTOR NOTES**

The contractor shall follow the standard when precast piers are used, and when cast-in-place bearing blocks are used in lieu of precast bearing blocks. See Section 7.07 for additional notes and details.

**CAST-IN-PLACE CONCRETE DETAIL NOTES**

Cast-in-place bearing block details shall only be used when plans indicate allowance for precast piers.

* Cast-in-place height = Value equal to 2'-0" max., contractor to determine the cast-in-place bearing block height.

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**CAST-IN-PLACE BEARING BLOCK DETAILS**

* Approved: Bill Oliva

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**STANDARD 7.07**