

CHINLE UNIFIED SCHOOL DISTRICT #24
P.O. Box 587, Chinle, Arizona 86503

Telephone: (928) 674-9645 ∞ Fax: (928) 674-9644

INVITATION FOR BID

**ADM19-1380 MANY FARMS ELEMENTARY SCHOOL
GYMNASIUM FLOOR REPLACEMENT**

Chinle Unified School District #24
P.O. Box 587 (*mailing address*)
19 Route 27 (*delivery address*)
Chinle, Arizona 86503

Telephone: (928) 674-9645 • Fax: (928) 674-9644

Seal Bids will be accepted until
MAY 11, 2018 at 3:00 p.m. MDST
At CUSD#24 Administration Building
Purchasing Department



Expiration Date: 12/31/2020

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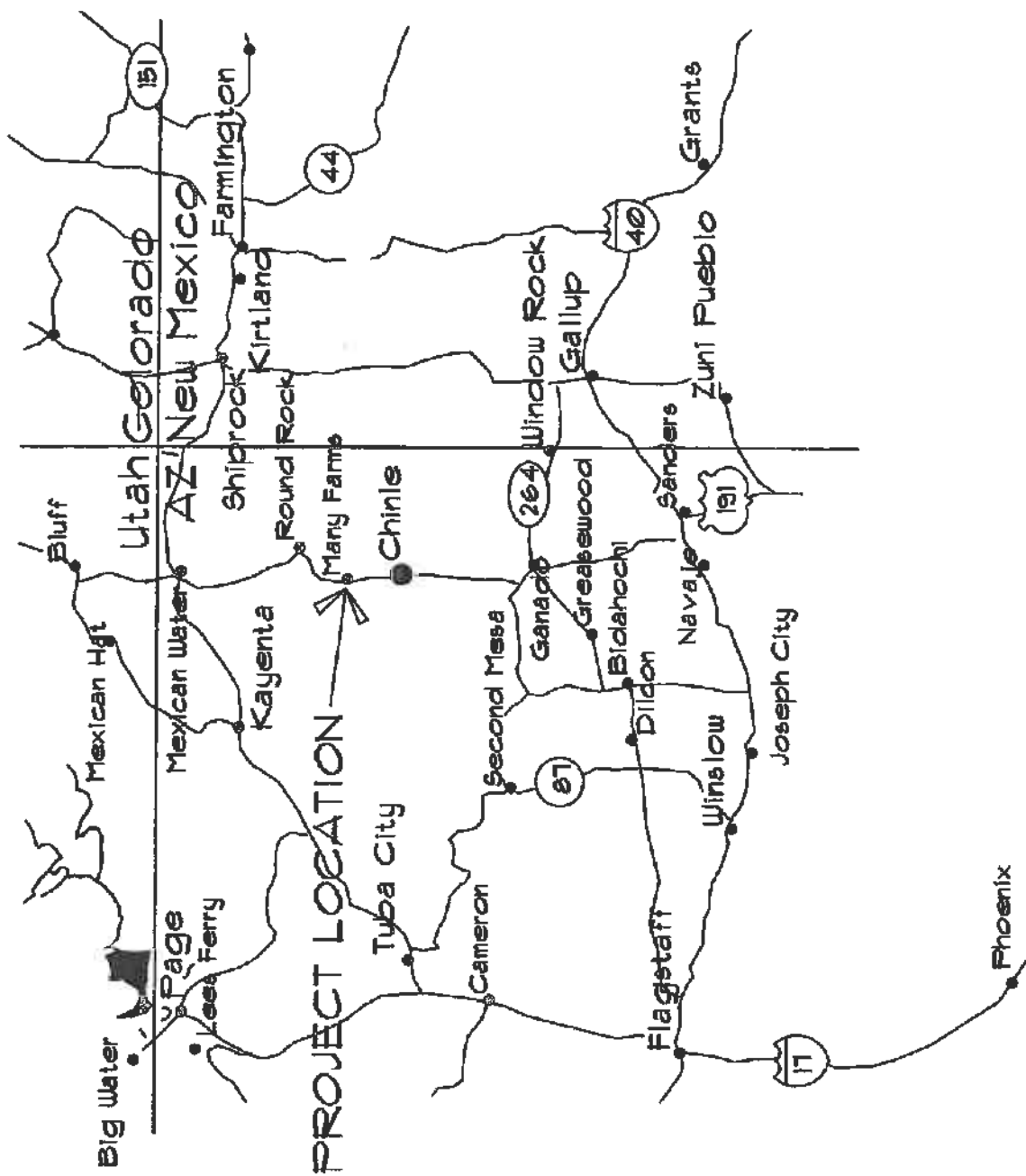
Many Farms Elementary School Gymnasium Floor Replacement CHINLE UNIFIED SCHOOL DISTRICT NO. 24

REFERENCE DRAWINGS:

- A. STATE VINCINITY MAP
- B. MANY FARMS ELEMENTARY SCHOOL – SITE PLAN
- C. MULTI-PURPOSE ROOM FLOOR PLAN

SECTION	TITLE	NO. OF PAGES
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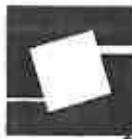
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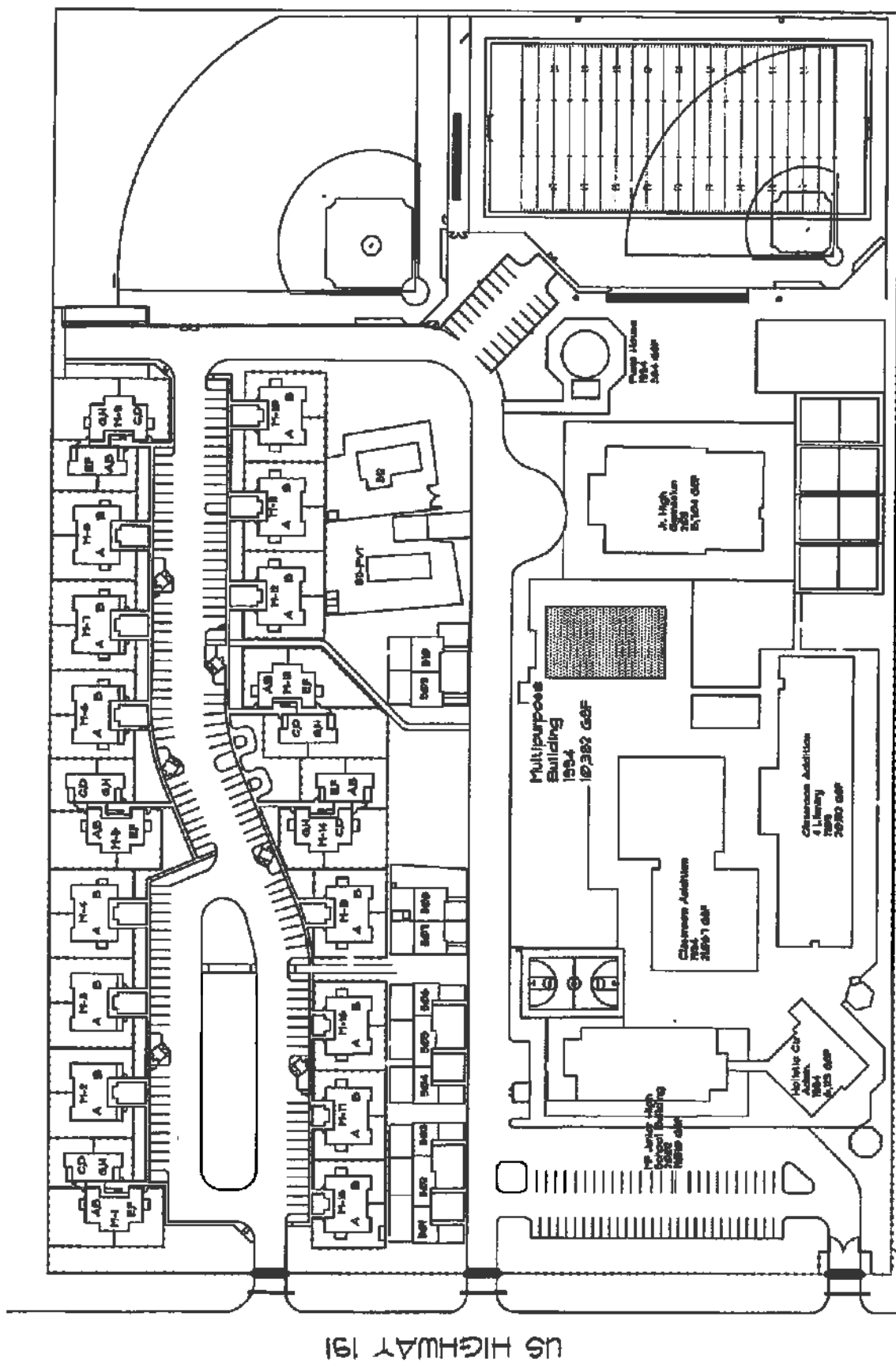


A STATE VICINITY MAP

N.T.S.

GREEN & GREEN, Inc.
 6106 E. Montgomery Road
 Cave Creek, AZ 85331
 Phone: (480) 502-1409





MANY FARMS, AZ - SITE PLAN

NLT 5.



GREEN & GREEN, Inc.
6106 E. Montgomery Road
Cave Creek, AZ 85331
Phone: (480) 502-1409

KEYNOTE 1) - PROVIDE APPROPRIATE FLOORING TRANSITION

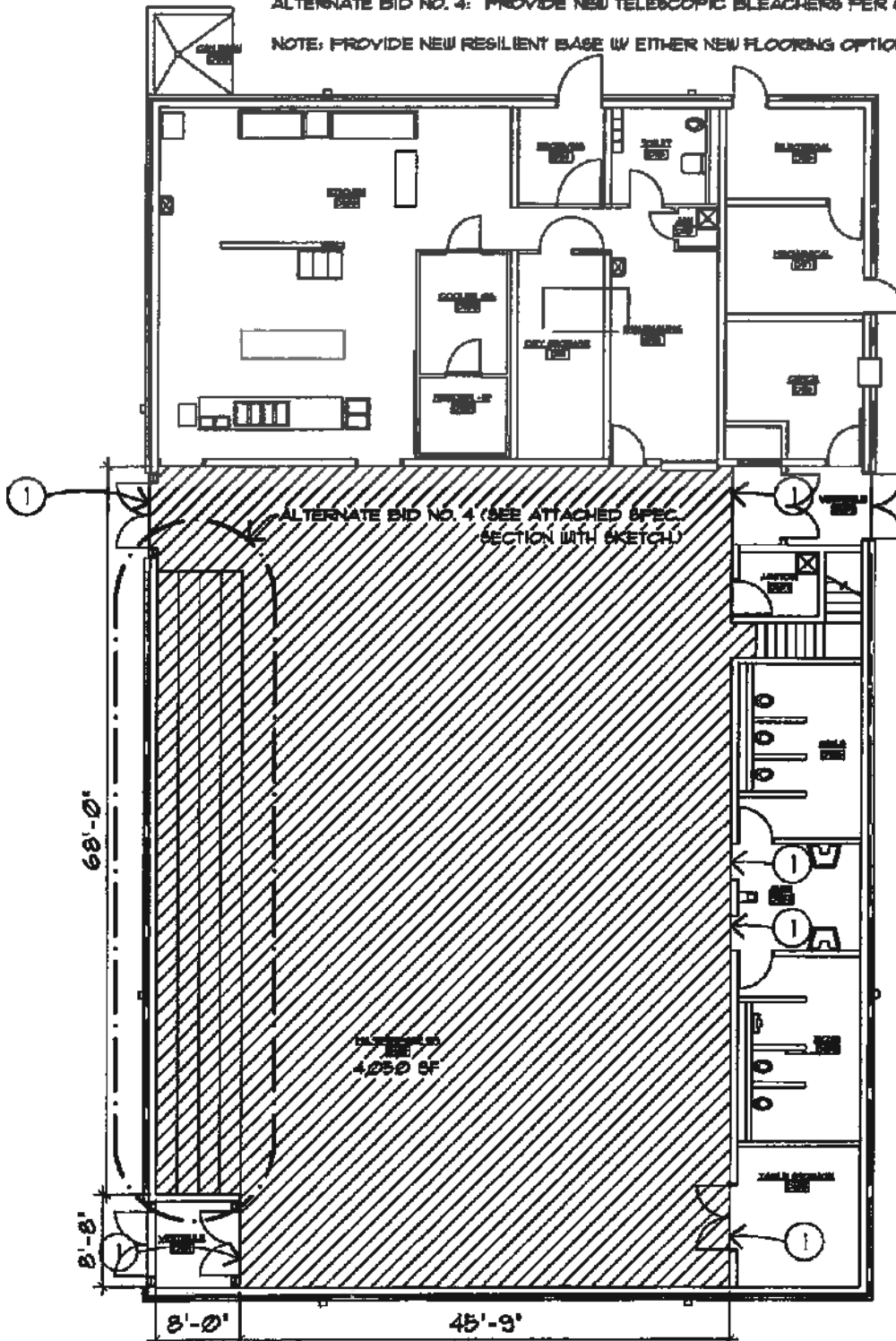


AREA OF EXISTING RUBBER FLOORING TO BE REMOVED (NOT IN CONTRACT)

BASE BID: REPLACE EXISTING FLOOR WITH POLISHED CONCRETE PER SECTION 03365.
 BASE BID: REMOVE EXISTING BLEACHERS, STORE, AND REINSTALL IN ORIGINAL LOCATION

ALTERNATE BID NO. 1: REPLACE EXISTING FLOOR PER SECTION 03636.
 ALTERNATE BID NO. 2: REPLACE EXISTING FLOOR PER SECTION 03656.
 ALTERNATE BID NO. 3: REMOVE BLEACHERS, REPAIR PER IDC 4 ADA AND REINSTALL.
 ALTERNATE BID NO. 4: PROVIDE NEW TELESCOPIC BLEACHERS PER SECTION 2160.

NOTE: PROVIDE NEW RESILIENT BASE W/ EITHER NEW FLOORING OPTION.



GREEN & GREEN, Inc.
 6106 E. Montgomery Road
 Cave Creek, AZ 85331
 Phone: (480) 502-1408



C FLOOR PLAN

SCALE 1/8" = 1'-0"

1 INSTRUCTIONS TO BIDDERS

2
3 To be considered, Proposals must be made in accordance with these Instructions to Bidders.

4
5 Bid Documents

6
7 A full 8-1/2 x 11 Project Manual can be obtained by contacting the Architect listed below. The
8 firm must provide the company name, contact person, e-mail address and phone number. Green &
9 Green, Inc. will respond by inviting the Bidder to the firm Dropbox to retrieve the 8-1/2 x 11
10 Project Manual for complete scope of work and bidding instructions.

11
12 Diane Green, AIA
13 Green & Green, Inc.
14 6106 East Montgomery Road
15 Cave Creek, AZ 85331
16 Office Email: grn2@earthlink.net
17 Personal Email: dgreen61@earthlink.net
18 Office Phone: 480-502-1409
19 Mobile Phone: 480-797-1534
20

21 Administrative and contractual questions regarding the Bid Documents can be addressed to:

22
23 Carmelita Norcross, Purchasing Agent
24 Chinle Unified School District No. 24
25 PO Box 587 (mailing address)
26 19 Route 27 (physical address)
27 Chinle, Arizona 86503
28 Telephone: (928) 674-9645
29 Fax: (928) 674-9644
30 E-Mail: cnorcross@chinleusd.k12.az.us
31 District Website: www.chinleusd.k12.az.us
32

33 Timeline for Bid and Award

34
35 Post Instructions to Bidders on District website: April 16, 2018
36 Advertise for Bid: April 18, 2018 and April 25, 2018
37 Pre-submittal Conference and Walk-thru: May 1, 2018 at 3:00 p.m. MDST
38 Open Bids: May 11, 2018 at 3:00 p.m. MDST
39 CUSD No. 24 Board Approval: June 13, 2018
40

41 Project Schedule

42
43 All bids shall remain firm for a period of 90 days after the date of bid opening.

44
45 The project is expected to require 90 days from Notice to Proceed to Substantial Completion.
46

1 Proposals may not be modified after submittal. Bidders may withdraw Proposals at any time prior
2 to bid opening. Once a proposal is withdrawn, it may not be re-submitted. No Proposal may be
3 modified or withdrawn after the bid opening except where the award of the contract has been
4 delayed for 91 days.

5
6 The competency and responsibility of Bidders and of their proposed Subcontractors will be
7 considered in making the award.

8
9 The Owner reserves the right to reject any or all bids and to award the Contract to other than the
10 lowest Bidder. The Owner further reserves the right to waive any informality or irregularities in
11 the bidding process. In addition, the Bidder recognized the right of the Owner to reject a bid if the
12 Bidder failed to furnish any required bid security, or to submit the data required by the Bidding
13 Documents, or if the bid is in any way incomplete or irregular.

14
15 The Contractor shall be prepared to enter into and execute a Contract, if awarded on the basis of his
16 proposal, within 5 days after receipt of Contract, and to furnish guaranty bonds and insurance
17 certificates in accordance with the Contract Documents.

18 19 20 Examination

21
22 Before submitting a Proposal, Bidders shall carefully examine the Drawings and Project Manual,
23 and fully inform themselves as to all existing conditions and limitations; and shall include in the
24 Proposal a sum to cover the cost of all items included in the Contract. The General Contractor if
25 awarded the Contract, shall not be allowed any extra compensation by reason of any matter or
26 thing, concerning which such Bidder might have fully informed himself prior to the bidding. A
27 pre-proposal conference is not scheduled at this time.

28 29 Interpretations, Addenda

30
31 Should a Bidder find any ambiguity, inconsistency or error in the Drawings and Project Manual, or
32 should he be in doubt as to their meaning, he shall at once notify the Architect, in writing, who will
33 send a written addendum to all Bidders. Neither Owner nor Architect will be responsible for oral
34 instructions or information. Questions received less than 4 days before the bid opening cannot be
35 answered in writing.

36
37 Any Addenda issued by the Architect during the time of bidding are to be included in the Proposal,
38 and in closing a Contract they will become a part thereof. Acknowledge receipt of Addenda on the
39 Proposal Form in the space provided. Addenda will be e-mailed to each person or firm recorded by
40 the Architect as having received the Bidding Documents and will be available for inspection at the
41 District website where the bid document was originally obtained.

42 43 Substitutions

44
45 Identification of material or equipment by manufacturer's name or trade name is not meant to give
46 preference to any manufacturer, but merely to establish a basis of design.

- 1
2 1. To obtain approval to use unspecified products, Bidders shall submit by mail, overnight
3 shipping or hand delivery to the Architect, a written Substitution Request Form (included in
4 the Project Manual) at least 14 calendar days before the Bid Date and hour. Requests
5 received after this time will not be considered. Requests shall clearly describe the product
6 for which approval is asked, including comparative data necessary to demonstrate
7 acceptability. The Architect- Engineer will consider and either approve or reject all
8 proposals submitted and will comply with the following requirements:
9
 - 10 a. If, by the close of the tenth day prior to the deadline for receiving bids, the
11 Architect-Engineer has approved any alternative product proposals, the Bidding
12 Documents will be modified to include the alternative products in an Addendum
13 issued to Prime Bidders of record at least 10 days prior to Bid Date.
14
 - 15 b. If the Architect-Engineer rejects an alternative product proposal, he shall give notice
16 of the rejection to the Bidder prior to the deadline for receiving bids. Notice shall
17 include a description of the rejected product.
18
- 19 2. Substitution requests shall be made on the "Substitution Request Form" included with the
20 Bid Forms.
21
- 22 3. The decision of the Architect-Engineer regarding the approval of items for which
23 substitution is requested will be final. In the event an approved substitution is later
24 determined by the Architect-Engineer to be unacceptable for any reason, including the
25 necessity to perform extended redesign or rework of the project in order to accommodate
26 the substitution, or if it becomes apparent to the Architect-Engineer that the substituted item
27 will not perform or function as well as the specified item, the Bidder will be required to
28 furnish the original specified item or request approval to use another substitution. The
29 Bidder shall pay all costs, expenses or damages associated with or related to the
30 unacceptability of a substitution and the resultant utilization of any item. The Bidder
31 further understands and agrees that a time extension will not be granted due to delays
32 associated with or related to the unacceptability of a substitution.
33
- 34 4. If a substitution is approved, no subsequent change in brand or make will be permitted
35 unless satisfactory written evidence is presented to the Architect-Engineer that the
36 manufacturer cannot make scheduled delivery of the approved substitute item.
- 37 5. Substitutions will not be considered for approval by the Architect-Engineer after the award
38 of the Contract, if:
39
 - 40 a. The proposed substitution is indicated or implied on shop drawings or product data
41 submittals and has not been formally submitted for approval by the Bidder in
42 accordance with the above stated requirements.
43
 - 44 b. Acceptance of the proposed substitution will require substantial design revisions to
45 the Contract Documents or is otherwise not acceptable to the Architect-Engineer
46

1 The Contractor shall be prepared to begin construction within 5 calendar days from the date
2 established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the
3 Owner-Contractor Agreement or such other date as may be established therein.

4
5 State Sales Tax: The Bidder shall include State of Arizona Sales Tax, as imposed under the
6 contracting classification, in his Bid.

7
8 Local Option Sales Tax: The Bidder shall include all applicable sales tax in his bid.

9 Navajo Business Activity Tax shall be included in the lump sum Base Bid and alternate bid
10 amounts.

11
12 Prevailing Wages: Laborers and mechanics employed on the Project shall be paid wages at the
13 minimum wage rates as published by the Office of Navajo Labor Relations (attached) under the
14 Navajo Labor Laws and Wages or Davis Bacon which ever is higher.

15
16 Illegal Aliens: The Contractor shall not employ on the Project any alien illegally in the United
17 States.

18
19 Asbestos Containing Materials: No materials used on this Project shall contain asbestos.
20 Contractor shall provide a certificate stating that no materials containing asbestos have been used
21 on this Project.

22
23 Asbestos Free Certification:

24
25 1. The Contractor, Subcontractors and Material Suppliers shall provide and install materials
26 that are ASBESTOS FREE. The Owner's certified (OSHA/AHERA/EPA) asbestos
27 inspector will periodically inspect the job site for compliance. The Owner reserves the right
28 to remove any suspected ACM for testing. Costs for such testing will be paid for by the
29 Owner, unless the material is revealed to contain asbestos in which case the costs shall be
30 paid by the Contractor.

31
32 2. Any material containing asbestos must be removed by a licensed asbestos abatement
33 contractor and replaced with non-asbestos containing equals at no cost to the Owner.
34 Should removal be required, the Owner's (OSHA, AHERA/EPA) asbestos inspector shall
35 have the authority to inspect and approve the abatement project.

36
37 Required Documents

38
39 Navajo Indian Employment Preference: The Contractor shall give preference in employment for
40 all work performed under the Contract, including subcontracts there under, to qualified Navajo
41 Indians regardless of age, religion, sex. The Contractor shall also provide employment and training
42 opportunities to Navajo Indians that are not fully qualified to perform under the Contract,
43 regardless of religion, age or sex, to the extent it is consistent with the efficient performance of the
44 Contract. The Contractor shall comply with the Guidelines for the Establishment of Navajo
45 Manpower Utilization requirements in Construction Activity established by the Navajo Nation.

1 The Contractor is required to submit with his Proposal a Bid Bond in an amount equal to 5% of the
2 Base Bid made payable to the Owner. The bid security shall be given as a guarantee that the
3 Bidder will enter into a Contract if awarded to him and shall be declared forfeited as liquidated
4 damages if he refuses to enter into said Contract upon request to do so by the Owner. Bid security
5 will be returned to the unsuccessful Contractors and to the successful Bidder upon his execution of
6 a satisfactory Payment and Performance Bond and Contract.

7
8 Bid Bond shall be executed on a standard Statutory Bid Bond Form.

9 Subcontractor Listing

10
11 A complete list of proposed Subcontractors and / or Manufacturers is to be provided on the
12 Subcontractor List form provided in the Project Manual. Submit in separate sealed envelope
13 containing Proposal Form.

14
15 Contractors License Law

16
17 Contractor shall comply with, and require all subcontractors to comply with State and City
18 Contractors License Law, and be duly registered and licensed thereunder.

19
20 Insurance Limits

21
22 The insurance required under Article 11.1 of the General Conditions shall be written for the
23 following minimum limits:

24
25 Contractor's Liability Insurance (shall be submitted on the appropriate Accord Form):

26
27 Workers compensation

28 State	Statutory
29 Federal	Statutory
30 Employer's Liability	\$ 100,000 per accident

31
32 Commercial General Liability including Premises-Operations; Independent Contractors' Protective;
33 Products and Completed Operations; Broad Form Property Damage:

34
35 Combined Single Limit: \$1,000,000 each occurrence
36 \$1,000,000 aggregate

37
38 Products and Completed Operations Insurance shall be maintained for a minimum period of one
39 year after final payment and Contractor shall continue to provide evidence of such coverage to
40 Owner on an annual basis during the aforementioned period.

41
42 Property Damage Liability Insurance shall include XCU coverage.

43
44 Contractual Liability (Hold Harmless Coverage):

45
46 Bodily Injury: \$1,000,000 each occurrence

1 Property Damage: \$1,000,000 each occurrence
2 \$1,000,000 aggregate
3

4 Personal Injury, with Employment Exclusion deleted:
5

6 \$1,000,000 aggregate
7

8 Comprehensive Automobile Liability (owned, non-owned, hired):

9 Bodily Injury \$1,000,000 each person
10 \$1,000,000 each accident
11

12 Property Damage: \$1,000,000 each occurrence
13

14 Performance Bond
15

16 Contractor is required to provide and pay for Performance and Payment Bond. Bond shall cover
17 the faithful performance (100%) of the Contract and the payment of all obligations (100%) arising
18 there under, in such form as the Owner may prescribe and with such sureties as he may approve.
19 The bidder shall deliver the required bonds to the Owner not later than the date of execution of the
20 Contract. The Bidder shall require the attorney in fact who executes the required bonds on behalf
21 of the surety to affix thereto a certified and current copy of his power of attorney indicating the
22 monetary limit of such power.
23

24 Bonds shall be executed on Statutory Bond Forms bound herein with amount shown on each part
25 equal to 100% of the total amount payable by terms of the Contract. Surety shall be company
26 licensed to do business in State in which work is located and shall be acceptable to Owner. Bond
27 amount shall be increased to include any Change Order added to the Contract to 100% total value
28 amount of each Change Order.
29

30 Summary of Work
31

32 See Section 01010, Summary of Work, for description of the work.
33

34 Social Security Act
35

36 The Contractor agrees to comply with and to require all of his Subcontractors to comply with all
37 the provisions of the Act of Congress approved August 14, 1935, known and cited as the "Social
38 Security Act" and also the provisions of the act of the State Legislature approved, and known as the
39 State Unemployment Compensation Law and all other laws and regulations pertaining to labor and
40 workmen and all amendments and to such data, and the Contractor further agrees to indemnify and
41 save harmless the Owner of and from any and all claims and demands made against it by virtue of
42 the failure of the Contractor or any Subcontractors to comply with the provisions of any or all of
43 said Acts and Amendments.
44
45
46

1 Waiver of Liens

2
3 The Contractor is responsible for the payment of all bills for labor and materials furnished by, or to,
4 the Subcontractors and himself on this Project, and the contractor shall also deliver to the Owner a
5 Waiver of Liens in duplicate from himself and each of his Subcontractors, if any, and at such time
6 he shall certify that he is submitting such lien waivers for all Subcontractors involved. A bond in
7 lieu of Waivers will not be satisfactory.
8

9 Qualifications of Contractors

10
11 Bidders to whom an award of a contract is under consideration shall submit to the Architect upon
12 his request a properly executed Contractor's Qualification Statement, AIA Document A- 305.
13

14 Failure to Complete Work Within Time for Completion and Liquidated Damages

15
16 It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that
17 the date of beginning, rate of progress and the time for completion of the work to be done
18 hereunder are essential conditions of this Contract; and it is further mutually understood and agreed
19 that the work embraced in this Contract shall be commenced on a date to be specified in the Notice
20 to Proceed.
21

22 The Contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly
23 at such rate of time he specifies. It is expressly understood and agreed, by and between the
24 Contractor and the Owner, that the time for completion of the work will be in the time in calendar
25 days as stipulated by the Contractor in the Proposal Form.
26

27 For each calendar day that any part of the work remains uncompleted after the expiration of the
28 time specified and/or allowed for completion of the work stipulated in the contract or ordered after
29 the Contract is signed, the sum per day shall be deducted from any monies due the Contractor, or if
30 no money is due the Contractor, the Owner shall have the right to recover said sum or sums from
31 the contractor, from the surety, or from both.
32

33 It shall be understood that the time to complete the Project, beyond the contractual date of
34 completion, is in itself prima facie evidence of actual damages incurred, and the amount of these
35 deductions are to cover the liquidated damages caused by the loss of use, or limited use, of the
36 building and other additional Owner incurred losses, or expenses, due to the failure of the
37 Contractor to complete the work within the time specified.
38

39 Now, if the said Contractor shall neglect, fail or refuse to complete the work within the time
40 specified, then the Contractor does hereby agree, as a part consideration for the awarding of the
41 Contract, to pay the Owner \$500.00 per calendar day, until the Project is completed, not as a
42 penalty, but as liquidated damages for such breach of contract as hereinafter set forth, for each and
43 every calendar day that the Contractor shall be in default after the time stipulated in the Contract
44 for completing the work.
45

1 The said amount is fixed and agreed upon by and between the Contractor and the Owner because of
2 the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner
3 would in such event sustain, and said amount is agreed to be the amount of damages which the
4 Owner would sustain, and said amounts may be retained from time to time by the Owner from
5 current periodical estimates.
6

7 It is further agreed that time is of the essence of each and every portion of this Contract and of the
8 Specifications where a definite and certain length of time is fixed for the performance of any act
9 whatsoever; and where under the Contract an additional time is allowed as hereinbefore mentioned
10 for the completion of any work, the new time limit fixed by such extension shall be of the essence
11 of this Contract, provided that the Contractor shall not be charged with liquidated damages or any
12 excess cost when the delay in completion of work is due:
13

14 To unforeseeable cause beyond the control and without fault or negligence of the Contractor,
15 including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of
16 another Contractor in the performance of a contract with the Owner, fires, floods, epidemics,
17 quarantine, restrictions, strikes, freight embargoes, and unusually severe weather. The unusualness
18 of the weather shall be determined by statistics from the local Weather Bureau over a period of the
19 last 10 years. Upon request of the Architect, the Contractor shall obtain statistical information
20 from the Weather Bureau to support his claim for extension caused by unusual weather conditions.
21

22 Provided, further, that the Contractor shall, within 7 days from the beginning of such delay, notify
23 the Architect, in writing, of the causes of the delay, who shall ascertain the facts and extent of the
24 delays and notify the Contractor within a reasonable time of his decision in the matter.
25
26

27 END OF SECTION
28

SUBSTITUTION REQUEST FORM

FAX SUBSTITUTION REQUEST WILL NOT BE ACCEPTED

TO:

PROJECT:

We hereby submit for your consideration the following product instead of the specified item for the above project:

<u>Section</u>	<u>Page</u>	<u>Paragraph/Line</u>	<u>Specified Item</u>
----------------	-------------	-----------------------	-----------------------

Proposed Substitution:

Attached complete product description, drawings, photographs, performance and test data, and other information necessary for evaluation. Identify specific model numbers, finishes, options, etc.

A. Will changes be required to building design in order to properly install proposed substitution?

Yes ____ No ____ . If yes, explain.

B. Will the under signed pay for the changes to the building design, including engineering and drawing costs, caused by requested substitution? Yes ____ No ____.

C. List differences between proposed substitution and specified item.

<u>Specified Item</u>	<u>Proposed Substitution</u>
-----------------------	------------------------------

D. Does the substitution affect drawings dimensions?

Yes ____ No ____.

E. What affect does substitution have on other trades?

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2
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53

F. Does manufacture's warrant of proposed substitution differ from that specified.
Yes ____ No ____ . If yes explain: _____

G. Will substitution affect progress schedule? Yes ____ No ____ . If yes explain:

H. Will substitution require more license fees or royalties than specified product?
Yes ____ No ____ . If yes explain:

I. Will maintenance and service parts be available for substitution?
Yes ____ No ____ . If yes explain:

Submitted By: _____
Signature Date
Firm Telephone
Address

For Architect's Use: ____ Accepted ____ Accepted as Noted
____ Not Accepted ____ Received Too Late

By: _____ Date: _____

Remarks: _____

For Owner's Use: ____ Accepted ____ Accepted as Noted
____ Not Accepted ____ Received Too Late

By: _____ Date: _____

Remarks: _____

1 PROPOSAL FORM

2
3 To: Ms. Priscine Jones, Business Manager
4 Chinle Unified School District #24
5 P. O. Box 587
6 Chinle, AZ 86503
7

8 Re: Many Farms Elementary School
9 Gymnasium Floor Replacement
10

11 We, the undersigned, propose to do all the work, and furnish all the labor, physical plant and
12 materials necessary for the construction of subject Project as set forth in the Drawings and Project
13 Manual titled:

14
15 "Many Farms Elementary School - Gymnasium Floor Replacement as prepared by Green & Green,
16 Inc., Architects.
17

18 We further declare that we have carefully read and examined the Project Manual including the
19 Bidding Requirements, Contract Forms, General Conditions, all other Sections, all sheets of the
20 Drawings; that we have made a personal examination of the site and that we understand the exact
21 scope of the Project.
22

23 We acknowledge that we understand the Navajo Labor Laws and Regulations regarding these
24 projects as well as the Navajo Business Tax requirements.
25

26 We acknowledge receipt of the following Addenda and have included provisions in this Proposal:

27
28 Addendum No. _____ Dated _____
29

30 Addendum No. _____ Dated _____
31

32 Addendum No. _____ Dated _____
33

34 Addendum No. _____ Dated _____
35

36 In submitting this Proposal, we agree:

- 37
38 1. To hold the Proposal open until 90 days after date for receipt of bids.
39
40 2. To accept the provisions of the Instructions to Bidders regarding disposition of Bid
41 Security.
42
43 3. To enter into and execute a Contract, if awarded on the basis of this Proposal, within 10
44 days after date of receipt of Contract, and to furnish guaranty bonds and insurance
45 certificates in accordance with the Contract Documents.
46

1 4. To accomplish the work in accordance with the Contract Documents.

2
3 5. To provide Substantial Completion of the Project within 90 calendar days from date of
4 Notice to Proceed and that, failure to complete within this time will result in deduction
5 of liquidated damages as specified in the Instructions to Bidders.

6
7 6. The undersigned agrees to construct the Chinle High School – Additions & Renovations
8 for the lump-sum price

9
10 of _____ Dollars

11
12 (\$ _____). The said amount constituting the

13
14 The Base Bid may be increased in accordance with the following Alternate Bids as may be selected
15 by the Owner, for the added or deducted costs listed. (Please circle ADD or DEDUCT).

16
17 Alternate Bid No. 1 ADD / DEDUCT: \$ _____

18
19 Alternate Bid No. 2 ADD / DEDUCT: \$ _____

20
21 Alternate Bid No. 3 ADD / DEDUCT: \$ _____

22
23 Alternate Bid No. 4 ADD / DEDUCT: \$ _____

24
25 We have enclosed the required Bid Security, Non-Collusion Affidavit, Subcontractor Listing.

26
27 Date: _____

28
29 Contractor: _____
30 (include seal if corporation)

31 By: _____

32
33 Title: _____

34
35 Address: _____

36
37 Telephone No.: _____

38
39 License No.: _____

40
41 Surety (include address/phone): _____

1 SUBCONTRACTOR LIST FORM

2
3
4 This attachment to the Proposal Form shall be submitted along with the Proposal Form, each of which
5 shall be placed in separate sealed envelopes.

6
7 Each envelope shall bear the name of the Contractor making submittal with identification of contents
8 contained therein.

9
10 The Contractor must list below the names of all qualified Subcontractors or suppliers he will employ
11 for the various portions of the work indicated. Failure on the part of the Contractor to complete or
12 properly complete this list will constitute sufficient grounds to reject his bid.

13
14 The Contractor may list himself to perform one or more of the listed categories of work for which he
15 has any requisite state licenses when required. In this case, all personnel performing such work at the
16 site shall be carried on his own payroll, except that he may sublet those portions of the work, which are
17 traditionally and commonly sublet by the representative Subcontractor in the community. If equipment
18 is leased with operators, the operators need not be carried on the Contractor's payroll.

19
20 List only a single name for each listing. List names only for Base Bid as per your Proposal. List
21 submitted by unsuccessful Bidders will be returned unopened.

22
23 Polished Concrete Floor Finishing_____

24
25
26 Resilient Base_____

27
28
29 Existing Telescopic Bleachers (move, store and relocate only)_____

30
31
32
33
34
35 Signed_____
36 (Contractor)

NON-COLLUSION AFFIDAVIT

State of Arizona)
)
County of) ss.

_____, affiant,
the _____ of
(TITLE)
_____.
(CONTRACTOR)

the person, corporation or company who makes the accompanying Proposal, having first been duly sworn, deposes and says:

That such Proposal is genuine and not sham or collusive, nor made in the interest or behalf of any person not herein named, and that the Bidder has not directly or indirectly induced or solicited any other Bidder or put in a sham bid, or any other person, firm or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure for itself an advantage over any other Bidder.

(TITLE)

Subscribed and sworn to before me this day of _____, 20_____.

SIGNATURE OF NOTARY PUBLIC IN AND FOR THE
COUNTY OF _____
STATE OF _____
(My commission Expires _____ 20____)

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS:

THAT, _____
(hereinafter called Principal), as Principal, and _____
_____, a corporation organized and existing
under the laws of the State of _____, with its principal office in
the City of _____, (hereinafter called the Surety), as Surety, are held
and firmly bound unto the _____ Unified School District No. _____
of _____ County, (hereinafter called the Obligee) in the amount of _____
Dollars (\$ _____), for the payment whereof,
the said Principal and Surety bind themselves, and their heirs, administrators, executors,
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the principal has entered into a certain written contract with the Obligee,
dated the _____ day of _____, 20_____, to construct and complete a certain
work described as _____

which contract is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

NOW, THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, that the
said Principal shall faithfully perform and fulfill all the undertakings, covenants, terms,
conditions and agreements of said contract during the original term of said contract and any
extension thereof, with or without notice to the Surety and during the life of any guaranty
required under the contract, and shall also perform and fulfill all the undertakings, covenants,
terms, conditions, and agreements of any and all duly authorized modifications of said contract
that may hereafter be made, notice of such modifications to the Surety being hereby waived; then
the above obligations shall be void, otherwise to remain in full force and effect.

The provisions of the Arizona School District Procurement Rules, Arizona
Administrative Code, Title 7, Chapter 2, Article 10, R7-2 1001, et seq., including the Contract
Claims and Controversies provisions thereof, are incorporated herein by reference.

Witness our hands this _____ day of _____, 20_____.

Principal Seal

By _____

Surety Seal

By _____

Agency of Record

PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

THAT,
(hereinafter called Principal), as Principal, and _____
_____, a corporation organized and existing
under the laws of the State of _____, with its principal office in
the City of _____, (hereinafter called the Surety), as Surety, are held
and firmly bound unto the _____ Unified School District No. _____
of _____ County, (hereinafter called the Obligor) in the amount of _____
Dollars (\$ _____), for the payment whereof,
the said Principal and Surety bind themselves, and their heirs, administrators, executors,
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the principal has entered into a certain written contract with the Obligor,
dated the _____ day of _____, 20_____, to construct and complete a certain
work described as _____

which contract is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

NOW, THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, that if the
said Principal shall promptly pay all monies due to all persons supplying labor or materials to him
or his subcontractors in the prosecution of the work provided for in said contract, then this
obligation shall be void, otherwise to remain in full force and effect.

The provisions of the Arizona School District Procurement Rules, Arizona
Administrative Code, Title 7, Chapter 2, Article 10, R7-2 1001, et seq., including the Contract
Claims and Controversies provisions thereof, are incorporated herein by reference.

Witness our hands this _____ day of _____, 20_____.

Principal Seal

By _____

Surety Seal

By _____

Agency of Record

1 SECTION 01010

2
3 SUMMARY OF WORK

4
5
6 PART 1 - GENERAL

7
8 Work Included

9
10 The enclosed plans and specifications are for the replacement of the gymnasium floor at the Many
11 Farms Elementary School. The demolition, mercury abatement and testing are to be completed by
12 others prior to commencing with this project. The following is a summary of the Base Bid:

- 13
14
 - Polished Concrete Floor Finishing per specification Section 03365
 - New Resilient Base per specification Section 09662 (use with all flooring options).
 - Remove the existing bleachers, store during construction and re-install in the original location.

15
16
17
18 Specifications

19
20 In the preparation of these Specifications an effort has been made to segregate the various branches of
21 the work under headings, by trades. This is done only for convenience and shall not relieve the
22 Contractor of the responsibility of furnishing every item indicated or specified whether properly
23 segregated or not.

24
25 No responsibility will be assumed by the Owner or the Architect for omissions or duplications by the
26 Contractor in the completion of the Contract due to any alleged error in the arrangement of the material
27 in these Specifications nor shall any such segregation of work and materials operate to make the
28 Architect an arbiter in defining limits to the Agreements between the Contractor and his Subcontractors
29 or Suppliers.

30
31 The misplacement, addition or omission of any letter, word or punctuation, or lack of capitalization of a
32 word, shall in no way damage the true spirit, intent, or meaning of these Specifications.

33
34 The word "shown", "indicated", "noted", "scheduled", or words of like effect shall be understood to
35 mean that reference is made to the Drawings accompanying these Specifications.

36
37 Where reference herein is made to colors or finishes "as selected" the reference is to the Architect.

38
39 Reference to known standards within these Specifications shall mean and intend the latest edition or
40 amendment published prior to the date of these Specifications, unless specifically specified otherwise,
41 and to such portions of it that relate and apply directly to the material or installation called for on the
42 Project.

43
44 Disposition of Utilities

45
46 Observe rules and regulations governing the respective utilities in executing all work under this
47 heading.

1 Adequately protect active utilities from damage. Remove or relocate only as indicated or specified.
2 Remove, plug or cap inactive and abandoned utilities encountered during the work. If there are no
3 specific requirements, plug or cap such utility lines at least 3 feet outside of new building walls or as
4 required by local regulations.

5 6 Architectural and Engineering Services 7

8 It is understood that normal architectural and engineering liaison for the purpose of interpretation of the
9 Contract Documents is provided for by the Owner. Should any services of the Architect be required to
10 assist in the corrections of errors or omissions in construction by the Contractor, or services of the
11 Architect be required because of changes in structure or equipment where the Contractor has requested
12 approval of substitute methods or materials, these services will be provided by the Architect at his
13 standard hourly rates, and shall be paid for by the Contractor.

14 15 Safety Requirements 16

17 These Construction Documents, and the joint and several phases of construction hereby contemplated
18 are to be governed, at all times, by applicable provisions of the federal laws, including but not limited
19 to, the latest amendments of the Occupational Safety and Health Standards and the Safety and Health
20 Regulations for Construction.

21 22 Contractor's License Law 23

24 Contractor shall comply with, and require all Subcontractors to comply with, State and City
25 Contractor's license laws and be duly registered and licensed thereunder.

26 27 Approved Applicators 28

29 Where specific instructions in these specifications require that a particular product and/or material(s)
30 be installed and/or applied by an approved applicator of the manufacturer, it shall be the Contractor's
31 responsibility to ensure that any Subcontractors used for such work be approved applicators.

32 33 Watertight-Weathertight 34

35 The Contractor accepts the responsibility of constructing a watertight, weathertight project.

36 37 Signed Drawings and Specifications 38

39 Immediately upon signing the Contract for the work, the Contractor shall sign two complete Project
40 Manuals (signatures are to be applied on the Table of Contents sheet thereof) as additional evidence of
41 his understanding of the work called for with such Alternatives and Amendments as specifically
42 mentioned in the Agreement. These shall become Contract Drawings and Contract Project Manual.

43 44 Project Description 45

46 All documents are bound in the Project Manual, including an 8-1/2" x 11 noted floor plan of the
47 existing gymnasium with square foot numbers and dimensions included.

1 Work By Others

2
3 The work which is not in this contract is the removal and abatement of the existing rubber floor and all
4 mercury contaminates related to the existing rubber floor, adhesives or substrates.

5
6 Occupancy Prior to Completion

7
8 The Owner shall have the right to occupy portions of the gymnasium that are completed on or after the
9 specified completion date (even though the Contractor may not have completed the entire Project).
10 Such occupancy by the Owner will not release the Contractor or his bonding agency from any
11 warranties or guarantees and final completion of work in accordance with the Contract Documents.
12

13 Contractor Use of Premises

14
15 The Contractor shall limit the storage of materials and equipment to the areas indicated.

16
17 At no time during the work under the Contract shall the Contractor place, or cause to be placed, any
18 material or equipment, etc., at any location that would impede or impair access to or from the present
19 facilities for their customers, employees, or delivery facilities.
20

21 The Contractor shall cooperate with the Owner to the fullest extent in providing traffic control during
22 the course of construction so as to provide a minimum of inconvenience to District staff and students.
23

24 The Contractor shall send proper notices, make all necessary arrangements, and perform all services
25 required in the care and maintenance of all public utilities. The Contractor shall, during the
26 construction period and until final acceptance of the work as a whole by the Owner, assume all
27 responsibility concerning the same for which the Owner may be liable.
28

29 Two Year End Inspection

30
31 The Owner, Architect and Contractor are to make a two-year-end inspection in accordance with
32 subparagraph 12.2.2 of the General Conditions. Architect to notify, in writing, Owner and Contractor
33 of any problems. Any costs related to this two-year-end inspection are to be included in the bid
34 proposal. A two-year warranty is a project requirement.
35

36
37 END OF SECTION

1 SECTION 01030

2
3 ALTERNATE BIDS

4
5
6 Work Specified Herein

7
8 Included are all Alternate Bid items for which Contractors are required to submit Bid Proposals.
9 Insert cost numbers in the respective locations as provided on the Proposal Form. Each bid is to
10 include its respective proportional amount of overhead and profit.

11
12 Alternate Bids:

13
14 Alternate Bid No. 1:

15 Provide new Sheet Vinyl Resilient Multi-Purpose Flooring per specification Section 09656.

16
17 Alternate Bid No. 2:

18 Provide new Synthetic Athletic Flooring per specification Section 09658.

19
20 Alternate Bid No. 3:

21 Remove existing bleachers, repair and retrofit to International Building Code and Americans
22 with Disabilities Act requirements. Re-install bleachers in the original location.

23
24 Alternate Bid No. 4:

25 Provide new Telescopic Bleachers per specification Section 12760.

26
27 END OF SECTION

1 SECTION 01070

2
3 ABBREVIATIONS

4
5
6 Work Specified Herein

7
8 This Section describes abbreviations used throughout these Specifications.

9
10 Abbreviations

11
12 Throughout these Specifications reference to a technical society, organization or body is by
13 abbreviations and shall refer as follows:

14

15	AA	Aluminum Association
16	AAMA	American Architectural Manufacturers Association
17	AASHTO	American Association of State Highway and Transportation Officials
18	ABPA	Acoustical and Board Products Association
19	ACI	American Concrete Institute
20	ADA	American Disability Act
21	AGA	American Gas Association
22	AGC	Associated General Contractors
23	AHC	Architectural Hardware Consultant
24	AI	Asphalt Institute
25	AIA	American Institute of Architects
26	AIA	American Insurance Association
27	AIEE	American Institute of Electrical Engineers
28	AISC	American Institute of Steel Construction
29	AISI	American Iron and Steel Institute
30	AITC	American Institute of Timber Construction
31	AMCA	Air Moving and Conditioning Association
32	AMG	Arizona Masonry Guild
33	ANSI	American National Standards Institute
34	APA	American Plywood Association
35	ARI	Air Conditioning and Refrigeration Institute
36	ARMA	Asphalt Roofing Manufacturers Association
37	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
38	ASME	American Society of Mechanical Engineers
39	ASTM	American Society for Testing and Materials
40	AWPB	American Wood Preservers Bureau
41	AWPI	American Wood Preservers Institute
42	AWS	American Welding Society
43	AWSC	American Welding Society Code
44	AWI	Architectural Woodwork Institute
45	AWWA	American Water Works Association
46	BIA	Brick Institute of America

47

1	CLFMI	Chain Link Fence Manufacturer's Institute
2	CRA	California Redwood Association
3	CRSI	Concrete Reinforcing Steel Institute
4	CS	Commercial Standards
5	CSI	Construction Specifications Institute
6	CTI	Cooling Tower Institute
7		
8	FGMA	Flat Glass Manufacturer's Association
9		
10	FIA	Factory Insurance Association
11	FM	Factory Mutual
12	FS	Federal Specifications
13	FTI	Facing Tile Institute
14		
15	GA	Gypsum Association
16		
17	ICBO	International Conference of Building Officials
18	IEEE	Institute of Electrical and Electronic Engineers
19	IES	Illuminating Engineering Society
20		
21	LIA	Lead Industries Association
22		
23	MAG	Maricopa Association of Governments
24	MIA	Marble Institute of America
25	MIA	Masonry Institute of America
26	MLMA	Metal Lath Manufacturers Association
27	MS	Military Specifications
28		
29	NAAMM	National Association of Architectural Metal Manufacturers
30	NBHA	National Builders Hardware Association
31	NBFU	National Board of Fire Underwriters
32	NBS	National Bureau of Standards
33	NCMA	National Concrete Masonry Association
34	NEC	National Electrical Code
35	NEMA	National Electrical Manufacturers Association
36	NFPA	National Fire Protection Association/National Forest Products Association
37	NGA	National Glass Association
38	NKCA	National Kitchen Cabinet Association
39	NMWIA	National Mineral Wool Insulation Association
40	NTMA	National Terrazzo and Mosaic Association
41	NWMA	National Woodwork Manufacturer's Association
42		
43	PCI	Precast Concrete Institute
44	PCA	Portland Cement Association
45	PDI	Plumbing Drainage Institute
46	PEI	Porcelain Enamel Institute
47	PS	Product Standards

1	SDI	Steel Door Institute; Steel Deck Institute
2	SJI	Steel Joist Institute
3	SMACNA	Sheet Metal and Air Conditioning Contractors National
4		Association
5	SSPC	Steel Structures Painting Council
6		
7	TCA	Tile Council of America
8	TIMA	Thermal Insulation Manufacturers Association
9	TPI	Truss Plate Institute
10		
11	UBC	Uniform Building Code
12	UL	Underwriters Laboratories, Inc.
13	USDA	United States Department of Agriculture
14	USPS	United States Postal Service
15		
16	VI	Vermiculite Institute
17		
18	WCLA	West Coast Lumberman's Association
19	WCLB	West Coast Lumber Bureau
20	WIA	Woodwork Institute of Arizona
21	WPOA	Western Plumbing Officials Association
22	WTCA	Wood Truss Council of America, Inc.
23	WWPA	Western Wood Products Association
24		
25		
26	END OF SECTION	

1 SECTION 01200

2
3 PROJECT MEETINGS

4
5
6 Work Specified Herein

7
8 This Section describes criteria for Project meetings to be held both before and during construction.
9 This Section is complementary to the General conditions and Supplementary General Conditions
10 and nothing herein shall be considered to waive any requirements of the General conditions or
11 Supplementary General Conditions.

12
13 Pre-construction Conference

14
15 A Pre-construction Conference to discuss the Project work will be held at a time and location
16 designated by the Architect. The Contractor, together with representatives of his major
17 Subcontractors, shall attend, as will the Owner and the Architect. The purpose of this conference is
18 to discuss the Project in detail, including scheduling of work, and to answer any questions that may
19 arise. Unless followed up in writing, verbal authorizations or acknowledgment by anyone present
20 shall not be binding.

21
22 Progress Meetings

23
24 Every two weeks, at a time designated by the Architect, a Progress Meeting will be held at the job
25 site. The Contractor, together with representatives of his major Subcontractors, shall attend, as will
26 the Owner and the Architect. The Contractor shall be responsible for notifying the Subcontractors
27 of their required attendance. The purpose of these meetings is to discuss the job progress, and to
28 resolve any problems that may have developed since the last meeting. Unless followed up in
29 writing, verbal authorizations or acknowledgments by anyone present shall not be binding.

30
31
32 END OF SECTION

1 SECTION 01300

2
3 SUBMITTALS

4
5
6 Work Specified Herein

7
8 This Section outlines, in general, as a convenience to the Contractor, submittals required before
9 commencing construction or during the course of construction of the Project. This Section is
10 complementary to the General Conditions and Supplementary General Conditions and nothing
11 herein shall be considered to waive any requirements of the General Conditions or Supplementary
12 General Conditions.

13
14 See Section 01340 for provisions concerning submittal of Shop Drawings, Product Data and
15 Samples.

16
17 Construction Schedule and Cost Breakdown

18
19 Immediately after execution and delivery of the Contract and before the first partial payment is
20 made, the contractor shall deliver to the Architect a Construction Progress Schedule in a form
21 satisfactory to the Architect, showing the proposed dates of commencement and completion of each
22 of the various subdivisions of the work required under the Contract Documents.

23
24 The Contractor shall submit a schedule of the anticipated monthly payments that will become due
25 in accordance with the Progress Schedule.

26
27 Submit an itemized breakdown of the costs of the various subdivisions of the work on AIA
28 Document G-702 and G-703 for the purpose of evaluating the work completed for each monthly
29 payment. Each monthly Payment Request shall be submitted in the same form with all data
30 required by the form completed.

31
32 The figures used in making up any of these schedules will be used only for determining the basis of
33 partial payments and will not be considered as fixing a basis for additions to or deductions from the
34 Contract Price.

35
36 Construction Schedule:

37
38 See Section 01310 for detailed requirements.

39
40 Daily Reports:

41
42 The Contractor shall maintain a written daily log at the job site, with copies provided to the
43 Architect and/or Owner upon request. Report to include but not necessarily limited to the
44 following:

45
46 Classification and number of workmen.

1 Notification 48 hours prior to concrete pours.
2
3 Description of work accomplished.
4
5 Visits by governmental authorities
6
7
8 END OF SECTION

1 SECTION 01310

2
3 CONSTRUCTION SCHEDULE

4
5
6 PART 1 - GENERAL

7
8 Work Specified Herein

9
10 This Section describes criteria for providing and maintaining a construction schedule for the
11 Project both before and during construction. This Section is complementary to the General
12 conditions and Supplementary General Conditions and nothing herein shall be considered to waive
13 any requirements of the General conditions or Supplementary General Conditions.

14
15 General

16
17 CPM Schedule Required: All schedule and report work under this Contract shall be performed
18 using a computer-based critical path method, hereinafter referred to as CPM. Requirements for
19 CPM are included to insure adequate planning and execution of the work and to assist the Owner in
20 evaluating progress of the work, both economically and chronologically.

21
22 Time of Completion: Contractor's time of completion shall adhere to the time specified in the
23 Contract Documents unless an earlier (advanced) time of completion is requested by Contractor
24 and agreed to by the Owner. Any such agreement will be formalized by a change order.

25
26 Preliminary Contract Schedule: Within 7 days after receiving Notice to Proceed, Contractor shall
27 furnish to the Owner one reproducible and 3 prints of a preliminary schedule network, as specified
28 herein, showing the general plan for orderly completion of the work; details of planned
29 mobilization of plant and equipment; sequence of early operations; and procurement of materials
30 and equipment.

31
32 Contract Schedule: Within 21 days after receiving Notice to Proceed, Contractor shall furnish to
33 the Owner the Contract Schedule, consisting of one reproducible and 3 prints of a detailed and
34 complete time-scaled logic network diagram presenting an orderly and realistic plan for completion
35 of work. Included with this shall be a project calendar, list of project holidays, other non-work
36 days, constraining dates, and a printed logic report showing all activities, their predecessors,
37 successors and logicties.

38
39 Contractors Responsibilities: Failure of the Contract Schedule to include any element of the work,
40 or any inaccuracy in the Contract Schedule, will not relieve Contractor from responsibility for
41 accomplishing all the work in accordance with the Contract and within the time frames as specified
42 in the Contract Documents, or as otherwise approved by the Owner.

43
44 Float Time: Float or Slack time is the amount of time between the earliest start date and the latest
45 start date, or between the earliest finish date and the latest finish date of an activity in the Contract
46 Schedule. No time extensions or associated delay or impact costs will be allowed for delays caused

1 by the Owner, on paths of activities containing float time, providing such delay does not exceed the
2 float time, per the latest updated version of the Approved Contract Schedule.

3
4 Format of Schedule

5
6 Preliminary Contract Schedule: The Preliminary Contract Schedule shall be a time-scaled logic
7 network diagram of the CPM type. Contractor shall submit for approval by the Owner a cost
8 breakdown covering the first 3 months of the preliminary schedule. The approved cost breakdown
9 will be used as a basis for monthly progress payments until approval of the Contract Schedule. The
10 Preliminary Contract Schedule shall reflect the following minimum information:

11
12 Procurement, submittals, shop drawings, approvals, classification and delivery of all major long
13 lead equipment and material items.

14
15 Work expected to occur within the first 90 days of the project.

16
17 Contract Schedule Deliverables: The Contract Schedule shall provide the following:

18
19 A time-scaled resource (cost, manpower, and quantity) loaded CPM diagram in activity (PDM) or
20 arrow (ADM) format.

21
22 No activity on the schedule shall have a duration longer than 14 days, with the exception of
23 fabrication and procurement activities, unless otherwise acceptable to Owner. Activity durations
24 shall be the total of the actual days required to perform the activity including consideration of
25 weather impact on completion of that activity.

26
27 Procurement of major equipment, through receipt and inspection at the job site, identified as a
28 separate activity. If installation of minor equipment is part of a broader construction activity,
29 procurement of that minor equipment shall not imply progress of that activity.

30
31 Owner furnished materials and equipment, identified as separate activities, identifying, at
32 minimum, delivery dates and subsequent installation activities.

33
34 Sufficient detail to show the plan for completion of the work for each stage within the time
35 specified.

36
37 Milestone activities showing the point of completion for each stage of work.

38
39 Dependencies (or relationship) and logic between activities.

40
41 A procurement log including the following information for each type of material or equipment to
42 be provided:

43
44 Material or equipment description.

45 Technical specification reference.

46 Duration in days required for preparation and review of submittals.

1 Duration in days required for fabrication and delivery.

2 Cross reference to all activities which will be constrained by the delivery date of the material or
3 equipment item.

4 Scheduled delivery dates.

5
6 Activities that are dependent on submittal acceptance and/or material delivery shall not be
7 scheduled to start earlier than the expected acceptance or delivery dates.

8
9 The total cost of performing each activity. This cost shall be the total of all labor, material,
10 equipment, including overhead and profit. The sum of the cost for all activities shall equal the total
11 contract value.

12
13 The resources required (manpower and major equipment) to perform each activity.

14
15 A responsibility code for each activity corresponding to the subcontractor responsibility for
16 performing the work.

17
18 An activity of at least 30 days shall be designated for the development of punch list(s), completion
19 of punch list items, and final cleanup for the work of any designated portion thereof. This activity,
20 or group of activities shall be a part of the allowed contract duration, and not an addition thereto.

21
22 Four copies of computer reports containing information described herein.

23 Approvals

24
25
26 Preliminary Contract Schedule: The Owner will return the Preliminary Contract Schedule with
27 comments, within 7 days after receiving it from Contractor.

28
29 Contract Schedule: The Owner will return the Contract Schedule with approval action 14 days
30 after receiving it from Contractor. If revisions are required, Contractor shall re-submit the Contract
31 Schedule within 7 days after receiving it for approval by the Owner. Once approved, it becomes
32 the Approved Contract Schedule.

33
34 Approval of Contract Schedule: Approval of the Contract Schedule will not relieve Contractor of
35 the responsibility for accomplishing all the work in accordance with the Contract.

36 Monthly Update

37
38
39 Monthly Submittal: Contractor shall submit to the Owner each month, prior to submission of the
40 updated computer report (required by this section) an up-to-date status report of the work. The
41 status report shall include:

42
43 Contractor's estimated percentage complete for each activity in progress.

44
45 Actual start/finish dates for all activities as appropriate.

1 List of materials and/or equipment delivered. Identified as network activities for which the
2 Contractor is requesting payment and an original paid invoice verifying cost.

3
4 Identification of processing errors, if any, on the previous update reports.

5
6 Revisions, if any, to the assumed activity durations including revisions for weather impact for any
7 activities due to the effect of the previous update on the schedule.

8
9 Identification of activities which are affected by Proposed Change Orders issued during the update
10 period (Comparison Network Window).

11
12 Resolution of conflict between actual work progress and schedule logic. When out of sequence
13 activities develop in the schedule because of actual construction progress, the Contractor shall
14 submit revisions to schedule logic to conform to current job status and direction, with comparison
15 network windows, for consideration and approval by the Owner.

16
17 Owner Review: The Owner will review the updated information and meet with the Contractor
18 each month to ascertain the status of the work.

19
20 Partial Payment: Partial payment pursuant to the Contract Documents will be based on the update
21 of the Contract Schedule.

22 23 Computer Reports

24
25 Update Reports: Contractor shall provide updated computer generated reports each month. The
26 reports shall include the following:

27
28 A Schedule Logic Report listing all the activities, their early/late and actual start and finish dates,
29 duration, float and the logic relationship of all activities sorted by activity number or
30 initiating/juncture (IJ).

31
32 A Cost Report listing each activity and its associated cost, percentage of work accomplished,
33 earned value to date, previous payments and amounts earned for this period.

34
35 Bar chart showing status of all activities. Network Plots presenting time scaled network diagram
36 showing all activities and their relationships.

37
38 A narrative report with the updated progress analysis, which shall include, but not be limited to, a
39 description of problem areas, current and anticipated delaying factors and their impact, an
40 explanation of corrective action taken and any proposed revisions for recovery.

41
42 A audit listing showing all changes, update data, and/or other modifications made to the Contract
43 Schedule since the last approved update.

44
45 Additional Reports:
46

1 In addition to the above reports, the Owner may request any of the following reports:

2
3 Total float from least to most

4 Event probability analysis

5 Activities by early start

6 Activities by late start

7 Activities grouped by subcontractor or selected trades

8 Activities with scheduled early start dates in a given time frame (i.e., 30 or 60 day outlook)

9
10 Contract Schedule Revisions

11
12 Revised Schedules: If there are significant changes, as determined by the Owner, in the plan of
13 construction from that shown in the Approved Contract Schedule, Contractor shall submit within
14 15 days a revised schedule to the Owner for approval.

15
16 Proposed Change Orders: When a Proposed Change Order is issued which has the potential to
17 impact specified completion dates, a Network Window shall be prepared by the Contractor to
18 reflect the impact of such changes. After the Network Window has been mutually agreed upon,
19 and Contractor ordered to proceed with the Proposed Change Order, it shall be incorporated in the
20 Contract Schedule. Time extensions will be considered only to the extent that there is insufficient
21 remaining float to accommodate these changes.

22
23 Additional Costs: No additional costs beyond that provided in the Contract Documents will be
24 allowed for the incorporation of approved Proposed Change Orders into the Contract Schedule.

25
26 Short Interval Schedules

27
28 Use of Short Interval Schedules: Short Interval Scheduling (SIS) shall be used throughout the on-
29 site construction activity.

30
31 Two Week Projection" The interval shall be a two week projection and include the week submitted
32 and the week thereafter.

33
34 Required Detail: It shall contain sufficient detail to evaluate daily milestones and shall identify and
35 tie into existing activities in the Approved Project Schedule.

36
37 Approval of Owner: This schedule shall meet the approval of the Owner.

38
39 Submitted Weekly: The schedule shall be submitted weekly as directed by the Owner.

40
41 Weekly Meeting: A weekly meeting shall be scheduled by the Owner to review and discuss these
42 schedules.

43
44
45
46 END OF SECTION

1 SECTION 01340

2
3 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4
5
6 Work Specified Herein

7
8 All requirements and procedures for submittal of shop drawings, product data and samples required
9 for all work on the Project. This Section is complementary to the General Conditions and
10 Supplementary General Conditions and nothing herein shall be considered to waive any
11 requirements of the General Conditions or Supplementary General Conditions.

12
13 General

14
15 Provide shop drawings, product data and samples specified herein in accordance with the following
16 requirements.

17
18 Submit shop drawings, material lists, manufacturer's literature, samples and other required
19 information in sufficient time to permit proper consideration and action on same before any
20 materials or items, which such shop drawings, information and samples represent, are ordered.
21 Allow sufficient time so that no delay occurs due to required lead time in ordering or delivery to
22 the job site.

23
24 The Contractor will be held responsible for any delay in progress of the work due to his failure to
25 observe these requirements. Time for completion of the Contract will not be extended on account
26 of his failure to promptly submit shop drawings, product data and samples.

27
28 Shop Drawings, Product Data

29
30 Furnish to the Architect, for review, 4 prints of each sheet of shop (or setting) drawings and
31 schedules for parts of the work as specified or required. Allow ample time for Architect's
32 comments and review.

33
34 Do not execute work required by shop drawings until confirmation of review is obtained.

35
36 Submit shop drawings and details sufficiently in advance of the work which they cover, and in
37 accordance with a prearranged schedule, to afford ample time for checking, correcting and
38 rechecking, if necessary, for such drawings and details.

39
40 Before submitting shop drawings for review, Contractor shall check shop drawings of
41 Subcontractors for accuracy, ascertain that all work contiguous with and having bearing on other
42 work shown on shop drawings is accurately drawn, and that work shown is in conformity with
43 Contract requirements.

44
45 All such drawings and details, when submitted, must bear the stamp of approval of Contractor,
46 bearing checked data, as evidence that such drawings and details have been checked by him. Said

1 "stamp" shall clearly state that the Contractor has check the drawings and, by his signature, he so
2 certifies. Any drawings submitted without such executed stamp of approval, or whenever it is
3 evident (despite the stamp) that the drawings have not been checked, they will be returned to the
4 Contractor for resubmission and will not be considered. In such event, it will be deemed that
5 Contractor has not complied with this provision and the Contractor shall bear risk of all delays to
6 the same extent as if no drawings or details at all had been submitted.

7
8 The Contractor shall prepare composite drawings and installation layouts, when required to solve
9 tight field conditions. Such drawings shall consist of dimensioned plans and elevations, and must
10 give complete information particularly as to size and location of sleeves, inserts, attachments,
11 openings, conduits, ducts, boxes, structural interferences, etc. These composite drawings and
12 installation layouts shall be coordinated in the field by the Contractor and his Subcontractors for
13 proper relationship to the work of other trades, based on field conditions, and shall be checked and
14 approved by them before submission to the Architect for his final review. The Contractor shall
15 have competent technical personnel readily available for such coordinating and checking, as well as
16 for supervision of field installation of work as per the drawings and installation layouts, which have
17 been previously determined by him to be correct and carry the Architect's review stamp.

18
19 Submission of shop drawings (in either original submission or when resubmitted with corrections)
20 constitute evidence that the Contractor has checked all information thereon, and that he accepts and
21 is willing to perform the work as shown in a workmanlike manner and in accordance with best
22 standard practice. No claim for an addition to the Contract Sum shall be based on work shown on
23 shop drawings, unless such claim is noted in Contractor's Transmittal Form accompanying the shop
24 drawings.

25
26 Cost of any changes in construction due to improper checking and coordination by the Contractor
27 shall be paid for by him, and the Contractor shall be responsible for all additional costs, including
28 coordination.

29 Shop drawings shall clearly delineate the following information:

30
31 Architects name and project number, Project name and address.

32
33 Drawing title, number, date and scale.

34
35 Names of Contractor, Subcontractor and fabricator.

36
37 Working and erection dimensions.

38
39 Arrangements and sectional views.

40
41 Necessary details, including complete information for making connections with other work.

42
43 Kinds of materials and finishes.

1 Show descriptive names of materials and equipment, classified item numbers, and locations at
2 which materials or equipment are to be installed in the work. Use same reference identification as
3 shown on Contract Drawings.

4
5 If shop drawings show variations from Contract Documents because of standard shop practice or
6 other reasons, make specific mention of such variations in Transmittal Form.

7
8 Shop drawing review will be general. It shall not relieve the Contractor of responsibility for
9 accuracy of such shop drawings, nor proper fitting, construction of work, furnishing of materials,
10 or work required by Contract Documents and not indicated on shop drawings. Shop drawing
11 review shall not be construed as approving departures from Contract Documents.

12
13 Review of shop drawings and schedules shall not relieve the Contractor from responsibility for any
14 violation indicated on such drawings or schedules of local, county, state or federal laws, rules,
15 ordinances, or rules and regulations of commissions, boards or other authorities or utilities having
16 jurisdiction.

17
18 When product data, consisting of manufacturer's printed literature is required to be submitted to
19 Architect, it shall be submitted in original form. Any fading type of reproduction will not be
20 accepted. A minimum of 3 each is required; 2 for the Architect and one to be returned to
21 Contractor, who shall submit whatever additional copies he required for his distribution.

22
23 Provide the above items noted for the four specification sections noted in this project manual.

24 25 Samples

26
27 Deliver no material to the building site prior to receipt of Architect's written approval. Furnish
28 materials equal in every respect to approved samples and execute work in conformity therewith.

29
30 The approval or acceptance of samples will not preclude the rejection of any material upon the
31 discovery of defects in same prior to the final acceptance of the completed work.

32
33 After a material has been approved, no change in brand or make will be permitted unless
34 satisfactory written evidence is presented to, and approved by the Architect that the manufacturer
35 cannot make scheduled delivery of approved material, or that material delivered has been
36 rejected and substitution of suitable material is an urgent necessity, or that other conditions are
37 apparent which indicate approval of such substitute materials to be in best interest of Owner.

38
39 All samples of materials requiring laboratory tests shall be submitted to laboratory for testing
40 not less than 90 days before such materials are required to be used in the work. Submit all other
41 samples for approval within 30 days after signing of the Contract.

42
43 Submit samples, in duplicate, except where greater or lesser number is specifically required by
44 these Specifications. Submittal shall be made only by the Contractor, unless he has authorized his
45 Subcontractor to submit them and has notified the Architect to this effect. Ship all samples
46 prepaid.

1 Each sample shall be accompanied by an itemized transmittal form. The transmittal shall contain
2 list of samples, Project, Contractor, manufacturer, brand, quarry, quality, etc.; also project number,
3 specifications reference, ASTM or FS number (if any) and material being furnished. Enclose
4 copies of transmittal with samples. Any deviation from Contract Requirements shall be so stated in
5 the transmittal.

6
7 Label each sample by a securely attached label giving the Project, Contractor, subcontractor or
8 supplier, manufacturer's name, product trade name and number, material type, specification section
9 and paragraph reference etc.; also project name and number, ASTM or FS number (if any).

10
11 Samples shall be of adequate size to permit proper evaluation. The samples submitted shall show
12 the full range of colors, textures and dimensions, and other variable characteristics expected.
13 Samples of different items that must match or whose finish relates shall be delivered at the same
14 time to facilitate coordination.

15
16 Samples which are rejected by the Architect must be resubmitted as soon as possible after
17 notification of rejection, and shall be marked "Resubmitted Sample" in addition to other
18 information required.

19
20 The right is reserved to require submission of samples of any material or any material lists whether
21 or not specifically specified in the Specifications.

22
23 Provide a field sample of the polished concrete per specification Section 03350.

24
25
26 END OF SECTION

1 SECTION 01400

2
3 QUALITY CONTROL

4
5
6 Work Specified Herein

7
8 This Section outlines requirements covering testing laboratory services and inspection required
9 during the course of construction of the Project. This Section is complementary to the General
10 Conditions and Supplementary General Conditions and nothing herein shall be considered to waive
11 any requirements of the General Conditions or Supplementary General Conditions.

12
13 Testing Laboratory Services

14
15 The respective Sections of these Specifications contain detailed requirements for materials testing
16 and inspections to be performed by an approved testing laboratory.

17
18 All costs incurred for testing laboratory services will be paid by the Owner at no cost to the
19 Contractor. However, should retesting be required due to Contractor's failure to comply with these
20 Specifications requirements the Contractor shall pay all costs of retesting.

21
22 Duties of the Testing Agency

23
24 Cooperate with the architect and Contractor and provide qualified personnel to perform required
25 inspections and tests.

26
27 Notify the Architect and Contractor promptly of irregularities or deficiencies observed in the work
28 during performance of its service.

29
30 The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract
31 Documents, or approve or accept any portion of the work.

32
33 The agency shall not perform any duties of the Contractor.

34
35 Submittals

36
37 The independent testing agency retained by the Contractor shall submit written reports of each
38 inspection, test or similar service, in writing, simultaneously to the following:

39
40 Architect 2 copies
41 Structural Engineer 1 copy
42 General Contractor 2 copies
43 District 1 copy
44
45
46

1 Report Data: Written reports of each inspection, test or similar service shall include, but not be
2 limited to:
3
4 Date of issue.
5 Project title and number.
6 Name, address and telephone number of testing agency.
7 Dates and locations of samples and tests or inspections.
8 Names of individuals making the inspection or test.
9 Identification of product and Specification Section.
10 Complete inspection or test data.
11 Test results and interpretations of test results.
12 Ambient conditions at the time of sample-taking and testing.
13 Comments or professional opinion as to whether inspected or tested work complies with Contract
14 Documents requirements.
15 Name and signature of laboratory inspector.
16 Recommendations on retesting.
17
18
19 END OF SECTION

1 SECTION 01410

2
3 QUALITY ASSURANCE

4
5 PART 1 - GENERAL

6
7
8 Description

9
10 The Contractor is responsible for implementing a Quality Assurance program that will ensure the
11 timely and cost-effective completion of this project.

12
13 Responsibilities of Contractor

14
15 Coordinate work of all Subcontractors and of separate Contracts, if any, assigned to this
16 Contractor.

17
18 Cooperate with other Contractors performing work on the site under separate Contracts.

19
20 Cooperate with the Owner in accommodating Owner-furnished material, furnishings, equipment
21 and its installation.

22
23 Establish on-site lines of authority and communication:

24
25 Schedule and conduct progress meetings with the Architect and Owner's Representative.

26
27 Utilize sequentially numbered and dated forms to document requests for information and
28 clarification.

29
30 Provide and maintain a competent staff of experienced construction, administrative and supervisory
31 personnel in sufficient numbers to meet the Contract completion date.

32
33 Furnish detailed time schedule of operations for all work on Project. Monitor schedule as work
34 progresses, and revise schedule at appropriate intervals to reflect actual progress.

35
36 Furnish detailed breakdown of total Contract amount organized by construction activity or
37 Specification index.

38
39 Verify that applications for permits, inspections, temporary facilities and permanent utilities are
40 processed in a timely fashion.

41
42 Unless otherwise indicated or specified: Locate, identify, protect and maintain existing water, gas,
43 sewer, irrigation and storm drain lines; lighting, power and telephone conduits and wires; and any
44 other existing surface or subsurface structures. Do not disturb, disconnect or damage these
45 improvements during progress of work. Maintain all existing plants and trees which are to remain.

1 Contractor shall repair or replace, at his expense, damage to existing improvements, and to adjacent
2 private and public property or rights-of-way, resulting directly or indirectly from his operations.

3
4 Coordinate furnishing and placing of embedded items, sleeves and blockouts with formwork and
5 reinforcing steel.

6
7 Resolve conflicts that may develop among Subcontractors and vendors over access to, and
8 utilization of, the restricted spaces available for construction activities, materials and equipment.

9
10 Statement of Coordination

11
12 The Contract Documents have been checked by the Owner and the Architect, and to the best of
13 their knowledge and belief are reasonably free from errors, omissions, inconsistencies, conflicts,
14 code violations, and improper use of materials. To identify any problems that may remain in the
15 Contract Documents, and to expedite their resolution, the Contractor shall follow the procedures
16 described herein.

17
18 The Contractor shall carefully study and compare the Contract Documents and at once report to the
19 Owner any error, omission, conflict, inconsistency or code violation he may discover.

20
21 The Contractor shall require each Subcontractor to read and comply with the requirements of this
22 Section. Compliance with these requirements does not obligate the Contractor, or his
23 Subcontractors, to correct the problems that are identified without written instructions from the
24 Owner. Prior to awarding any subcontract, or starting any work with his own forces, the
25 Contractor and each Subcontractor shall complete a Statement of Coordination and submit to the
26 Construction Manager.

27
28 A copy of this Statement is included at the end of this Section for information, reproduction, and
29 distribution by the Contractor.

30
31 Complete the item entitled "Exceptions" either by indicating "No Exceptions" or by listing
32 exceptions along with any errors, omissions, conflicts, inconsistencies, code violations, and
33 improper use of materials discovered in the Contract Documents.

34
35 Contractor shall resolve all exceptions that are identified as described above prior to awarding
36 subcontracts or starting that portion of the work. If any of the completed Statements of
37 Coordination identify conflicts or conditions which interfere with the structural integrity, function
38 or architectural appearance of the work, and which cannot be resolved by the Contractor without
39 additional expense, he shall inform the Owner in writing. Any work performed prior to receipt of
40 instructions from the Owner shall be done at Contractor's risk. The Architect
41 will assist in resolving conflicts submitted by the Contractor.

1 STATEMENTS OF COORDINATION

2
3 The Undersigned acknowledges that, in the progress of preparing a bid for the referenced category
4 of work, he has examined the Contract Drawings; read and understands the requirements of the
5 General and Supplementary Conditions; Addenda, if any; Technical Sections of the Specifications
6 describing work categories for which the Undersigned is directly responsible, and those related
7 Sections which include additional requirements for cooperation, coordination and compliance.
8

9 The Undersigned acknowledges his obligation to identify below any errors, commissions, conflicts,
10 code violations and improper use of materials discovered in the Contract Documents that could
11 interfere with the timely completion, or increase the cost, of the category of work for which the
12 Undersigned is responsible.
13

14 Except as noted below, the Undersigned has no objection to, or reservation about, the materials to
15 be furnished or the conditions under which they will be installed; and is satisfied that he can
16 complete his contractual responsibilities in a workman like manner without extensive modifications
17 or additional expense.
18

19 EXCEPTIONS: _____
20
21 _____
22
23 _____
24

25 CATEGORY OF WORK: _____
26

27 SPECIFICATION SECTION (S): _____
28
29

30 Submitted by: _____
31

32
33 Signed by: _____ Date: _____
34
35

36 END OF SECTION

1 SECTION 01500

2
3 CONSTRUCTION FACILITIES & TEMPORARY CONTROLS

4
5
6 Work Specified Herein

7
8 All labor, materials, equipment and services necessary to furnish, erect and maintain construction
9 facilities and temporary controls and perform temporary work required in the performance of the
10 Contract, including those indicated and specified. This Section is complementary to the General
11 Conditions and Supplementary General Conditions and nothing herein shall be considered to waive
12 any requirements of the General Conditions or Supplementary General Conditions.

13
14 The Drawings identify storage areas allocated to the Contractor for the work, and he shall limit his
15 storage and office operations to the defined areas.

16
17 Quality Assurance

18
19 Comply with NFPA 241 - Standard for Safeguarding Construction, Alterations, and Demolition
20 Operations.

21
22 Maintenance and Removal

23
24 Maintain construction facilities and temporary controls in a proper, safe operating and sanitary
25 condition for the duration of the Contract. Upon completion of the Contract, remove all
26 construction facilities and temporary controls from the premises.

27
28 Utilities

29
30 Provide temporary adequate light and power supply for construction, making all necessary
31 arrangements with serving utility and paying all expenses in connection therewith. Temporary
32 lighting illumination level shall be adequate to permit workmen to properly perform their work.

33
34 Provide temporary adequate water supply for construction, making all necessary arrangements with
35 serving utility and paying all expenses in conjunction therewith.

36
37 Pay for temporary light, power and water consumed during course of construction. Receipted bills
38 setting forth that charges have been paid in full shall accompany Application for Final Payment.

39
40 Supply adequate cool, pure drinking water with individual drinking cups or sanitary bubbler
41 fountain for the use of employees on the project. The quality of the drinking water shall meet the
42 standards for public water supplies of the County Health Department.

43
44 Telephone

1 Provide and pay for installation of a job telephone, paying all local and long distance services
2 charges involved, for the duration of the Contract. High speed internet connection is a must for the
3 architect's office.

4 5 Toilet Facilities

6
7 Provide proper sanitary and adequate toilet facilities for the use of all workmen employed on the
8 Project, located where directed, and enforce their use by all personnel on the project. Enclose and
9 weatherproof toilets and keep in a sanitary condition at all times.

10 11 Heating

12
13 Should it become necessary to do any work in the building, such as plastering, cement work,
14 painting, etc., at times when the temperature is below 40o F., the Contractor shall provide
15 temporary heat for such length of time as deemed necessary by the Architect for the protection of
16 the work. Pay all expenses for temporary apparatus, its installation, proper maintenance and
17 operation and for fuel.

18
19 Should temporary heat be required after permanent heating system is installed and operating, this
20 unit may be used, however, Contractor shall pay all fuel costs and be responsible for proper
21 operation of unit.

22 23 Fire Protection

24
25 Provide adequate fire extinguishers on the premises during the course of construction, of the type
26 and sizes recommended by the NFPA to control fires resulting from the particular work being
27 performed. Instruct employees in their use. Place extinguishers in the immediate vicinity of the
28 work being performed, ready for instant use. In the use of especially hazardous type of equipment,
29 such as acetylene torches, welding equipment, tar pots, kettles, etc., no work shall be commenced
30 or equipment used unless fire extinguishers of an approved type and capacity are placed in the
31 working area and available for immediate use by the workmen using the above-mentioned
32 equipment.

33 34 Temporary Enclosures, Barriers and Fences

35
36 Provide and maintain all fences, barricades, lights, shoring and other protective structures or
37 devices necessary for the safety of workmen, equipment, the public and property as required by
38 state or municipal laws and regulations, and local ordinances, laws and other requirements of the
39 county, state, and other authorities having jurisdiction with regard to safety precautions, operation
40 and fire hazards.

41
42 Provide and maintain pumping facilities including power for keeping the site, excavations and
43 structure free from accumulations of water at all times, whether from underground seepage,
44 rainfall, drainage or broken lines.

45
46 Maintain provisions for closing and locking the building at such time as possible to do so.

1
2 Protect all door openings when so required with temporary batten doors, and cover windows and
3 openings with suitable materials when weather or job conditions require.
4

5 Provide 6 foot high woven wire temporary fencing around the construction area. Fencing shall be
6 erected and secured in a manner to withstand the forces to which it may be subjected. Locate gates
7 for access to the areas as required. Close and lock all gates after normal working hours.
8

9 Protect all elements of construction from any danger of damage from wind, rain, dust, frost,
10 freezing temperatures, or other infiltration of weather.
11

12 Scaffold, Staging, Etc. 13

14 The work under each Section of these specifications shall include providing, installing, and
15 maintaining all scaffold, staging, trestles, and planking necessary for the work under each Section
16 in strict conformity with applicable laws and ordinances, and maintenance of same so as not to
17 interfere with or obstruct the work of other trades. Additionally, the work under each Section of
18 these Specifications shall include providing all forms of protection necessary to preserve the work
19 of other trades free from damage. These provisions shall be considered as though repeated under
20 each separate Section of these Specifications.
21

22 Tree and Plant Protection 23

24 Existing or newly planted vegetation, shrubs, trees, sidewalks, paving, etc., on the site, shall, unless
25 directly affected by the work of this Contract, be protected against damage of any kind. No diesel
26 or gasoline engine shall be allowed to pass over the feeder root system within the drip line unless
27 approved by the Owner. Work, storage and traffic areas shall be restricted to those areas
28 immediately adjacent to the building. Damage of any kind caused by the work of this contract shall
29 be made good before final acceptance of the Project. The Contractor shall provide water and
30 protection barricades as required to maintain all trees, plants, shrubs, existing site improvements,
31 designated to remain.
32

33 Security 34

35 The Architect and the Owner do not assume any responsibility, at any time, for the protection of
36 the building and premises or for loss of materials, from the time that the Contract operations have
37 commenced until the final acceptance of the work by the Architect and Owner. If watchman
38 service is deemed necessary by the Contractor, such protection shall be provided and paid for by
39 the Contractor.
40

41 Noise and Dust Control 42

43 Exercise all possible care to control excessive noise and dust during the construction to keep these
44 problems to a minimum. Traffic or construction areas shall be sprinkled with water or chemicals as
45 required and in accordance with applicable county requirements.
46

1 Project Identification

2
3 Furnish (4) 9" x 12" notifying the District and campus staff of the parameters of the project,
4 including safety measures for school staff and students. The Architect's and General Contractor's
5 name and contact information is to be included on each sign.
6

7 Field Office, Storage Enclosures

8
9 Provide suitable temporary office facilities complete with telephone, dedicated fax line, laptop
10 computer and furnishings, required for the Contractor's administration of the work in such locations
11 as approved by the Architect. Provide a separate office for the Architect, complete with telephone
12 (separate line, not an extension), desk, letter file, spread table and plan rack including internet
13 access. The offices shall be heated and air conditioned by refrigeration. Provide adequate lighting
14 for the reading of Drawings and Specifications. Provide proper locking for security and furnish
15 Architect with keys. Contractor shall keep space clean.
16

17 Contractor shall provide all storage enclosures required for his operations.
18

19 Parking

20
21 Limit parking by construction personnel to the area designated by the Owner.
22

23 Note, in the event the above needs are not fulfilled a change order shall be awarded to the
24 owner in the amount of services which were not provided.
25

26
27 END OF SECTION

1 SECTION 01600

2
3 MATERIAL AND EQUIPMENT

4
5
6 Work Specified Herein

7
8 All requirements and procedures covering material and equipment to be utilized in the Project
9 work. This Section is complementary to the General Conditions and Supplementary General
10 Conditions and nothing herein shall be considered to waive any requirements of the General
11 Conditions or Supplementary General Conditions.

12
13 Facility and Equipment

14
15 The Contractor shall provide, install, maintain and operate a complete and adequate facility for the
16 handling, execution, disposal and distribution of all material and equipment required for the proper
17 and timely performance of all work connected with the Contract.

18
19 Delivery and Storage of Materials

20
21 Deliver all manufactured materials in the original packages, containers or bundles (with the seals
22 unbroken) bearing the name or identification mark of the manufacturer.

23
24 Deliver fabrications in as large assemblies as practicable, and where specified to be shop primed or
25 shop finished, they shall be packaged or crated as required to preserve such priming or finish intact
26 and free from abrasion.

27
28 Store all materials in such manner as necessary to properly protect same from damage. Materials
29 or equipment damaged by handling, weather, dirt or from any other cause will not be acceptable.

30
31 Store material so as to cause no obstructions, stored off sidewalks, roadways and underground
32 services. The Contractor shall be responsible for protecting all material and equipment furnished
33 under the Contract.

34 When any room in the project is used as a shop or storeroom, the Contractor shall be responsible
35 for any repairs, patching or cleaning necessary due to such use. Location of such storage space
36 shall be subject to approval of the Architect.

37
38 Workmanship

39
40 Where not more specifically described in any of the various Sections of these Specifications,
41 workmanship shall conform to all of the methods and operations of best standards and accepted
42 practices of the trade or trades involved, and shall include all items of fabrication, construction or
43 installation regularly furnished or required for completion (including any finish, and for successful
44 operation as intended).

1 All work shall be executed by mechanics skilled in their respective lines of work. When
2 completed, all parts shall have been durably and substantially built and shall present a neat,
3 workmanlike appearance.

4
5 Material Reference Standards
6

7 Where material is specified solely by reference to Standard Specifications the Contractor shall, if
8 requested by the Architect, submit to the Architect, for his approval, data on all such material
9 proposed to be incorporated into the work of the Contract listing the name and address of vendor,
10 the manufacturer or producer, and the trade or brand names of such materials.

11
12
13 END OF SECTION

1 SECTION 01700

2
3 CONTRACT CLOSEOUT

4
5
6 Work Specified Herein

7
8 All requirements and procedures for submittal of pertinent data relating to closing out the Project
9 upon completion of the project work. Detailed instructions elsewhere in these Specifications may
10 require that certain items listed herein be submitted prior to Substantial Completion of the Project.
11 This Section is complementary to the General Conditions and Supplementary General Conditions
12 and nothing herein shall be considered to waive any requirements of the General Conditions or
13 Supplementary General Conditions.
14

15 Final Payment

16
17 Receipt and review of all items specified in this Section is a prerequisite for final payment.
18

19 Test and Balance Reports

20
21 These reports are to be provided by an independent sub-contractor paid by the District. The
22 General Contractor is to obtain (3) quotes for the work and submit to the Architect and District for
23 selection. Once a selection is made, the General Contractor is to schedule the work.
24

25 Record Drawings

26
27 Submit in accordance with Section 01720.
28

29 Maintenance Manual and Operating Instructions

30
31 Submit in accordance with Section 01730.
32

33 Guarantees

34
35 Submit all required guarantees to the Architect. Provide written guarantee in accordance with the
36 General Conditions. In addition, provide all written guarantees or warranty certificates required as
37 specified in these Specifications.
38

39 Spare Parts and Maintenance Materials

40
41 The Contractor shall deliver to the Owner the spare parts, extra stock and maintenance materials
42 listed below, and shall obtain a signed receipt for these materials. Materials shall be neatly
43 packaged and identified.
44
45
46

Section

Item

09656 - Flooring (Alt. Bid No. 1)

80 SF

09658 - Flooring (Alt. Bid No. 2)

80 SF

09662 - Resilient Base

40 Lineal feet

12760- New Bleachers (Alt. Bid No. 4)

Per manufacturer's recommendations

Semi-Final and Final Inspections

When Contractor is of the opinion that the Project is Substantially Complete, he shall send to the Architect a written statement that the Project is substantially complete (naming a date) and shall request a semi-final inspection by the Architect to determine the status of completion. Such notice shall be given at least 3 days before the requested inspection date.

If the Architect finds that the Project is substantially complete, he will prepare a Certificate of Substantial Completion, AIA Document G-704, for the approval and acceptance of the Contractor and the Owner, attaching thereto a list or "Punch List" of items to be completed or corrected.

If the Architect does not concur in the Contractor's claim of Substantial Completion, he will so notify the Contractor, and thereafter the Contractor shall initiate a new request for (semi-final) inspection.

As the Contractor completes the "Punch List" of uncompleted or uncorrected items, he shall submit to the Architect for his review:

- All required Operating Instructions and Manuals
- Guarantees and Certificates
- Record Drawings
- Certificate of Occupancy
- Regulatory Certificates as required
- Consent of surety, if any, for final payment
- Test and Balance Reports

When all items on the "Punch List" are completed or corrected, the Contractor shall send to the Architect a statement that the Project is complete and request a final inspection.

If the Project is complete and all "Punch List" items are completed or corrected, the Architect will issue a final "Certificate of Payment".

After completion of the procedures outlined above the Contractor shall submit his final application for payment in accordance with the Agreement, the General Conditions and Supplementary General Conditions.

If, because of acts or omissions of the Contractor, the Architect is required to conduct more than one final inspection of the Project, he will charge the Owner for the additional services required, and such costs will be deducted from the money still due the Contractor.

1
2 Final Checkout of Structure and Equipment with Owner
3

4 Before acceptance and final payment, at a time arrived at with the Owner, a complete checkout and
5 test shall be made of all mechanical and electrical systems, architectural and structural devices, etc.,
6 with the Owner. For this purpose, each trade concerned shall provide a skilled operating engineer
7 or technician for a period of at least one day (8) hours. This person, together with selected
8 operating personnel, shall test all systems and devices and demonstrate the complete operation and
9 required maintenance of each. In conjunction Mechanical, Electrical and Kitchen Equipment trades
10 shall provide an additional (8) hours of training time scheduled by the owner between Substantial
11 Completion and Final Completion.
12
13

14 END OF SECTION

1 SECTION 01710

2
3 CLEANING

4
5
6 PART 1 - GENERAL

7
8 Work Specified Herein

9
10 This Section outlines requirements for cleaning of the Project Work. This Section is
11 complementary to the General Conditions and Supplementary General Conditions and nothing
12 herein shall be considered to waive any requirements of the General Conditions or Supplementary
13 General Conditions.

14
15 Requirements of Regulatory Agencies

16
17 Safety and Insurance Standards: Maintain Project in accordance with the following safety and
18 insurance standards:

19
20 State Industrial Commission of Arizona
21 OSHA

22
23 Fire Protection: Store volatile waste in covered metal containers, and remove from premises daily.

24
25 Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and
26 anti-pollution laws. Burning or burying of rubbish and waste material on the project site is not
27 permitted. Disposal of volatile fluid waste (such as mineral spirits, oil or paint thinner) in storm or
28 sanitary sewer systems or into streams or waterways is not permitted.

29
30
31 PART 2 - PRODUCTS

32
33 Cleaning Material

34
35 Use only cleaning materials recommended by manufacturer of surface to be cleaned. Use cleaning
36 materials only on surfaces recommended by cleaning material manufacturer.

37
38
39 PART 3 - EXECUTION

40
41 During Construction

42
43 During the construction period, the material to be used in the work shall be kept in an orderly
44 manner, neatly stacked or piled.

1 Clean up frequently (at least weekly) all refuse, rubbish scrap materials, and debris caused by
2 operations, to the end that at all times the site of the work shall present a neat, orderly and
3 workmanlike appearance. Sprinkle dusty debris with water.

4 Provide for the disposal of all waste products, trash, debris, etc., and make necessary arrangement
5 for legal disposal of same off the site. Never throw rubbish from windows or other parts of
6 building. Lower waste materials in a controlled manner with as few handlings as possible.

7
8 Remove all surplus material, false-work, temporary structures, including foundations thereof, plant
9 of any description and debris of every nature resulting from operations and put the site in a neat,
10 orderly condition.

11
12 Vacuum clean interior building areas when ready to receive finish painting and continue vacuum
13 cleaning on an as-needed basis until building is ready for acceptance.

14
15 Schedule cleaning operation so that dust and other contaminants resulting from cleaning process
16 will not fall on wet, newly painted surfaces.

17
18 General Contractor shall provide trash gondolas or containers for use by all trades.

19 20 Final Cleaning

21
22 Use experienced workmen, or professional cleaners for final cleaning. Provide adequate
23 ventilation during use of volatile or noxious substances.

24
25 Besides general broom cleaning, do following special cleaning for all trades at completion of work:

26
27 Remove putty stains from glass; wash, polish same, inside and outside. Exercise care not to scratch
28 glass.

29
30 Remove marks, stains, fingerprints, other soil, dirt from painted, decorated, or stained work.

31
32 Clean, polish and wax woodwork.

33
34 Clean and polish hardware for removal of stains, dust, dirt, paint and the like.

35
36 Remove spots, soil, paint from tile and similar work; wash same.

37
38 Clean fixtures, equipment; remove stains, paint, dirt, dust.

39
40 Remove temporary floor protections.

41
42 Clean and polish all floors.

43
44 Remove all temporary protections at the site.

1 Clean exterior and interior metal surfaces, including doors and windows, of oil, stains, dust, dirt,
2 paint and the like.

3
4 Make buildings ready for occupancy in all respects. Lay heavy building paper in main circulation
5 areas to protect the floors until final inspection and acceptance.

6
7 All existing improvements, inside or outside the property which are disturbed, damaged or
8 destroyed by the work under the Contract shall be restored to the condition in which they originally
9 were, or to the satisfaction of the Architect.

10
11
12 END OF SECTION

1 SECTION 01720

2
3 PROJECT RECORD DOCUMENTS

4
5
6 PART 1 - GENERAL

7
8 Work Specified Herein

9
10 All labor, materials, equipment and services necessary to prepare project record documents as
11 indicated or specified. This Section is complementary to the General Conditions and
12 Supplementary General Conditions and nothing herein shall be considered to waive any
13 requirements of the General Conditions or Supplementary General Conditions.

14
15 Record Document Submittals

16
17 General: General submittal requirements are indicated in "Submittal" section. Do not use record
18 documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive
19 location; provide access to record documents for Architect's reference during normal working
20 hours.

21
22 Record Drawings: Continuously maintain a white-print set (blue-line or black-line) of Contract
23 Drawings and shop drawings in clean, undamaged condition, with mark-up of actual installations
24 which vary from the work as originally shown. Mark whichever drawing is most capable of
25 showing "field" condition fully and accurately; however, where shop drawings are used for mark-
26 up, record a cross-reference at corresponding location on working drawings. Mark with red
27 erasable pencil and, where feasible, use other colors to distinguish between variations in separate
28 categories of work. Mark-up new information which is recognized to be of importance to the
29 Architect, but was for some reason not shown on either Contract Drawings or shop drawings. Give
30 particular attention to concealed work, which would be difficult to measure and record at a later
31 date. Note related change-order numbers where applicable. Organize record drawing sheets into
32 manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other
33 identification on cover of each set.

34
35 Record Specifications: Maintain one copy of specifications, including addenda, change orders and
36 similar modifications issued in printed form during construction, and mark-up variations (of
37 substance) in actual work in comparison with text of specifications and modifications as issued.
38 Give particular attention to substitutions, selection of options, and similar information on work
39 where it is concealed or cannot otherwise be readily discerned at a later date by direct observation.
40 Note related record drawing information and product data, where applicable. Upon completion of
41 mark-up, submit to the Architect.

42
43 Record Product Data: Maintain one copy of each product data submittal, and mark-up significant
44 variations in actual work in comparison with submitted information. Include both variations in
45 product as delivered to site, and variations from manufacturer's instructions and recommendations
46 for installation. Give particular attention to concealed products and portions of the work which

1 cannot otherwise be readily discerned at a later date by direct observation. Note related change
2 orders and mark-up of record drawings and specifications. Upon completion of mark-up, submit
3 complete set to the Architect.
4

5 Miscellaneous Record Submittals: Refer to other sections of these specifications for requirements
6 of miscellaneous record-keeping and submittals in connection with actual performance of the work.
7 Immediately prior to date(s) of Substantial Completion, complete miscellaneous records and place
8 in good order, properly identified and bound or filed, ready for continued use and reference.
9 Submit to the Architect.
10

11 Record Document Review

12

13 The record documents shall be reviewed for completeness to date by the Architect and his
14 consultants each month, prior to the evaluation of the progress payment. Failure to maintain the
15 record drawings current with the work shall be reason to withhold a portion of the partial payment.
16
17

18 PART 2 - PRODUCTS

19

20 Not applicable.
21
22

23 PART 3 - EXECUTION

24

25 Not applicable.
26
27

28 END OF SECTION

1 SECTION 01730

2
3 OPERATING AND MAINTENANCE DATA

4
5
6 PART 1 - GENERAL

7
8 Work Specified Herein

9
10 All labor, materials, equipment and services necessary to prepare all operating and maintenance
11 data as indicated or specified. This Section is complementary to the General Conditions and
12 Supplementary General Conditions and nothing herein shall be considered to waive any
13 requirements of the General Conditions or Supplementary General Conditions.

14
15 Description of Work

16
17 Furnish the Owner, through the Architect, (1) hard copy and (1) electronic copy of all maintenance
18 and operating data for all work specified under Divisions 3, 9 and 12.

19
20 The above noted items shall be furnished to the Architect within 7 days after equipment is installed
21 so the Owner can begin organizing a Preventive Maintenance Program.

22
23 Prepare any manuals in durable plastic binders approximately 8-1/2" x 11" in size and with at least
24 the following:

25
26 Identification on, or readable through, the front cover stating general nature of the manual.

27
28 Neatly typewritten index, near the front of the manual, furnishing immediate information as to
29 location in the manual of all emergency data regarding the installation.

30
31 Complete instructions regarding operation and maintenance of all equipment involved.

32
33 Complete nomenclature of all replaceable parts, their part numbers, current cost and name and
34 address of nearest vendor of parts.

35
36 Wiring diagrams, control diagrams, etc.

37
38 Copy of all guarantees and warranties issued.

39
40 Copy of the approved shop drawings with all data concerning changes made during construction.
41 Where contents of manuals include manufacturer's catalog pages, clearly indicate the precise items
42 indicated in this installation and delete, or otherwise clearly indicate, all manufacturers' data with
43 which this installation is not concerned.

44 The manuals shall include, but not be limited to the following equipment:
45
46

1 Architectural:

2
3 Polished Concrete

4 Resilient Flooring

5 Telescopic Bleachers

6
7 Maintenance Manuals: Organize maintenance-and-operating manual information into suitable sets
8 of manageable size, and bind into individual binders properly identified and indexed (thumb-
9 tabbed). Include emergency instructions, spare parts listing, warranties, wiring diagrams,
10 recommended "turn-around" cycles, inspection procedures, shop drawings, product data, and
11 similar applicable information.

12
13
14 PART 2 - PRODUCTS

15
16 Not applicable.

17
18
19 PART 3 - EXECUTION

20
21 Not applicable

22
23
24 END SECTION

1 SECTION 03365

2
3 POLISHED CONCRETE FLOOR FINISHING (Base Bid)

4
5
6 PART 1 - GENERAL

7
8 Project Includes:

9
10 Examination of substrates and conditions, with Installer present, for compliance with requirements
11 for installation tolerances and other conditions affecting application of special concrete finishes.
12 Do not proceed with application until unsatisfactory conditions have been corrected.

13
14 As a retrofit project, the existing floor material will be removed by a third party and the exposed
15 concrete floor will need to be prepared with an overlay that is polished or by "cutting" and sanding
16 the existing floor.

17
18 A clear penetrating sealer will be required on the existing concrete profile. A site mock-up of the
19 finished polished concrete will be evaluated by the Owner, Architect and General Contractor. A
20 proposed sealer is as specified in Division 9 Section "Floor Sealers".

21
22 Scope of Work

23
24 The areas of concrete flooring that will require this special concrete finish, include, but are not
25 limited to, the following:

26
27 Existing Gymnasium / Multi-purpose Room floor as noted on the attached 8-1/2 x 11 drawing.

28
29 Quality Assurance

30
31 Mockups (Sample Panels): produce a minimum of (3) 4' x 4' sample panels, directly on the
32 existing concrete floor, to demonstrate the expected range of polished, natural colored concrete.

33
34 Reflective Clarity and Reflective Sheen: Based on a modified version of the Concrete Polishing
35 Association of American, CPAA Chart. Gloss can be measured with Gloss Meter.

- 36
37 1. Level: 3
38 2. Name: Semi-polished
39 3. Reflective Clarity: Objects being reflected are not sharp but can be easily identified
40 4. Reflective Sheen: Medium to high
41 5. Grit Range: 800 to 3000
42

43 PART 2 - PRODUCTS

44
45 This guide specification does not contain any proprietary brand names or systems as part of the
46 scope of work for achieving polished concrete on an existing concrete slab. The sub-contractor

1 shall be trained per the Concrete Polishing Association of America and follow the industry standard
2 for best practice use.

3
4 **References:**

- | | | |
|----|--------------|---|
| 5 | CPAA 03 3543 | Concrete Polishing Assoc. of America Specification Diamond Polishing. |
| 6 | CPAA | Recommendations for the Design, Specification and Placement of Concrete |
| 7 | | Floor Slabs for Polished Concrete. |
| 8 | ICRI | Guideline for Selecting and Specifying Concrete Surface Preparation for |
| 9 | | Sealers, Coatings, G03732P |
| 10 | PCA PA/124 | Finishing Slabs with Color and Texture |
| 11 | PCA SP/021 | Color and Texture in Architectural Concrete |

12
13 **Polishing Contractor:**

14
15 **Materials:**

- 16 1. Provide data sheets for hardeners and densifiers.
- 17 2. Submit data sheets for joint and crack fillers and the certification for using this product.
- 18 3. Submit data sheets for any materials used in the coloring and polishing process.

19
20 **Equipment:**

- 21 1. Submit product data sheets for the polishing equipment:
 - 22 a. Grinding machine
 - 23 b. Metal bonded diamond tools
 - 24 c. Resin bonded diamond tools
 - 25 d. Burnishing pads
- 26 2. Submit data sheets on dust control and run-off for both dry and wet polishing systems.
- 27 3. If using a wet polishing system, submit a slurry disposal plan.
- 28 4. If using a dry polishing system, submit CFM's for vacuum.
- 29 5. Provide hook ups or generators with proper outlets.
- 30 6. Have the proper, certified polishing machine with the proper capability of pounds per down
31 pressure for the job.

32
33
34 **PART 3 – EXECUTION**

35
36 **Polishing Process:**

- 37
38 1. Clean the slab thoroughly and remove paint, mastics, oil spots and dirt. Scrub slab with soft
39 brush or pads. Use neutral pH detergent and rinse well. Protect adjacent areas to prevent
40 damage by polishing machines and/or materials.
- 41 2. Repair and fill any surface cracks and allow the crack repairs to cure thoroughly.
- 42 3. Follow the recommendations of the equipment manufacturer in increments of various heads
43 or pads for grinding, honing, and polishing to the desired level.
- 44 4. Apply the densifiers and hardeners as necessary for maximum performance.
- 45 5. Cleanup the job site.
- 46 6. Provide protection from construction trades until the project is turned over to the owner.

7. Determine the procedure for polishing the floor edges that are perpendicular to a wall. Contactor to offer an edging detail as an alternative to polish in the hard reach corners.
8. Maintain uniformity of polished concrete over construction joints.

Game Lines:

1. Lay out game lines as depicted by a standard for elementary school multi-purpose rooms and / or adjusted to fit existing dimensions of the space.
2. Mask flooring at game lines and apply paint of color indicated to produce clean, sharp and distinct edges.

Maintenance:

1. Leave a Maintenance Protocol for the Owner.
2. Do not use high pH cleaners like "Mean Green", use neutral pH cleaners.
3. Suggest cleaning pads/brushes (white or red pads).
4. Clean with the same Brand as the "Guard" and/or densifier used in the polishing process.

END OF SECTION

1 SECTION 09656

2
3 SHEET VINYL RESILIENT MULTI-PURPOSE FLOORING (Alternate Bid No. 1)

4
5
6 PART 1 - GENERAL

7
8 A. Scope of Work:

- 9 1. The complete installation of sheet vinyl resilient multi-purpose sport flooring
10 including striping.

11 B. Related work specified under work by others:

12 1. CONCRETE MOISTURE VAPOR EMISSION AND pH TESTING

- 13 a. Moisture vapor emission and pH of concrete shall be tested. Concrete substrates
14 must comply with limitations of moisture and alkalinity, with in-situ Relative
15 Humidity (RH) per ASTM F2170 not to exceed 95%, and substrate pH readings
16 between 7.0-9.0.

- 17 b. The third party testing agency will be provided by the Owner and paid for by the
18 Owner.

19 2. CONCRETE SUBFLOORS (BY THE ABATEMENT CONTRACTOR)

- 20 a. The abatement sub-contractor is to remove the existing flooring and adhesive
21 and then grind the concrete so that all existing flooring material is gone and
22 achieves a Concrete Surface Profile (CSP) of Level 3.

- 23 b. The existing floor is to be left porous and to an 1/8" tolerance in any 10' radius.

- 24 c. The new flooring contractor is to inspect and accept the condition of the existing
25 concrete before beginning the new installation.

26
27 Manufacturer Certifications:

- 28 1. Provide certification that accurately identifies the Original Equipment Manufacturer (OEM)
29 of flooring furnished for this project including manufacturer's name, address and factory
30 location.
31 2. Provide ISO 9001 certification for the OEM of the specified products.
32 3. Provide ISO 14001 certification for the OEM of the specified products.

33
34 Laboratory Test Results:

- 35 1. Provide certification of testing per ASTM F2772-11 and the product being furnished
36 complies with ASTM Indoor Sport Floor Classification specified for this project. Third-
37 party certification required; sales literature is not sufficient.
38 2. Fire Test Characteristics: As determined by testing identical products according to ASTM
39 E 648, Class 1, by a qualified testing agency acceptable to aauthorites having jurisdiction.

40
41 Submittals:

- 42 1. General: Submit listed submittals in accordance with Division 1, Submittal Procedures.
43 2. Product Data: Submit manufacturer's technical data sheet, care & maintenance document,
44 submittal and/or warranty for each material and accessory proposed for use.
45 3. Samples: Submit representative samples of each product specified for verification.
46

1 Quality Assurance:

- 2 1. **Manufacturer Qualifications:** Provide resilient flooring materials manufactured in the
3 United States of America by a firm with a minimum of 10 year' experience with resilient
4 flooring materials of type equivalent to those specified.
5 2. **Installer Qualifications:** Installer must be professional, licensed, insured and acceptable to
6 manufacturer of resilient flooring materials. Project Managers or Field Supervisors must be
7 INSTALL (International Standards & Training Alliance) certified, CFI (Certified
8 Floorcovering Installers) Certified and/or FCICA (The Flooring Contractors Association)
9 CIM (Certified Installation Manager) for the requirements of the project.
10 3. **Indoor Air Quality Requirements:**
11 a. Resilient flooring and accessories that are easily cleaned and do not require coatings and
12 stripping, or use chemicals that may be hazardous to human health.
13 b. Resilient flooring and accessories that are free of materials known to be teratogenic,
14 mutagenic or carcinogenic.
15 c. Resilient flooring and accessories that contain no polyvinyl chloride or plasticizers.
16 d. Resilient flooring and accessories that contain no halogens.
17 e. Resilient flooring and accessories that contain no asbestos.

18
19 Delivery, Storage and Handling:

- 20 1. Store flooring and installation materials in protected dry spaces, with ambient temperatures
21 maintained within range recommended by manufacturer, but not less than 55 deg F (13 deg
22 C) nor more than 85 deg F (29 deg C).
23 2. Store the indoor resilient surfacing rolls in an upright position on a smooth flat surface
24 immediately upon delivery to Project.

25
26 Field Conditions and Product Installation:

- 27 1. Maintain temperatures during installation within range recommended by manufacturer, but
28 not less than 65 deg F (18 deg C) in spaces to receive flooring for 48 hours prior, during and
29 48 hours after installation.
30 2. After installation, maintain temperatures within range recommended by manufacturer, but
31 not less than 55 deg F (13 deg C) or more than 85 deg F (29 deg C).
32 3. Prohibit traffic during flooring installation and for at least 48 hours after flooring
33 installation.
34 4. Install flooring only after other finishing work, including painting and overhead work, has
35 been completed.

36
37 Manufacturer's Warranty:

- 38 1. **Special Limited Warranty:** Manufacturer's standard form in which manufacturer agrees to
39 repair or replace sports flooring that fails within specified warranty period.
40 2. Material warranty must be direct from the product manufacturer. Material warranties from
41 private label distributors are not valid.
42 3. Failures include, but are not limited to, the following:
43 a. Material manufacturing defects.
44 b. Failure due to substrate moisture exposure not exceeding 95% relative humidity (RH)
45 when tested according to ASTM F2170.
46 4. **Warranty Period:** 10 years from date of Substantial Completion.

1 Installer's Warranty:

- 2 1. Special Limited Warranty: Installer's standard form in which installer agrees to repair or
3 replace flooring that fails due to poor workmanship or faulty installation within the
4 specified warranty period.
5 2. Warranty Period: 2 years from date of Substantial Completion.
6
7

8 PART 2 – PRODUCTS
9

- 10 A. Basis-of-Design: Provide Gerflor RECREATION 60 Multi-purpose flooring installed with
11 Gerflor's full-spread adhesive (or equal as prior approved by substitution).
12 B. Substitutions: In accordance with Instructions to Bidders however, the proposed
13 substitution must meet or exceed all conditions of this specification.
14
15 C. Product Description: ASTM Class 1 Foam-backed sheet vinyl flooring designed for fully
16 adhered multi-purpose applications.
17
18 1. Overall Thickness: Not less than 0.24 inch (6.0 mm).
19 2. Wear-Layer Thickness: Not less than 0.06 inch (1.5 mm).
20 3. Backing: Closed cell foam with reinforced fiberglass grid.
21 4. Seaming Method: Heat welded.
22 5. Adhesive Method:
23 a. Full-spread adhesive coverage to completely adhere flooring to substrate.
24 b. Complete adhesive coverage to eliminate the possibility of gaps or space between
25 the slab and flooring material where moisture could accumulate and create an
26 environment conducive to mold growth.
27 c. Flooring to be fully adhered to the concrete slab in all locations eliminating the
28 possibility of waves or wrinkles forming caused by the floor shifting, moving or by
29 rolling loads displacing it.
30 6. Traffic-Surface Texture: Wood grain embossed texture.
31 7. Bacteriostatic and Fungicidal Treatment: Manufacturer's factory-applied permanent
32 treatment throughout the flooring material which can improve indoor air quality and reduce
33 asthma and allergy risks associated with bacterial and mold growth.
34 8. Applied Finish: Manufacturer's, factory-applied, permanent and UV-cured.
35 a. No-Wax finish: Published product literature identifying factory applied finish as,
36 "No-Wax-Just clean and rinse"
37 b. Basis-of-Design Product: PUR Protect.
38 9. Field-Applied Finishes: None required and not allowed.
39 10. Roll Size:
40 a. Roll Width: 4'-11" (1.5m)
41 b. Roll Length: Rolls to be a minimum length of 86'-6" (26.4m) to minimize the
42 number of end seams.
43 11. Color and Pattern:
44 a. Color 6047 Classic Wood

- 1 b. Wood pattern shall accurately simulate the true visual appearance of natural wood
2 strip flooring. Surface texture shall simulate realistic wood grain and not be raised
3 or "pebble" embossing.
4
- 5 D. Accessories: Trowel applied patching compound for standard slab surface preparation:
6 Latex-modified, hydraulic-cement-based formulation provided by flooring manufacturer.
7 a. Basis-of-Design Product: GerPatch, Gerflor's patching compound.
8 b. Slab moisture tolerance: Same slab moisture tolerance as the adhesive.
9
- 10 E. Adhesives: Water-resistant type recommended by athletic flooring manufacturer for
11 substrate and conditions indicated.
12 1. Basis-of-Design Product: Gerflor Gerfix Spray Adhesive.
13 2. Moisture Resistance Limit: 95% relative humidity (RH) when tested according to
14 ASTM F 2170.
15 3. Coverage Type: Full-spread application for 100% coverage.
16 4. Heat Welding Rod: As supplied by indoor resilient flooring manufacturer. Color shall
17 blend with resilient flooring color.
18 5. Game-Line and Marker Paint: Complete system including primer, compatible with
19 flooring and recommended by flooring and paint manufacturers.
20
21

22 PART 3 – EXECUTION

- 23
- 24 A. Verify the Following:
25 1. The concrete slab surface deviation is no greater than 3/16 inch within 10 feet when
26 measured according ASTM E 1155.
27 2. The concrete slab is existing therefore, the acceptance of the concrete slab (by the
28 flooring installer) is of high importance.
29
- 30 B. Preparation: Prepare substrates according to manufacturer's written recommendations to
31 ensure proper adhesion of resilient flooring system. Refer to PART 1 – GENERAL, Scope
32 of Work for testing and acceptance of the existing concrete floor prior to installation.
33
- 34 C. Moisture Testing: Perform ASTM F 2170 relative humidity test and proceed with
35 installation only after substrates have maximum relative humidity (RH) of 99%.
36
- 37 D. Use appropriate, trowel-on concrete based patching compound with the same moisture
38 vapor tolerance as the adhesive to fill depressions, holes, cracks, grooves or other
39 irregularities in substrate.
40
- 41 E. Place flooring and installation materials into spaces where they will be installed at least 48
42 hours before installation. Install flooring materials only after they have reached the same
43 temperature as space where they are to be installed.
44
- 45 F. The concrete is to be prepared (by the abatement contractor) to achieve a Concrete
46 Surface Profile (CSP) of Level 3.

1 G. Sweep and then vacuum substrates immediately before installation. After cleaning,
2 examine substrate for moisture, alkaline salts, grit, dust or other contamination. Proceed
3 with installation only after unsatisfactory conditions have been corrected.
4

5 H. General Installation:

- 6 1. Comply with resilient flooring manufacturer's installation instructions.
- 7 2. Take necessary precautions to minimize noise, odors, dust and inconvenience during
8 installation.
- 9 3. Fit flooring neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and
10 other interruption of floor surface.
- 11 4. Extend flooring into toe spaces, door reveals, closets, and similar openings unless
12 otherwise indicated.
13

14 I. Lay out flooring as follows:

- 15 1. Minimize number of seams and place within inconspicuous areas.
- 16 2. Locate seams as shown on approved Shop Drawings.
17

18 J. Adhered Flooring: Attach products to substrates using a full-spread of adhesive applied to
19 substrate to comply with adhesive and flooring manufacturer instructions.
20

21 K. Vinyl Sheet Flooring Seams: Finish seams to produce surfaces flush with adjoining
22 flooring surfaces. Comply with ASTM F 1516. Route joints and use heat welding rod to
23 permanently and seamlessly fuse sections together.
24

25 L. Bleacher-blocking: Adhere bleacher-blocking directly to the concrete slab with the
26 manufacturer's supplied and/or approved adhesive to the entire area of floor under the
27 bleachers in the extended position. Surface vinyl will then be adhered to the top of the
28 bleacher-blocking using the manufacturer's 2-part urethane adhesive. The bleacher-
29 blocking and vinyl will match the visual appearance, surface performance and height of the
30 RECREATION 60 that will be installed across the rest of the floor. Bleacher-blocking will
31 be heat welded to the RECREATION 60 as part of the installation.
32

33 Game Lines

- 34 1. Lay out game lines as depicted by a standard for elementary school multi-purpose rooms
35 and / or adjusted to fit existing dimensions of the space.
- 36 2. Mask flooring at game lines and apply paint of color indicated to produce clean, sharp and
37 distinct edges.
38

39 Cleaning and Protection

- 40 1. Remove marks and blemishes from flooring surfaces.
- 41 2. Sweep and then vacuum flooring.
- 42 3. Damp-mop flooring to remove soiling and dust.
- 43 4. Protect flooring from abrasions, indentations, and other damage from subsequent operations
44 and placement of equipment, during remainder of construction period.
45

46 END OF SECTION

1 SECTION 09658

2
3 SYNTHETIC ATHLETIC FLOORING (Alternate Bid No. 2)

4
5 PART 1 - GENERAL

6
7 DESCRIPTION

8
9 A. Scope of Work:

- 10 1. The complete installation of synthetic sports surfacing system including striping.

11 B. Related work specified under work by others:

12 1. CONCRETE MOISTURE VAPOR EMISSION AND pH TESTING

- 13 a. Moisture vapor emission and pH of concrete shall be tested. Concrete
14 substrates must comply with limitations of moisture and alkalinity, with in-
15 situ Relative Humidity (RH) per ASTM F2170 not to exceed 95%, and
16 substrate pH readings between 7.0–9.0.
17 b. The third party testing agency will be provided by the Owner and paid for by
18 the Owner.

19 2. CONCRETE SUBFLOORS (BY THE ABATEMENT CONTRACTOR)

- 20 a. The abatement sub-contractor is to remove the existing flooring and adhesive
21 and then grind the concrete so that all existing flooring material is gone and
22 achieves a Concrete Surface Profile (CSP) of Level 3.
23 b. The existing floor is to be left porous and to an 1/8" tolerance in any 10'
24 radius.
25 c. The new flooring contractor is to inspect and accept the condition of the
26 existing concrete before beginning the new installation.
27

28 REFERENCES

29
30 A. Physical Properties compiled using the following test standards:

- 31 1. ASTM D 412
32 2. ASTM D 624
33 3. ASTM E 1745-97
34 4. ASTM F 2170
35 5. DIN 53505
36 6. DIN 18032-2
37 7. DIN 53517
38

39 SUBMITTALS

- 40
41 A. Connor® ElastiPlus™ specifications.
42 B. One sample of the specified system, if requested by Architect.
43 C. Connor Synthetic Care & Maintenance Guide.
44 D. Current installation instructions as published by Connor.
45
46

1 QUALITY ASSURANCE

2
3 A. MATERIAL SUPPLIER: Shall be Connor (or equal as prior approved).

4 B. INSTALLER:

- 5 1. The complete installation of the flooring system, as described in these
6 specifications, shall be carried out by an experienced installer (Flooring
7 Contractor), and the work shall be performed in accordance with current Connor
8 installation instructions.
9 2. Installer (Flooring Contractor) shall be liable for all matters related to the
10 installation for a period of one year after the floor has been installed and
11 completed.
12

13 DELIVERY, STORAGE AND HANDLING

- 14
15 A. Materials must be delivered in Connor's original, unopened and undamaged
16 packaging with identification labels intact.
17 B. Store the material protected from exposure to harmful weather conditions on a clean,
18 dry, flat surface protected from possible damage. Do not stack rolls of material.
19 C. Storage conditions shall be 60°F to 85°F.
20

21 SITE CONDITIONS

- 22
23 A. Installation of synthetic materials shall not commence until all other finishes and
24 overhead mechanical trades have completed their work in the synthetic floor areas.
25 B. Permanent heat, light and ventilation shall be installed and operating during and after
26 installation. Subfloors shall be clean, dry, and free from dirt, dust, oil, grease, paint,
27 old adhesive residue, or other foreign materials.
28 C. Moderate room temperature of 65° F to 80° F shall be maintained for one week prior
29 to, during and 72 hours after installation.
30 D. Flooring installation shall not begin until moisture vapor emissions, pH level, and
31 levelness of concrete subfloors have been met. The installation area shall be closed to
32 all traffic and activity for a period to be set by the flooring contractor.
33 E. Environmental Limitations
34 1. Comply with requirements of Connor.
35 2. Adhere to all SDS requirements for materials employed in the work. Protect all
36 persons from exposure to hazardous materials at all times.
37 F. After the synthetic floors are installed and the game lines are painted, the area is to be
38 closed to allow curing time for the system. No other trades or personnel are allowed
39 on the floor until the owner has accepted it.
40

41 WARRANTY

42
43 Manufacturer's Warranty:

- 44 1. Special Limited Warranty: Manufacturer's standard form in which manufacturer agrees
45 to repair or replace sports flooring that fails within specified warranty period.

2. Material warranty must be direct from the product manufacturer. Material warranties from private label distributors are not valid.
3. Failures include, but are not limited to, the following:
 - a. Material manufacturing defects.
 - b. Failure due to substrate moisture exposure not exceeding 95% relative humidity (RH) when tested according to ASTM F2170.
4. Warranty Period: 10 years from date of Substantial Completion.

Installer's Warranty:

1. Special Limited Warranty: Installer's standard form in which installer agrees to repair or replace flooring that fails due to poor workmanship or faulty installation within the specified warranty period.
2. Warranty Period: 2 years from date of Substantial Completion.

PART 2 - PRODUCTS

MATERIALS (Connor ElastiPlus™ or prior approved equal by substitution)

- A. All polyurethane components shall be non-hazardous, and shall not contain ANY lead, mercury, heavy metals, PCB, or formaldehyde, and shall be supplied by Connor.

1. Physical Properties

i. Surface Hardness	81 Shore A
ii. Gloss	5-15
iii. Coating	Water-based top coats and game lines
iv. Shock absorption (standard base mat)	
4mm base mat	28.3%
v. Coefficient of Friction	.56 Dry/.28 Wet
vi. Ball rebound	98%
vii. Tabor Abrasion	0.06
viii. Compression set	1.9%
ix. Impact resistance	11 Nm
x. Residual Impression	0.32mm
xi. Resistance to rolling loads	1500 N
xii. Static Load Limit	225 psi
xiii. Tensile strength	3071 psi (21 N/mm2)
xiv. Elongation at break	200%
xv. Tear strength	294 pli (51 N/mm)

- B. ElastiPlus™ Basemat Adhesive – Warranty to 95% RH.

- C. ElastiPlus™ Basemat – Specially formulated prefabricated resilient basemat made of recycled rubber and foam granules bound with MDI polyurethane. Basemat is a constant thickness.

1. Base mat density – 42lbs/ft³
2. Basemat standard thickness – 4mm

- D. ElastiPlus™ Scratch Coat (mat sealer) – Two-component, thixotropic polyurethane compound.

- 1 E. ElastiPlus™ Wear Coat – Two-component, pigmented, seamless self-leveling
2 polyurethane.
3 Total wear layer thickness – 2mm throughout the floor.
4 F. ElastiPlus™ Top Coat (matte finish) – Three-component water-based urethane Top
5 Coat. Select from standard colors.
6 G. ElastiPlus™ Game Line Paint – Three-component water-based urethane. Select from
7 standard colors.
8

9 PART 3 – EXECUTION (Note, not a complete guide to installation)

10
11 INSPECTION

- 12
13 A. Inspect the concrete slab for proper flatness and levelness. Report any discrepancies
14 to the general contractor.
15 B. Concrete slab shall be broom cleaned by the general contractor.
16 C. Installer (Flooring Contractor) shall document all working conditions as specified in
17 PART 1 – GENERAL prior to starting the installation. Report any discrepancies to
18 the general contractor.
19

20 EXAMINATION AND PREPARATION

- 21
22 A. Review moisture vapor emission and pH test results as supplied by a 3rd party testing
23 agency.
24 1. Moisture vapor emissions must not exceed 95% RH as per ASTM F2170.
25 2. pH level should be in the range of 7 to 8.5.
26 B. Installation shall not be carried out unless the concrete flatness, moisture vapor
27 emissions, and pH requirements as specified are satisfied.
28

29 INSTALLATION

- 30
31 A. Coordinate acceptance of condition of existing concrete as stated in PART 1.
32 B. Base Mat:
33 1. Unroll base mat, fold, and adhere to substrate or unroll directly into spread
34 adhesive. Do not cut the base mat to final dimensions until it is laid into the
35 adhesive.
36 2. Thoroughly mix the two-component polyurethane adhesive per Connor's
37 instructions and apply it directly to the concrete subfloor with a V-notched 3/32"
38 X 3/32" X 3/32" trowel.
39 3. Install the base mat into the freshly applied adhesive. Do not allow a compression
40 fit at any seam. Roll the base mat with a 100 lb segmented roller and repeat the
41 rolling process on the entire mat 45 minutes after installation. Allow the adhesive
42 to cure before proceeding to the next step.
43 C. Bleacher-blocking: Before scratch coat, tape off the entire area of floor under the
44 bleachers in the extended position and saturate that area with urethane in order to fill
45 all air pockets and voids within the area. The purpose of the urethane is to fill in the
46 rubber air pockets but not add to the profile height.

1
2
3 D. Scratch Coat:

- 4 1. Thoroughly mix the two-component Scratch Coat per Connor's instructions.
5 2. Apply two layers of Scratch Coat to the base mat with a flat trowel. Allow each
6 layer to cure a minimum of 8 hours before proceeding to the next application.
7 Inspect for, and fill all gaps by applying additional material as needed. Sand
8 down any ridges in the cured Scratch Coat with 100 grit sand paper.

9 E. Wear Coat:

- 10 1. Thoroughly mix the two-component Wear Coat per Connor's instructions.
11 2. Apply the mixed wear coat material using a notched squeegee in one layer. The
12 Wear Coat must be applied wet-into-wet to create a seamless surface. Allow the
13 Wear Coat to cure 12 hours before proceeding to the next application. Sand any
14 imperfections in the finished surface with 100 grit sandpaper.

15 F. Top Coat:

- 16 1. Thoroughly mix the three-component water-based urethane Top Coat per
17 Connor's instructions.
18 a. Apply the mixed material with a paint roller at 250 to 300 square feet per
19 gallon. Allow the Top Coat to cure a minimum of 18 hours before applying
20 the game lines.
21 b. *Optional application (Contractor's option) - Apply the mixed material with an*
22 *airless sprayer at 225 to 250 square feet per gallon. Allow the Top Coat to*
23 *cure a minimum of 18 hours before applying the game lines.*

24 F. Game Lines:

- 25 1. Use only high-quality masking tape approved by Connor.
26 2. Thoroughly mix the three-component game line paint per Connor's instructions.
27 3. Provide game lines as indicated on drawings.

28 G. Remove all excess and waste materials from the work area. Dispose of empty
29 containers in accordance with federal and local statutes.
30

31 END OF SECTION
32

1 SECTION 09662

2
3 RESILIENT BASE (Use with all flooring options)

4
5
6 PART 1 - GENERAL

7
8 Description of Work

9
10 Work Included: Provide labor, materials and equipment necessary to complete the work of this
11 Section, including but not limited to the following:

- 12 1. Resilient wall base and accessories.
13 2. Substrate preparation.
14

15 References (Industry Standards):

- 16 1. ASTM F1861 Standard Specification for Resilient Wall Base
17 2. NFPA 258 Test Method for Specific Density of Smoke Generated by Solid Materials
18 3. NFPA 255 Test Method of Surface Burning Characteristics of Building Materials
19

20 Submittals

- 21
22 A. General: Submit listed submittals in accordance with Division 1, Submittal Procedures.
23 B. Product Data: Submit manufacturer's technical data sheet, care & maintenance document,
24 submittal and/or warranty for each material and accessory proposed for use.
25 C. Samples: Submit representative samples of each product specified for verification.
26

27 Quality Assurance

- 28
29 A. Manufacturer Qualifications: Provide resilient flooring materials manufactured in the
30 United States of America by a firm with a minimum of 10 year' experience with resilient
31 flooring materials of type equivalent to those specified.
32 B. Installer Qualifications: Installer must be professional, licensed, insured and acceptable to
33 manufacturer of resilient flooring materials. Project Managers or Field Supervisors must be
34 INSTALL (International Standards & Training Alliance) certified, CFI (Certified
35 Floorcovering Installers) Certified and/or FCICA (The Flooring Contractors Association)
36 CIM (Certified Installation Manager) for the requirements of the project.
37 C. Sustainable Design Requirements:
38 1. Wall base and accessories that are easily cleaned and do not require coatings and
39 stripping, or use chemicals that may be hazardous to human health.
40 2. Wall base and accessories that are free of materials known to be teratogenic, mutagenic
41 or carcinogenic.
42 3. Wall base and accessories that contain no polyvinyl chloride or plasticizers.
43 4. Wall base and accessories that contain no halogens.
44 5. Wall base and accessories that contain no asbestos.
45
46

1 Delivery, Storage and Handling

2
3 Store all materials off the ground with watertight cover and away from sweating walls and other
4 damp surfaces until ready for use. All rooms, subfloors, base and adhesives shall be maintained at
5 a minimum temperature of 70o F. for at least 48 hours before commencing work. Temperature
6 shall be maintained during installation and for at least 48 hours after completion.

7
8 Protection

9
10 Protect finished work installed by other trades prior to work under this Section. Any work
11 damaged by workmen of this trade shall be replaced without cost to the Owner.

12
13 Extra Materials

14
15 Provide 40 lineal feet of resilient base for Owner's future use.

16
17 Warranty

18
19 Provide manufacturer's standard limited commercial warranty to cover manufacturing defects.

20
21 PART 2 – PRODUCTS

22
23 Acceptable Manufacturer

24
25 A. Basis-of-Design: Roppe Corporation, 1602 N Union St., Fostoria, OH 44830. P: (800)
26 537-9527. Website: www.roppe.com

27 B. Substitutions: In accordance with Instructions to Bidders however, the proposed
28 substitution must meet or exceed all conditions of this specification.

29
30 Sculptured Rubber Wall Base:

- 31
32 1. Product Name: Pinnacle Plus
33 2. Material Specification: Type TS – rubber, vulcanized thermoset
34 Group 1 – solid (homogenous)
35 Style D – Sculptured #65 Vertical
36 3. Material Height: 4-5/8" (117.47 mm)
37 4. Material Thickness: 3/8" (9.53 mm)
38 5. Material Length: 48" per carton
39 6. Limited Warranty: 1 year, Manufacturing Only
40 7. Material & Composition: 100% vulcanized homogenous rubber compound -
41 (premium blend & SBR rubber materials)
42 8. Color: #100 Black
43 9. Substrate Preparation: Per ASTM F710 and Roppe Technical Data Sheet
44 10. Accessories: Provide Roppe Rubber Corner Blocks and Micro Corners
45 11. Base Adhesive: Per manufacturer's recommendations
46 12. Maintenance Products: Per manufacturer's recommendations

1 **PART 3 - EXECUTION**

2
3 **Examination**

4
5 **Verification of Conditions:** Examine the areas and conditions under which the work of this Section
6 will be performed. Correct conditions detrimental to timely and proper completion of the Work.
7 Do not proceed until unsatisfactory conditions are corrected.

8
9 **Preparation**

10
11 **Inspect all surfaces to receive base and report all defects that will affect the installation. The work**
12 **under this Section includes smoothing of walls with underlayment as required to receive cove base.**
13 **Contractor shall be held responsible for any defects which appear in the surface after completion.**

14
15 **General:** Install the work of this Section in accordance with the manufacturer's written instructions
16 and recommendations, anchoring components firmly into position for long life under hard use.

17
18 **Coordination:** Coordinate as required with other trades to assure proper and adequate provision in
19 the work of those trades for interface with the work of this Section. Coordinate schedules for
20 installation of the orderly progress of the total construction sequence.

21
22 **After preparation of wall surfaces, apply adhesive to back of base leaving top 1/4" free of adhesive.**
23 **Press base firmly against the walls sliding horizontally into place, making sure toe is tight to the**
24 **floor and against the wall. Roll the entire surface of the base with a hand roller, and press the top**
25 **of the base against the wall with a straight edge. Remove excess adhesive immediately. Where**
26 **base terminates at projections install end caps.**

27
28 **Protection**

29
30 **Upon completion of the installation, visually check exposed surfaces of the work and touch up**
31 **scratches and abrasions.**

32
33
34 **END OF SECTION**

1 SECTION 09780

2
3 FLOOR SEALERS (Base Bid – use with Polished Concrete Floor Finishing)

4
5
6 PART 1 - GENERAL

7
8 Project Includes

9
10 Sealing and surface preparation for areas of polished concrete per Section 03365.

11
12 Performance Requirements

13
14 Provide products with the following properties:

15 VOC compliant.

16 Oil and chemical resistance.

17 Eliminates dusting of concrete surfaces.

18 Maintains slip resistance of .86 dry and .69 wet.

19
20 Quality Assurance

21
22 Regulations: Comply with VOC and environmental regulations.

23
24
25 PART 2 – PRODUCTS

26
27 Materials

28
29 Penetrating floor sealer:

30 Available Product: Euclid “Euco Diamond Hard”.

31
32
33 PART 3 – EXECUTION

34
35 Installation

36
37 Apply according to manufacturer’s instruction by low pressure sprayer.

38
39
40 END OF SECTION

1 SECTION 12760

2
3 TELESCOPIC BLEACHERS (Alternate Bid No. 4)

4
5 PART 1 - GENERAL

6
7 Summary:

- 8
9 A. Section Includes: Furnish and install Telescopic Bleachers as shown on Drawings
10 and as specified herein.

11
12 Scope of Work:

- 13
14 A. Completely review Section 01010 Summary of Work and Section 01030 Alternate
15 Bids in order to understand the scope of work relating to this specification section.

16
17 Submittals

- 18
19 A. General: Submittals requirements are specified in Section 01340.
20
21 B. Product Data:
22 1. Manufacturer's installation instructions.
23 2. Manufacturer's descriptive literature.
24 3. Furnish a list and clarification of deviations from these specifications. Listing
25 shall be specific to each paragraph of the specifications. Approved deviations
26 shall be incorporated in the project at no cost to the Owner separately:
27 a. Concentrated load of 200 lbs. applied at any point and in any direction
28 along top rail.
29 b. Uniform load of 50 lbs. per foot applied horizontally at top rail and a
30 simultaneous uniform load of 100 lbs. per foot applied vertically
31 downward.
32
33 C. Section Cross-Reference: Required submittals in accordance with "Conditions of the
34 Contract" and Division 1 General Requirements sections of this "Project Manual."
35
36 D. Project Data: Manufacturer's product data for each system. Include the following:
37 1. Project list: Ten (10) seating projects of similar size, complexity and in service
38 for at least five (5) years.
39 2. Deviations: List of deviations from these project specifications, if any.
40
41 E. Shop Drawings: Indicate Telescoping Gym Seat assembly layout. Show seat
42 heights, row spacing and rise, aisle widths and locations, assembly dimensions,
43 anchorage to supporting structure, material types and finishes.
44 1. Wiring Diagrams: Indicate electrical wiring and connections.
45 2. Bench seat color(s) to be selected from manufacturer's standard options.
46

- 1 F. Samples: Seat materials and color finish as selected by Architect from
2 manufacturers offered color finishes.
3
4 G. Manufacturer Qualifications: Certification of insurance coverage and manufacturing
5 experience of manufacturer, and copy of a telescopic load test observed by a
6 qualified independent testing laboratory, and certified by a registered professional
7 structural engineer verifying the integrity of the manufacturer's geometry design and
8 base structural assumptions.
9
10 H. Installer Qualifications: Installer qualifications indicating capability, experience, and
11 manufacturer acceptance.
12
13 I. Engineer Qualifications: Certification by a professional engineer registered in the
14 state of manufacturer that the equipment to be supplied meets or exceeds the design
15 criteria of this specification.
16
17 J. Operating/Maintenance Manuals: Provide to Owner (2) maintenance manuals.
18 Demonstrate operating procedures, recommended maintenance and inspection
19 program.
20
21 K. Warranty: Manufacturers standard warranty documents.
22

23 Quality Assurance
24

- 25 A. Seating Layout: Comply with current NFPA 102 Standard for Assembly seating,
26 Tents, and Membrane Structures, and specifically with Folding and Telescopic
27 Seating, except where additional requirements are indicated or imposed by
28 authorities having jurisdiction.
29
30 B. Welding Standards & Qualification: Comply with AWS D1.1 Structural Welding
31 Code - Steel and AWS D1.3 Structural Welding Code - Sheet Steel.
32
33 C. Insurance Qualifications: Mandatory that each bidder submit with his bid an
34 insurance certificate from the manufacturer evidencing insurance coverage as stated
35 in the General Conditions.
36
37 D. Manufacturer Qualifications: Manufacturer who has a minimum of twenty years of
38 experience manufacturing telescoping gym seats.
39
40 E. Installer Qualifications: Engage experienced Installer who has specialized in
41 installation of telescoping gym seat types similar to types required for this project
42 and who is acceptable to, or certified by, telescoping gym seat manufacturer.
43
44 F. Engineer Qualifications: Engage licensed professional engineer experienced in
45 providing engineering services of the kind indicated that have resulted in the

1 successful installation of telescoping bleachers similar in material, design,
2 fabrication, and extent to those types indicated for this project.

3
4 Delivery, Storage and Handling

- 5
6 A. Deliver telescopic gym seats in manufacturers packaging clearly labeled with
7 manufacturer name and content.
8
9 B. Handle seating equipment in a manner to prevent damage.
10
11 C. Deliver the seating at a scheduled time for installation that will not interfere with
12 other trades operating in the building.
13

14 Project Conditions

- 15
16 A. Field Measurements: Coordinate actual dimensions of construction affecting
17 telescoping bleachers installation by accurate field measurements before fabrication.
18 Show recorded measurements on final shop drawings. Coordinate field
19 measurements and fabrication schedule with construction progress to avoid delay of
20 Work.
21

22 Warranty

- 23
24 A. The manufacturer shall warrant all installation work performed under these
25 specifications to be free of defects for a period of two years.
26 B. All understructure components, seating and guard/hand rails shall be warranted
27 for a period of ten years.
28 C. Any materials found to be defective within this period will be replaced at no cost
29 to the owner. This warranty shall not include replacements required by Acts of
30 God, war, vandalism, flood, fire, calamity or deliberate abuse or misuse of the
31 equipment.
32

33 Maintenance and Operation

- 34
35 A. Instructions: Both operation and maintenance shall be transmitted to the Owner by
36 the manufacturer of the seating or his representative.
37
38 B. Service: Maintenance and operation of the seating system shall be the responsibility
39 of the Owner or his duly authorized representative, and shall include the following:
40 1. Operation of the Seating System shall be supervised by responsible personnel
41 who will assure that the operation is in accordance with the manufacturer's
42 instructions.
43 2. Only attachments specifically approved by the manufacturer for the specific
44 installation shall be attached to the seating.

- 1 3. An annual inspection and required maintenance of each seating system shall be
2 performed to assure safe conditions. At least biannually the inspection shall be
3 performed by a professional engineer or factory qualified service personnel.
4
5

6 PART 2 – PRODUCTS
7
8

9 Manufacturers
10

11 Available Manufacturers: Subject to compliance with requirements, manufacturers offering
12 products that may be incorporated in the Work include, but are not limited to, the following:
13

14 Manufacturers: Subject to compliance with requirements, provide products by one of the
15 following:
16

- 17 1. Irwin Seating Company
- 18 2. Hussey Seating Company
- 19 3. Intekal, Inc.
20

21 System Description (based on Irwin Seating Company)
22

- 23 1. Model 4500 wall attached telescopic bleacher, 5 seating rows at 24 inch row spacing
24 and 10 inch rise per row.
- 25 2. 1 Group at 60 feet – 6 inches.
- 26 3. Power Operation.
- 27 4. Panelam 5/8" Decking, Galvanized Nose and Rear Beam.
- 28 5. 2 Aisle step locations with 48 inch wide steps with self-storing "Smart Rails".
- 29 6. 180-10" Infinity Seats (18" Wide Seats) plus "Recoverable Wheelchair Spaces".
- 30 7. Removal and Disposal of existing bleachers.
- 31 8. 5 Year Warranty
32

33 Materials
34

- 35 A. Lumber: ANSI/Voluntary Product 20, B & B Southern Pine
- 36
- 37 B. Plywood: ANSI/Voluntary Product PS1, APA A-C Exterior Grade.
- 38
- 39 C. Structural Steel Shapes, Plates and Bars: ASTM A 36.
- 40
- 41 D. Uncoated Steel Strip (Non-Structural Components): ASTM A569, Commercial
42 Quality, Hot-Rolled Strip.
- 43
- 44 E. Uncoated Steel Strip (Structural Components): ASTM A570 Grade 33, 40, 45, or
45 50, Structural Quality, Hot-Rolled Strip.

- F. Uncoated Steel Strip (Structural Components): ASTM A607 Grade 45 or 50, High-Strength, Low Alloy, Hot-Rolled Strip.
- G. Galvanized Steel Strip: ASTM A653 Grade 40, zinc coated by the hot-dip process, structural quality.
- H. Structural Tubing: ASTM A500 Grade B, cold-formed.
- I. Polyethylene Plastic: ASTM D 1248, Type III, Class B; molded, color-pigmented, textured, impact-resistant, structural formulation; in color indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors.
- J. Fasteners: Vibration-proof, of size and material standard with manufacturer.

Understructure Fabrication

A. Frame System:

1. Wheels: Not less than 5" diameter by 1 1/4" with non-marring soft rubber face to protect wood and synthetic floor surfaces, with molded-in sintered iron oil impregnated bushings to fit 3/8" diameter axles secured with E-type snap rings.
2. Lower Track: Continuous Positive Interglide System interlocks each adjacent CPI unit using an integral, continuous, anti-drift feature and through-bolted guide at front to prevent separation and misalignment. Each CPI unit shall contain a Low Profile Posi-Lock LX to lock each row in open position and allow unlocking automatically. Provide adjustable stops to allow field adjustment of row spacings.
4. Slant Columns: High tensile steel, tubular shape.
5. Sway Bracing: High tensile steel members through-bolted to columns.
6. Upper Guide: High tensile steel through-bolted to nose and riser. Interlocks with adjacent upper tier to prevent separation and misalignment. Provide adjustable stops to allow field adjustment of row spacings.
7. Deck Support: Securely captures decking for entire length of section.

B. Deck System:

1. Section Lengths: Each bank shall contain sections not to exceed 25'-6" in length with a minimum of two supporting frames per row, each section.
2. Nosing and Rear Riser: Continuous roll formed galvanized steel members.
3. Attachment: Through-Bolted fore/aft to deck guides, and frame cantilevers.
4. Decking: 5/8", AC grade, tongue & groove, transversely oriented plywood, interior type with exterior glue, 5-ply, all plies Southern Pine with plugged crossbands, produced in accordance with National Bureau of Standards PS-1-83. Longest unsupported span: MXM 26, 21 1/2"; MXM 33, 28 1/2".
5. Deck End Overhang: Not to exceed frame support by more than 5'-7".

Seating Fabrication

1. Seat Modules: 18" long unitized, interlocking, engineered, high density polyethylene modules providing scuff resistant textured 10" wide anatomically contoured seat surface. ½" minimum interlock on seat and face.
2. Profile: Designed with internal reinforcement ribs and cantilevered to the rear to provide not less than 3" smooth toe space beneath the seat.
3. Seat Support: Each seat support module shall be secured against fore/aft movement by not less than (2) two longitudinally sited steel fasteners spaced no less than 2 1/4" on center, creating a steel to steel connection, tying the structure firmly to the steel nosing.
4. Number Plates: Seat module shall be designed to accept seat number plates.
5. End Caps: Each end of row shall be enclosed with matching end caps. End caps shall be designed with concealed attachment and provide indent for row letters. Color to match seat top.

Shop Finishes

- A. Understructure: For rust resistance, steel understructure shall be finished on all surfaces with black "Dura-Coat" enamel. Understructure finish shall contain a silicone additive to improve scratch resistance of finish.
- B. Wear Surfaces: Surface subject to normal wear by spectators shall have a finish that does not wear to show different color underneath:
 1. Steel nosing and rear risers shall be pre-galvanized with a minimum spangle of G-60 zinc plating.
 2. Decking shall have surfaces to receive a sealer coat with use surfaces to receive high gloss clear urethane finish.
 3. Injection Molded bench seats to be selected from manufacturer's standards.
- C. Railings: Steel railings shall be finished with powder coated semi - gloss black.

Fastenings

- A. Welds: Performed by welders certified by AWS standards for the process employed.
- B. Structural Connections: Secured by structural bolts with prevailing torque lock nuts or Free-spinning nuts in combination with lock washers.

Accessories

- A. Flex-Row: Provide first ROW modular units to be utilized by persons in wheelchairs and able bodied persons. Each Flex-Row unit shall have an unlock

1 lever for easy deployment if wheelchair access is needed. Unlock lever shall lock
2 the bleacher seats into position when fully opened.

3
4 1. Provide a black full surround skirting 1/2" off the floor for safety and
5 improved aesthetics.

6
7 2. Provide a black injection molded end cap for the nose beam for safety and
8 improved aesthetics.

9
10 3. Provide a mechanical positive lock when the Flex-Row system is in the
11 open and used position.

12
13 4. Flex-Row modular units are designed to achieve multi-use front row seating
14 to accommodate team seating, ADA requirements and facility specific
15 requirements. Flex-Row units are available in modular units from 2 - 7 seats
16 wide as well as full section widths.

17
18 B. Front Aisle Steps: Provide at each vertical aisle location front aisle step. Front
19 steps shall engage with front row to prevent accidental separation or movement.
20 Steps shall be fitted with four non-skid rubber feet each 1/2" in diameter. Blow
21 molded end caps shall have full radius on all four edges. Quantity and location as
22 indicated.

23
24 C. Non-Slip Tread: Provide at front edge of each aisle locations an adhesive-backed
25 abrasive non-slip tread surface.

26
27 D. Foot Level Aisles: Provide deck level full width vertical aisles located as
28 indicated. There shall be one (1) 4'0" aisle in the 15'6" bank and two (2) 4'0"
29 aisle in the 41' bank.

30
31 E. Intermediate Aisle Steps: Intermediate aisle steps shall be of boxed fully enclosed
32 type construction. Blow molded end caps shall have full radius on all four edges.
33 Step shall have non-skid on surface. Quantity and location as indicated.

34
35 F. Intermediate Aisle Handrails: Provide single pedestal mount handrails 34" high
36 with terminating mid rail. Handrails shall be attached to the socket and shall rotate
37 90° for easy storage in socket. Aisle handrails that are detached from the socket
38 for storage are unacceptable.

39
40 G. Self Storing End Rails: Provide steel self-storing 42" high above seat, end rail
41 with tubular supports and intermediate members designed with 4" sphere passage
42 requirements.

1
2 **PART 3 - EXECUTION**
3

4 **Examination**
5

- 6 A. Verification of Conditions: Verify area to receive telescoping gym seats are free of
7 impediments interfering with installation and condition of installation substrates are
8 acceptable to receive telescoping gym seats in accordance with telescoping gym
9 seats manufacturer's recommendations. Do not commence installation until
10 conditions are satisfactory.
11

12 **Installation**
13

- 14 A. Manufacturer's Recommendations: Comply with telescoping gym seats
15 manufacturer's recommendations for product installation requirements.
16
17 B. General: Install telescoping gym seats in accordance with manufacturer's installation
18 instructions and final shop drawings. Provide accessories, anchors, fasteners, inserts
19 and other items for installation of telescoping gym seats and for permanent
20 attachment to adjoining construction.
21

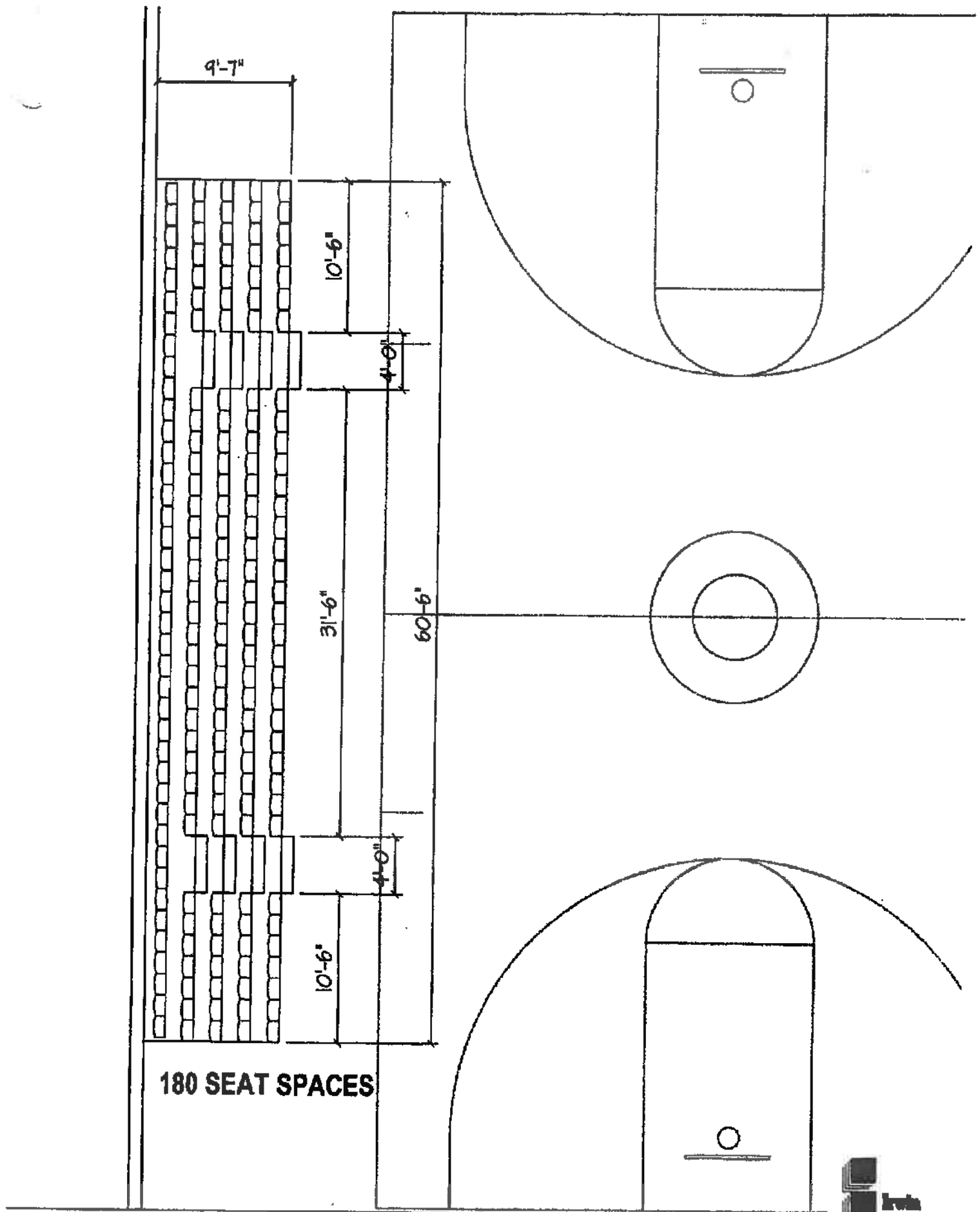
22 **Adjustment, Cleaning and Demonstration**
23

- 24 A. Adjustment: After installation completion, test and adjust each telescoping gym seats
25 assembly to operate in compliance with manufacturer's operations manual.
26
27 B. Cleaning: Clean installed telescoping gym seats on both exposed and semi-exposed
28 surfaces. Touch-up finishes to restore damage or soiled surfaces.
29
30 C. Manufacturer's representative shall demonstrate bleacher operation to Architect
31 and Owner
32

33 **Protection**
34

- 35 A. General: Provide final protection and maintain conditions, in a manner acceptable to
36 manufacturer and installer to ensure telescoping gym seats are without damage or
37 deterioration at time of substantial completion.
38
39

40 **END OF SECTION**
41
42
43



MANY FARMS ELE SCHOOL GYM SEATING PLAN