

STATE OF MICHIGAN  
 DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET  
 PROCUREMENT  
 P.O. BOX 30026, LANSING, MI 48909  
 OR  
 530 W. ALLEGAN, LANSING, MI 48933

**CHANGE NOTICE NO. 3**  
 to  
**CONTRACT NO. 071B8200257**  
 between  
**THE STATE OF MICHIGAN**  
 and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
ACT, Inc. 500 ACT Drive Iowa City, IA 52243	Tom Goedken	(319) 337-1152
	TELEPHONE	CONTRACTOR #, MAIL CODE
	tom.goedken@act.org	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR	MDE	Joseph Martineau	517-241-4710	<a href="mailto:MartineauJ@michigan.gov">MartineauJ@michigan.gov</a>
BUYER	DTMB	Lance Kingsbury	517-241-3768	<a href="mailto:KingsburyL@michigan.gov">KingsburyL@michigan.gov</a>

CONTRACT SUMMARY:			
DESCRIPTION: <b>Administration of Michigan Merit Examination – College Entrance – MDE (OEAA)</b>			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
August 13, 2008	September 30, 2011	2, 1 Year Options	May 31, 2014
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	NA	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS
<input type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MINIMUM DELIVERY REQUIREMENTS:			
N/A			

DESCRIPTION OF CHANGE NOTICE:				
EXTEND CONTRACT EXPIRATION DATE	EXERCISE CONTRACT OPTION YEAR(S)	EXTENSION BEYOND CONTRACT OPTION YEARS	LENGTH OF OPTION/EXTENSION	EXPIRATION DATE AFTER CHANGE
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12 Months	May 31, 2015
VALUE/COST OF CHANGE NOTICE:		ESTIMATED REVISED AGGREGATE CONTRACT VALUE:		
\$8,787,617.00		\$78,757,276.00		
Effective immediately, this Contract is EXTENDED to May 31, 2015, and is INCREASED by \$8,787,617.00				
All other terms, conditions, specifications, and pricing remain the same unless noted below. Per contractor and agency agreement, DTMB Procurement approval, and State Administrative Board approval on August 12, 2014.				

A. The following are removed/reserved (and the parenthetical "Line" references below and otherwise set forth in this Change Notice No. 3 are to Appendix H – Pricing, as it existed prior to this Change Notice No. 3):

1. Administration Briefings (Line 15)
2. Technical Reports (Line 25)
3. Psychometric review of student data files that have all components of the MME combined (Line 31)
4. Certifications (Line 38)
5. Testing Center for CE/WS (Line 40)
6. Testing Center for Michigan-developed- for non-public students unable to test at their own school (Line 42)
7. Technical Advisory Committee (TAC) Meetings (Line 45)
8. Standard Setting Meetings (Line 46)
9. Military Testing Setup (Line 51) as well as additional Cost beyond ACT & WK price per student standard testing (Line 52) and student accommodation testing (Line 53)
10. Observer Training On-site (Line 54)
11. Image Requirements for WorkKeys (line 56)
12. WorkKeys IT Development (Line 60)
13. WorkKeys Forensic Analysis (Line 61)
14. End-to-end System Testing (Line 62)
15. Test Development Item Mapping (Line 65)
16. WorkKeys State Form Development (Line 66)
17. No reporting of students without barcode label (Line 68)

B. The following are revised:

1. It is mutually understood that references throughout the contract and changes to OEAA or BAA refer to DAS- Division of Accountability Services- which is the current name of the organization directly securing services under this contract within MDE.
2. 1001-Project Request
  - i. The materials and process to administer College Entrance (CE) and Work Skills (WS) will cover the school year 2014-2015.
  - ii. There is no MME Administration contractor and therefore no interface with other vendors; for example, as occurred during 2013-2014 with Measurement Inc.

iii. This is no longer MME testing for 3 consecutive days.  
Instead there is testing and related activities for CE and WS testing only.

iv. In furtherance of the foregoing, and notwithstanding anything in the Contract or this Change Notice No. 3 to the contrary, in light of the revisions to Appendix H – Pricing and 1.001 – Project Request made in this Change Notice No. 3:

a. the Contract is modified such that Revised Appendix H - Pricing attached to this Change Notice No. 3 will replace the prior Appendix H – Pricing in its entirety;

b. Revised Appendix H – Pricing details the only tasks, together with such other tasks identified as in scope in this Change Notice No. 3 (collectively, the “2014-2015 Tasks”), required to be performed and provided by Contractor for the 2014-2015 school year and term of the Contract as extended hereby; provided that, certain of the 2014-2015 Tasks are to be provided at the option of DAS, in which case they will be performed as and when contemplated following reasonable and timely exercise of DAS’s option in writing given to Contractor; and

c. the required performance and provision of the 2014-2015 Tasks are subject to any broader contractual provisions expressly applicable to the 2014-2015 Tasks set forth in the Contract as amended.

3. ~~1200~~-Roles and Responsibilities: Names by role have changed. Contractor will maintain and share with DAS a list of contacts with phone number and email address.

4. The following are revised

i. The Annual Launch Meeting (line 20) will not be face to face but will occur as a web-ex.

C. For clarification purposes, we confirm the following are included in scope for the 2014-2015 school year:

1. State Allowed Accommodations

2. Compile and transfer data files of student test results including matched Michigan student UIC for College Entrance (Line 28) and Work Skills (Line 29). Price states "only required if multiple selects are required." Michigan confirms multiple select files are needed.

i. For clarification multiple select files include all files on the document entitled MME File Exchange Overview-Spring 2014 (ACT repository, Partner Connect) except the following 17 file types that are removed from scope: 4, 5, 11, 13, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 39.

ii. The image files are required for our exception processing included in the file exchanges identified in C.2.i (above). File #19 (WorkKeys) and file #20 (ACT) will still be received as part of the data file transfers.

iii. The pre-test session data is included in the in the select files as was done in Spring 2014.

iv. From the same list, we are changing #29 from Final MME Scored

Data File to 2 final data files; one for CE and one for WS.

- v. The reporting of students without barcode labels is simply a flag and is included in the data file.

3. Test Development- Test Book Review (Line 64)

- i. ACT will not perform alignment
- ii. The Test Book Review is optional and only has cost if MDE exercises the option.

4. Ability for MDE to select ACT without writing (Line 33) by delivery of written notice no later than end of day August 15, 2014 (absent timely selection of without writing, ACT will provide the ACT plus Writing as reflected on Revised Appendix H – Pricing attached hereto).

Revised Appendix H-Pricing  
Michigan Merit Examination - College-entrance and Work Skills Tests  
For Spring 2015

		Unit Type	Spring 2015 Contract		
LN	Description		Estimated Quantity	Rate Per Unit	Est Sum
GENERAL ADMINISTRATION					
1	Administration Briefings	each, implementation seminars		5,110.00	-
2					-
3	Staff Participation in On-Site Meetings				-
4	Indirect Costs (per Meeting)	Included in assessment pricing			-
5	En-route Cost (Meetings * Persons Traveling)	Included in assessment pricing			-
6	Annual Project Launch Meeting (ACT) Webex	Included in assessment pricing		-	-
7	Daily Costs (Days of Meeting * Persons Traveling)	Included in assessment pricing			-
8	Call Center	Included in assessment pricing			-
9					-
10	Compile and transfer data files of student test results (including matched Michigan student UICs)				-
11	College-entrance	year	1	17,250.00	17,250
12	Work skills	year	1	17,250.00	17,250
13					-
14	College-Entrance Test	each	120,000	49.00	5,880,000
15	Work Skills Test(s)				-
16	Reading	each	120,000	6.50	780,000
17	Mathematics	each	120,000	6.50	780,000
18	Locating Information	each	120,000	6.50	780,000
19	Certification (option line)	each, included in assessment pricing		5.50	-
20					-
21	Testing Center for College-Entrance and Work Skills (for non-public students that can not test at their own school)	site/day	0	3,580.00	-
22					-
23	Technical Advisory Committee (TAC) Meetings	each		1,790.00	-
24					-
25	Standard Setting Meetings	each		5,990.00	-
26	Other Meetings	each		5,290.00	-
27	MME Test Coordinator Supervisor Training	each	-	8,000.00	-
28	Records & Minutes	Included in program management fees			-
29	Shipment Overage	year		16,140.00	-
30					-
31	Military Testing - Set up	each		2,150.00	-
32	Additional Cost beyond ACT & WK price (per student standard testing)	each		200.00	-
33	Additional Cost beyond ACT & WK price (per student accomm testing)	each		350.00	-
34	Observer Training	year		6,010.00	-
35					-
36	Phone Training-observers	Session		670.00	-
37	Image Requirements for WorkKeys	year		8,060.00	-
38	Operational Check-in for WorkKeys	Included in assessment pricing			-
39	Program Management-CE	year	1	275,000.00	275,000
40	WorkKeys Program Management	year	1	50,000.00	50,000
41	Online Training for Test Accommodation Coordinators	year		1,910.00	-
		year, Includes development activities in support of Exceptions Check processing, reproposed records activities, duplicate records, file coding and validation, Day 2 WK select Files, and match file processing			-
42	WorkKeys IT Development			34,810.00	-
		year, Includes Modifications to scanning/editing programs to enable capture of Day 2 WK grid information			-
43	WorkKeys Forensic Analysis			7,590.00	-
		year, Includes activities in support of the Scoring Customer Acceptance Test (CAT) and independent Day 1 ACT and Day 2 WorkKeys system testing			-
44	End To End System Testing			6,050.00	-
45					-
46	Test Development-Alignment (Test Book Review)	year	1	41,824.00	41,824
47					-
48	Test Development-Item Mapping	year		341,330.00	-
49	WorkKeys state form development	year		47,590.00	-
50					-
51					-
52	GENERAL ADMINISTRATION SUBTOTAL				5,621,324
53					-
54	Preparing Accommodation Materials - College-Entrance				
55	Translation Spanish	year	1	7,860.00	7,860
56	Translation Arabic	year	1	7,860.00	7,860
57	Design and Compose Braille Versions	Included in assessment pricing			-
58	Design and Compose Enlarged-Print Versions	Included in assessment pricing			-
59	a. Assessment Administration Booklets for Braille	Included in assessment pricing			-
60	Reader Scripts or Assessment Administration Booklets for Braille:				-
61	English Reader Script	Included in assessment pricing			-
62	Audio Accommodation Masters:				-
63	General Audio Master creation (regardless of media format)	Included in assessment pricing			-
	Audio DVD Master (rate only dependent on General Audio Master work occurring)	Included in assessment pricing			-
64	Master Audio - Spanish - ACT	year	1	15,060.00	15,060
65	Master Audio - Arabic - ACT	year	1	15,060.00	15,060
66	Video Accommodation Masters:				-
67	English Versions				-
68	General Video Master creation (regardless of media format)	booklet	1	9,000.00	9,000
69	DVD Master (rate only dependent on General Video Master work occurring)	Included in assessment pricing			-
70	Spanish Versions				-
71	General Video Master creation (regardless of media format)	booklet	1	9,000.00	9,000
72	DVD Master (rate only dependent on General Video Master work occurring)	Included in assessment pricing			-
73		Included in assessment pricing			-

LN	Description	Unit Type	Spring 2015 Contract		
			Estimated Quantity	Rate Per Unit	Est Sum
74	Arabic Versions				-
75	General Video Master creation (regardless of media format)	booklet	1	9,000.00	9,000
76	DVD Master (rate only dependent on General Video Master work occurring)	Included in assessment pricing			-
77	Duplication and Packing				-
78	Paper Media				
79	Braille	Included in assessment pricing			
80	Enlarged Print	Included in assessment pricing			
81	English reader scripts	Included in assessment pricing			
82	Audio/Video Media				
83	Spanish				-
84	DVD	each	100	7.50	750
85	Arabic				-
86	DVD	each	150	8.50	1,275
87					-
88	SUBTOTAL Preparing Accommodation Materials - College-entrance				74,885
89					
90	Preparing Accommodation Materials - Work Skills (Ridders may adjust quantities to match the number of booklets being bid)				-
91	Design and Compose Braille Versions	Included in assessment pricing			
92	Design and Compose Enlarged-Print Versions	booklet	1	2,200.00	2,200
93	Assessment Administration Booklets for Braille	Not available for LJ, included in assessment pricing			
94	Reader Scripts or Assessment Administration Booklets for Braille				-
95	English Reader Script	booklet, not available for LJ	1	5,380.00	5,380
96	Audio Accommodation Masters:				-
97	General Audio Master creation (regardless of media format)	booklet, not available for LJ	1	4,890.00	4,890
98	Audio DVD Master (rate only dependent on General Audio Master work occurring)	booklet, not available for LJ	1	1,850.00	1,850
99	Video Accommodation Masters:				-
100	English Versions				-
101	General Video Master creation (regardless of media format)	booklet	1	20,190.00	20,190
102	General Video Master creation adjustment if Audio Accommodation master can be used.	Included in assessment pricing			
103	DVD Master (rate only dependent on General Video Master work occurring)	booklet	1	250.00	250
104	Spanish Versions				-
105	General Video Master creation (regardless of media format)	booklet	1	20,190.00	20,190
106	ACT General Video Master creation regardless... (LJ specific)		1	2,100.00	2,100
107	DVD Master (rate only dependent on General Video Master work occurring)	booklet	1	250.00	250
108	Arabic Versions				-
109	General Video Master creation (regardless of media format)	booklet	1	20,190.00	20,190
110	ACT General Video Master creation (regardless... ) LJ specific	booklet	1	2,100.00	2,100
111	DVD Master (rate only dependent on General Video Master work occurring)	booklet	1	250.00	250
112					-
113	Duplication and Packing				-
114	Paper Media				-
115	Braille - RFI	booklet	13	46.90	608
116	Braille - AM	booklet	13	81.90	1,065
117	Braille - LJ	booklet	13	315.90	4,107
118	Enlarged Print	booklet, includes RFI, AM and LJ	69	11.70	807
119	English reader scripts	booklet, not available for LJ	993	1.80	1,787
120	Audio/Video Media				-
121	English				-
122	DVD - Audio Only	each, not available for LJ	0	0.95	-
123	DVD	each, includes RFI, AM and LJ	405	5.30	2,147
124	Spanish				-
125	DVD	each, includes RFI, AM and LJ	60	5.30	318
126	Arabic				-
127	DVD	each, includes RFI, AM and LJ	145	5.30	769
128					-
129	SUBTOTAL Preparing Accommodation Materials - Work Skills				91,428
130					
131	ESTIMATED CONTRACT TOTAL				8,787,617

Workkeys only	2,498,578
College entrance only	8,247,115
Undesignated (50/50)	41,824
50%	20,912

workkeys total	2,519,590
College total	8,288,027
	8,787,617

STATE OF MICHIGAN  
 DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET  
 PROCUREMENT  
 P.O. BOX 30026, LANSING, MI 48909  
 OR  
 530 W. ALLEGAN, LANSING, MI 48933

September 30, 2013

**CHANGE NOTICE NO. 2**  
 to  
**CONTRACT NO. 071B8200257**  
 between  
**THE STATE OF MICHIGAN**  
 and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
ACT, Inc. 500 ACT Drive Iowa City, IA 52243	Tom Goedken	(319) 337-1152
	TELEPHONE	CONTRACTOR #, MAIL CODE
	tom.goedken@act.org	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR	MDE	Joseph Martineau	517-241-4710	<a href="mailto:MartineauJ@michigan.gov">MartineauJ@michigan.gov</a>
BUYER	DTMB	Lance Kingsbury	517-241-3768	<a href="mailto:KingsburyL@michigan.gov">KingsburyL@michigan.gov</a>

CONTRACT SUMMARY:			
DESCRIPTION: Administration of Michigan Merit Examination – College Entrance – MDE (OEAA)			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
August 13, 2008	September 30, 2011	2, 1 Year Options	September 30, 2013
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
N/A	N/A	NA	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS
<input type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MINIMUM DELIVERY REQUIREMENTS:			
N/A			

DESCRIPTION OF CHANGE NOTICE:				
EXTEND CONTRACT EXPIRATION DATE	EXERCISE CONTRACT OPTION YEAR(S)	EXTENSION BEYOND CONTRACT OPTION YEARS	LENGTH OF OPTION/EXTENSION	EXPIRATION DATE AFTER CHANGE
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8 Months	May 31, 2014
VALUE/COST OF CHANGE NOTICE:		ESTIMATED REVISED AGGREGATE CONTRACT VALUE:		
\$5,000,000.00		\$69,969,659.00		

Effective immediately, this Contract is EXTENDED to May 31, 2014, and INCREASED by \$5,000,000.00.

All other terms, conditions, specifications, and pricing remain the same.

Per vendor and agency agreement, DTMB Procurement approval, and the approval of the State Administrative Board dated September 13, 2013.

STATE OF MICHIGAN  
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET September 22, 2011  
PURCHASING OPERATIONS  
P.O. BOX 30026, LANSING, MI 48909  
OR  
530 W. ALLEGAN, LANSING, MI 48933

**CHANGE NOTICE NO. 1**  
**TO**  
**CONTRACT NO. 071B8200257**  
**between**  
**THE STATE OF MICHIGAN**  
**and**

NAME & ADDRESS OF CONTRACTOR		TELEPHONE (319) 337-1152 <b>Tom Goedken</b>
<b>ACT, Inc.</b> <b>500 ACT Drive</b> <b>Iowa City, IA 52243</b>  <b>tom.goedken@act.org</b>		
		BUYER/CA (517) 241-3768 <b>Lance Kingsbury</b>
Contract Compliance Inspector: Joseph Martineau (517) 241-4710 <b>Administration of Michigan Merit Examination – College Entrance – MDE (OEAA)</b>		
CONTRACT PERIOD: From: <b>August 13, 2008</b> To: <b>September 30, 2013</b>		
TERMS <b>N/A</b>	SHIPMENT <b>N/A</b>	
F.O.B. <b>N/A</b>	SHIPPED FROM <b>N/A</b>	
MINIMUM DELIVERY REQUIREMENTS <b>N/A</b>		

**NATURE OF CHANGE(S):**

Effective October 1, 2011, this contract is hereby **EXTENDED** to September 30, 2013, and **INCREASED** by \$23,900,000.00. All other terms, conditions, pricing, and specifications remain the same.

**AUTHORITY/REASON(S):**

Per contractor and agency agreement, the approval of DTMB Purchasing Operations and the approval of the State Administrative Board on September 30, 2011.

**INCREASE: \$23,900,000.00**

**TOTAL REVISED ESTIMATED CONTRACT VALUE: \$64,969,659.00**

LN	Description	Unit Type	Spring 2012 as proposed			Spring 2013 as proposed			Spring 2012 as projected		Spring 2013 as projected	
			Rate Per Unit	Estimated Total Units/Year	Est Sum	Rate Per Unit	Estimated Total Units/Year	Est Sum	Estimated Quantity	Estimated Cost	Estimated Quantity	Estimated Cost
13	GENERAL ADMINISTRATION											
14												
15	Administration Briefings	each	\$ 4,940.00	2	\$ 9,880.00	\$ 5,110.00	2	\$ 10,220.00	2.00	\$ 9,880.00	2.00	\$ 10,220.00
16												
17	Staff Participation in On-Site Meetings											
18	Indirect Costs (per Meeting)	meeting		12	\$ -		12	\$ -		\$ -		\$ -
19	En-route Cost (Meetings * Persons Traveling)	Person/mile		96	\$ -		96	\$ -		\$ -		\$ -
20	Project Kickoff Meeting (ACT)	meeting	\$ 27,530.00	1	\$ 27,530.00	\$ 28,770.00	1	\$ 28,770.00	1.00	\$ 27,530.00	1.00	\$ 28,770.00
21	Monthly Meetings (ACT)	meeting	\$ 18,210.00	0	\$ -	\$ 18,850.00	0	\$ -		\$ -		\$ -
22	Daily Costs (Days of Meeting * Persons Traveling)	Person/day		288	\$ -		288	\$ -		\$ -		\$ -
23										\$ -		\$ -
24	Call Center	year		1	\$ -		1	\$ -		\$ -		\$ -
25	Technical Reports	year	\$ 36,790.00	1	\$ 36,790.00	\$ 38,080.00	1	\$ 38,080.00	1.00	\$ 36,790.00	1.00	\$ 38,080.00
26										\$ -		\$ -
27	Compile and transfer data files of student test results (including matched Michigan student UICs)											
28	College-entrance	year	\$ 13,730.00	1	\$ 13,730.00	\$ 14,210.00	1	\$ 14,210.00	1.00	\$ 13,730.00	1.00	\$ 14,210.00
29	Work skills	year	\$ 13,730.00	1	\$ 13,730.00	\$ 14,210.00	1	\$ 14,210.00	1.00	\$ 13,730.00	1.00	\$ 14,210.00
30										\$ -		\$ -
31	Psychometric review of student data files that have all components of the MME combined											
32		year	\$ 1,350,150.00	1	\$ 1,350,150.00	\$ 1,397,410.00	1	\$ 1,397,410.00	1.00	\$ 1,350,150.00	1.00	\$ 1,397,410.00
33												
34	College-Entrance Test	each	\$ 46.50	150,000	\$ 7,440,000.00	\$ 47.50	150,000	\$ 7,600,000.00	132,325.00	\$ 6,153,112.50	135,365.00	\$ 6,429,537.50
35	Work Skills Test(s)											
36	Reading	each	\$ 5.50	150,000	\$ 880,000.00	\$ 5.50	150,000	\$ 880,000.00	132,325.00	\$ 727,787.50	135,365.00	\$ 744,507.50
37	Mathematics	each	\$ 5.50	150,000	\$ 880,000.00	\$ 5.50	150,000	\$ 880,000.00	132,325.00	\$ 727,787.50	135,365.00	\$ 744,507.50
38												
39	Other (Bidder may replace this line and/or add lines as appropriate)	each	\$ 5.50	150,000	\$ 880,000.00	\$ 5.50	150,000	\$ 880,000.00	132,325.00	\$ 727,787.50	135,365.00	\$ 744,507.50
40	Certification (option line)	each	\$ -	150,000	\$ -	\$ -	150,000	\$ -		\$ -		\$ -
41										\$ -		\$ -
42	Testing Center for College-Entrance and Work Skills (for non-public students that can not test at their own school)	site/day	\$ 3,750.00	0	\$ -	\$ 3,880.00	0	\$ -		\$ -		\$ -
43										\$ -		\$ -
44	Testing Center for Michigan-developed (for non-public students that can not test at their own school)	site/day	\$ -	0	\$ -	\$ -	0	\$ -		\$ -		\$ -
45										\$ -		\$ -
46	Other (Please describe and add additional line if needed)									\$ -		\$ -
47	Technical Advisory Committee (TAC) Meetings	each	\$ 1,730.00	4	\$ 6,920.00	\$ 1,790.00	4	\$ 7,160.00	4.00	\$ 6,920.00	4.00	\$ 7,160.00
48	Standard Setting Meetings	each	\$ 6,750.00	1	\$ 6,750.00	\$ 6,990.00	1	\$ 6,990.00	1.00	\$ 6,750.00	1.00	\$ 6,990.00
49	Other Meetings	each	\$ 5,100.00	6	\$ 30,600.00	\$ 5,280.00	6	\$ 31,680.00	6.00	\$ 30,600.00	6.00	\$ 31,680.00
50	MME Test Coordinator Supervisor Training	each	\$ 7,730.00	12	\$ 92,760.00	\$ 8,000.00	12	\$ 96,000.00	12.00	\$ 92,760.00	12.00	\$ 96,000.00
51	Records & Minutes	each		1	\$ -		1	\$ -		\$ -		\$ -
52	Shipment Overage	year	\$ 15,590.00	1	\$ 15,590.00	\$ 16,140.00	1	\$ 16,140.00	1.00	\$ 15,590.00	1.00	\$ 16,140.00
53	Military Testing - Set up	each	\$ 2,080.00	0	\$ -	\$ 2,150.00	0	\$ -		\$ -		\$ -
54										\$ -		\$ -
55	Additional Cost beyond ACT & WK price (per student standard testing)	each	\$ 190.00	0	\$ -	\$ 200.00	0	\$ -		\$ -		\$ -
56										\$ -		\$ -
57	Additional Cost beyond ACT & WK price (per student accom testing)	each	\$ 340.00	0	\$ -	\$ 350.00	0	\$ -		\$ -		\$ -
58	Observer Training	year	\$ 5,810.00	1	\$ 5,810.00	\$ 6,010.00	1	\$ 6,010.00	1.00	\$ 5,810.00	1.00	\$ 6,010.00
59	Phone Training	Session	\$ 650.00	1	\$ 650.00	\$ 670.00	1	\$ 670.00	1.00	\$ 650.00	1.00	\$ 670.00
60	Image Requirements for WorkKeys	year	\$ 7,790.00	1	\$ 7,790.00	\$ 8,060.00	1	\$ 8,060.00	1.00	\$ 7,790.00	1.00	\$ 8,060.00
61	Operational Check-In for WorkKeys	year		1	\$ -	\$ -	1	\$ -		\$ -		\$ -
62	Program Management	year	\$ 1,057,550.00	1	\$ 1,057,550.00	\$ 947,626.00	1	\$ 947,626.00	1.00	\$ 1,057,550.00	1.00	\$ 947,626.00
63												
64	Training DVD/online for 2012-2013 for Test Accommodation Coordinators	year	\$ 1,830.00	1	\$ 1,830.00	\$ 1,910.00	1	\$ 1,910.00	1.00	\$ 1,830.00	1.00	\$ 1,910.00
65	WorkKeys IT Development	year	\$ 33,630.00	1	\$ 33,630.00	\$ 34,810.00	1	\$ 34,810.00	1.00	\$ 33,630.00	1.00	\$ 34,810.00
66	WorkKeys Erasure Analysis	year	\$ 7,330.00	1	\$ 7,330.00	\$ 7,590.00	1	\$ 7,590.00	1.00	\$ 7,330.00	1.00	\$ 7,590.00
67	End To End System Testing	year	\$ 5,850.00	1	\$ 5,850.00	\$ 6,050.00	1	\$ 6,050.00	1.00	\$ 5,850.00	1.00	\$ 6,050.00
68	IT Contingency	year			\$ -			\$ -		\$ -		\$ -
69	Test Development/Alignment	year	\$ 58,950.00	1	\$ 58,950.00	\$ 58,940.00	1	\$ 58,940.00	1.00	\$ 58,950.00	1.00	\$ 58,940.00
70	Test Development/Item Mapping	year	\$ 329,790.00	1	\$ 329,790.00	\$ 341,330.00	1	\$ 341,330.00	1.00	\$ 329,790.00	1.00	\$ 341,330.00
71	WorkKeys state form development	year	\$ 45,980.00	1	\$ 45,980.00	\$ 47,590.00	1	\$ 47,590.00	1.00	\$ 45,980.00	1.00	\$ 47,590.00
72	Produce Barcode Labels	year		1	\$ -	\$ -	1	\$ -		\$ -		\$ -
73	No Reporting of Students w/o Barcode Label	year		1	\$ -	\$ -	1	\$ -		\$ -		\$ -
74	Append 1700 Style file w/Pre-ID information	year		1	\$ -	\$ -	1	\$ -		\$ -		\$ -
75	Pre-ID Label File Addendum-Set Up Fee Per File	each	\$ 61.23	1	\$ 61.23	\$ 63.37	1	\$ 63.37	1.00	\$ 61.23	1.00	\$ 63.37

71	Pre-ID Label File Addendum-Per Label Fee CCR 2009-01 Answer Folder supplements	each	\$	0.05	480,000	\$	23,840.00	\$	0.05	480,000	\$	23,840.40	430,000.00	\$	20,840.00	394,839.90	\$	19,815.50
72	WorkKeys Program Management	year	\$	105,470.00	1	\$	105,470.00	\$	109,160.00	1	\$	109,160.00	1.00	\$	105,470.00	1.00	\$	109,160.00
73	<b>GENERAL ADMINISTRATION SUBTOTAL</b>					\$	<b>13,366,161.23</b>	\$	<b>13,494,525.77</b>			\$	<b>11,620,236.23</b>		\$	<b>11,913,654.97</b>		
74						\$	-					\$	-			\$	-	
75						\$	-					\$	-			\$	-	
76	<b>Preparing Accommodation Materials - College-Entrance</b>					\$	-					\$	-			\$	-	
77	Translation Spanish	year	\$	7,590.00	1	\$	7,590.00	\$	7,860.00	1	\$	7,860.00	1.00	\$	7,590.00	1.00	\$	7,860.00
78	Translation Arabic	year	\$	7,590.00	1	\$	7,590.00	\$	7,860.00	1	\$	7,860.00	1.00	\$	7,590.00	1.00	\$	7,860.00
79	Design and Compose Braille Versions	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
80	Design and Compose Enlarged-Print Versions	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
81	a. Assessment Administration Booklets for Braille	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
82	Reader Scripts or Assessment Administration Booklets for Braille					\$	-					\$	-			\$	-	
83	English Reader Script	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
84	Spanish Reader Script	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
85	Spanish Reader Script - Independent Review	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
86	Arabic Reader Script	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
87	Arabic Reader Script - Independent Review	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
88	Audio Accommodation Masters:					\$	-					\$	-			\$	-	
89	General Audio Master creation (regardless of media format)	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
90	Audio DVD Master (rate only dependent on General Audio Master work occurring)	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-
91	Master specific for audio cassette duplication (rate only dependent on General Audio Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
92	Master Audio - Spanish ACT	year	\$	14,550.00	1	\$	14,550.00	\$	15,060.00	1	\$	15,060.00	1.00	\$	14,550.00	1.00	\$	15,060.00
93	Master Audio - Arabic ACT	year	\$	14,550.00	1	\$	14,550.00	\$	15,060.00	1	\$	15,060.00	1.00	\$	14,550.00	1.00	\$	15,060.00
94	Video Accommodation Masters:					\$	-					\$	-			\$	-	
95	English Versions					\$	-					\$	-			\$	-	
96	General Video Master creation (regardless of media format)	booklet	\$	8,700.00	1	\$	8,700.00	\$	9,000.00	1	\$	9,000.00	1.00	\$	8,700.00	1.00	\$	9,000.00
97	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
98	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
99	Spanish Versions					\$	-					\$	-			\$	-	
100	General Video Master creation (regardless of media format)	booklet	\$	8,700.00	1	\$	8,700.00	\$	9,000.00	1	\$	9,000.00	1.00	\$	8,700.00	1.00	\$	9,000.00
101	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
102	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
103	Arabic Versions					\$	-					\$	-			\$	-	
104	General Video Master creation (regardless of media format)	booklet	\$	8,700.00	1	\$	8,700.00	\$	9,000.00	1	\$	9,000.00	1.00	\$	8,700.00	1.00	\$	9,000.00
105	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
106	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
107	Arabic Versions					\$	-					\$	-			\$	-	
108	Duplication and Packing					\$	-					\$	-			\$	-	
109	Paper Media					\$	-					\$	-			\$	-	
110	Braille	booklet	\$	-	45	\$	-	\$	-	45	\$	-	-	\$	-	-	\$	-
111	Enlarged Print	booklet	\$	-	250	\$	-	\$	-	250	\$	-	-	\$	-	-	\$	-
112	English reader scripts	booklet	\$	-	1,700	\$	-	\$	-	1,700	\$	-	-	\$	-	-	\$	-
113	Spanish reader scripts	booklet	\$	-	1,700	\$	-	\$	-	1,700	\$	-	-	\$	-	-	\$	-
114	Arabic reader scripts	booklet	\$	-	1,700	\$	-	\$	-	1,700	\$	-	-	\$	-	-	\$	-
115	Audio/Video Media					\$	-					\$	-			\$	-	
116	English					\$	-					\$	-			\$	-	
117	DVD - Audio Only (cost is for 5 content areas: 20,000 units)	each	\$	-	4,000	\$	-	\$	-	4,000	\$	-	-	\$	-	-	\$	-
118	DVD (cost is for 5 content areas: 2,500 units)	each	\$	-	500	\$	-	\$	-	500	\$	-	-	\$	-	-	\$	-
119	VHS (cost is for 5 content areas: 1,000 units)	each	\$	-	500	\$	-	\$	-	500	\$	-	-	\$	-	-	\$	-
120	Audiocassette (cost is for 5 content areas: 30,000 units)	each	\$	-	5,000	\$	-	\$	-	5,000	\$	-	-	\$	-	-	\$	-
121	Spanish					\$	-					\$	-			\$	-	
122	DVD (cost is for 5 content areas: 2,500 units)	each	\$	7.20	500	\$	3,600.00	\$	7.50	500	\$	3,750.00	500.00	\$	3,600.00	500.00	\$	3,750.00
123	VHS (cost is for 5 content areas: 500 units)	each	\$	-	500	\$	-			500	\$	-	-	\$	-	-	\$	-
124	Arabic					\$	-					\$	-			\$	-	
125	DVD (cost is for 5 content areas: 2,000 units)	each	\$	8.20	400	\$	3,280.00	\$	8.50	400	\$	3,400.00	400.00	\$	3,280.00	400.00	\$	3,400.00
126	VHS (cost is for 5 content areas: 500 units)	each	\$	-	500	\$	-			500	\$	-	-	\$	-	-	\$	-
127	ACT Accommodations Review Under Fee-based "Special Situations" Window ACT Accommodations Review Under Fee-based "Special Situations" Window - late processing Spring 2011 Additional Charges	each	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
128	<b>SUBTOTAL Preparing Accommodation Materials - College-entrance</b>					\$	<b>77,260.00</b>				\$	<b>79,990.00</b>		\$	<b>77,260.00</b>		\$	<b>79,990.00</b>
129						\$	-				\$	-			\$	-		
130	<b>Preparing Accommodation Materials - Work Skills (Bidders may adjust quantities to match the number of booklets being bid)</b>					\$	-				\$	-			\$	-		
131	Design and Compose Braille Versions	booklet	\$	-	1	\$	-			1	\$	-	-	\$	-	-	\$	-
132	Design and Compose Enlarged-Print Versions	booklet	\$	2,130.00	1	\$	2,130.00	\$	2,200.00	1	\$	2,200.00	1.00	\$	2,130.00	1.00	\$	2,200.00

133	a. Assessment Administration Booklets for Braille	booklet		1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-	-	\$	-	-	\$	-	-
134	Reader Scripts or Assessment Administration Booklets for Braille:																							
135	English Reader Script	booklet	\$	5,180.00	1	\$	5,180.00	\$	5,360.00	1	\$	5,360.00	1.00	\$	5,180.00	1.00	\$	5,360.00	1.00	\$	5,360.00	1.00	\$	5,360.00
136	Spanish Reader Script	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
137	Spanish Reader Script - Independent Review	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
138	Arabic Reader Script	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
139	Arabic Reader Script - Independent Review	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
140	Audio Accommodation Masters:												-	\$	-	-	\$	-	-	\$	-	-	\$	-
141	General Audio Master creation (regardless of media format)	booklet	\$	4,720.00	1	\$	4,720.00	\$	4,890.00	1	\$	4,890.00	1.00	\$	4,720.00	1.00	\$	4,890.00	1.00	\$	4,890.00	1.00	\$	4,890.00
142	Audio DVD Master (rate only dependent on General Audio Master work occurring)	booklet	\$	1,790.00	1	\$	1,790.00	\$	1,850.00	1	\$	1,850.00	1.00	\$	1,790.00	1.00	\$	1,850.00	1.00	\$	1,850.00	1.00	\$	1,850.00
143	Master specific for audio cassette duplication (rate only dependent on GeneralAudio Master work occurring)	booklet	\$	490.00	1	\$	490.00	\$	510.00	1	\$	510.00	1.00	\$	490.00	1.00	\$	510.00	1.00	\$	510.00	1.00	\$	510.00
144	Video Accommodation Masters:												-	\$	-	-	\$	-	-	\$	-	-	\$	-
145	English Versions												-	\$	-	-	\$	-	-	\$	-	-	\$	-
146	General Video Master creation (regardless of media format)	booklet	\$	19,510.00	1	\$	19,510.00	\$	20,190.00	1	\$	20,190.00	1.00	\$	19,510.00	1.00	\$	20,190.00	1.00	\$	20,190.00	1.00	\$	20,190.00
147	General Video Master creation adjustment if Audio Accommodation master can be used	booklet	\$	-	1	\$	-	\$	-	1	\$	-	-	\$	-	-	\$	-	-	\$	-	-	\$	-
148	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	240.00	1	\$	240.00	\$	250.00	1	\$	250.00	1.00	\$	240.00	1.00	\$	250.00	1.00	\$	250.00	1.00	\$	250.00
149	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
150	Spanish Versions												-	\$	-	-	\$	-	-	\$	-	-	\$	-
151	General Video Master creation (regardless of media format)	booklet	\$	19,510.00	1	\$	19,510.00	\$	20,190.00	1	\$	20,190.00	1.00	\$	19,510.00	1.00	\$	20,190.00	1.00	\$	20,190.00	1.00	\$	20,190.00
152	ACT General Video Master creation regardless (LI specific)		\$	2,030.00		\$	-	\$	2,100.00		\$	-	-	\$	-	-	\$	-	-	\$	-	-	\$	-
153	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	240.00	1	\$	240.00	\$	250.00	1	\$	250.00	1.00	\$	240.00	1.00	\$	250.00	1.00	\$	250.00	1.00	\$	250.00
154	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
155	Arabic Versions												-	\$	-	-	\$	-	-	\$	-	-	\$	-
156	General Video Master creation (regardless of media format)	booklet	\$	19,510.00	1	\$	19,510.00	\$	20,190.00	1	\$	20,190.00	1.00	\$	19,510.00	1.00	\$	20,190.00	1.00	\$	20,190.00	1.00	\$	20,190.00
157	ACT General Video Master creation (regardless (LI specific)	booklet	\$	2,030.00	1	\$	2,030.00	\$	2,100.00	1	\$	2,100.00	1.00	\$	2,030.00	1.00	\$	2,100.00	1.00	\$	2,100.00	1.00	\$	2,100.00
158	DVD Master (rate only dependent on General Video Master work occurring)	booklet	\$	240.00	1	\$	240.00	\$	250.00	1	\$	250.00	1.00	\$	240.00	1.00	\$	250.00	1.00	\$	250.00	1.00	\$	250.00
159	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
160	WORK KEYS??												-	\$	-	-	\$	-	-	\$	-	-	\$	-
161	Duplication and Packing												-	\$	-	-	\$	-	-	\$	-	-	\$	-
162	Paper Media												-	\$	-	-	\$	-	-	\$	-	-	\$	-
163	Braille												-	\$	-	-	\$	-	-	\$	-	-	\$	-
164	Braille - RFI	booklet	\$	45.20	45	\$	2,034.00	\$	46.80	45	\$	2,106.00	20.00	\$	904.00	20.00	\$	936.00	20.00	\$	936.00	20.00	\$	936.00
165	Braille - AM	booklet	\$	79.10	45	\$	3,559.50	\$	81.90	45	\$	3,685.50	20.00	\$	1,682.00	20.00	\$	1,638.00	20.00	\$	1,638.00	20.00	\$	1,638.00
166	Braille - LI	booklet	\$	305.20	45	\$	13,734.00	\$	316.90	45	\$	14,215.50	20.00	\$	6,104.00	20.00	\$	6,318.00	20.00	\$	6,318.00	20.00	\$	6,318.00
167	Enlarged Print	booklet	\$	11.30	250	\$	2,825.00	\$	11.70	250	\$	2,925.00	250.00	\$	2,260.00	250.00	\$	2,340.00	250.00	\$	2,340.00	250.00	\$	2,340.00
168	English reader scripts	booklet	\$	1.70	1,700	\$	2,890.00	\$	1.80	1,700	\$	3,060.00	1,500.00	\$	2,550.00	1,500.00	\$	2,700.00	1,500.00	\$	2,700.00	1,500.00	\$	2,700.00
169	Spanish reader scripts	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
170	Arabic reader scripts	booklet											-	\$	-	-	\$	-	-	\$	-	-	\$	-
171	Audio/Video Media												-	\$	-	-	\$	-	-	\$	-	-	\$	-
172	English												-	\$	-	-	\$	-	-	\$	-	-	\$	-
173	DVD - Audio Only ( cost is for 2 content areas: 8,000 units )	each	\$	0.90	4,000	\$	3,600.00	\$	0.95	4,000	\$	3,800.00	4,587.50	\$	4,128.75	4,587.50	\$	4,358.13	4,587.50	\$	4,358.13	4,587.50	\$	4,358.13
174	DVD ( cost is for 2 content areas: 1,000 units )	each	\$	5.10	500	\$	2,550.00	\$	5.30	500	\$	2,650.00	437.50	\$	2,231.25	437.50	\$	2,318.75	437.50	\$	2,318.75	437.50	\$	2,318.75
175	VHS ( cost is for 2 content areas: 400 units )	each											-	\$	-	-	\$	-	-	\$	-	-	\$	-
176	Audiocassette ( cost is for 2 content areas: 12,000 units )	each	\$	0.70	6,000	\$	4,200.00	\$	0.75	6,000	\$	4,500.00	5,000.00	\$	3,500.00	5,000.00	\$	3,750.00	5,000.00	\$	3,750.00	5,000.00	\$	3,750.00
177	Spanish												-	\$	-	-	\$	-	-	\$	-	-	\$	-
178	DVD ( cost is for 2 content areas: 1,000 units )	each	\$	5.10	500	\$	2,550.00	\$	5.30	500	\$	2,650.00	400.00	\$	2,040.00	400.00	\$	2,120.00	400.00	\$	2,120.00	400.00	\$	2,120.00
179	VHS ( cost is for 2 content areas: 200 units )	each											-	\$	-	-	\$	-	-	\$	-	-	\$	-
180	Arabic												-	\$	-	-	\$	-	-	\$	-	-	\$	-
181	DVD ( cost is for 2 content areas: 800 units )	each	\$	5.10	400	\$	2,040.00	\$	5.30	400	\$	2,120.00	300.00	\$	1,530.00	300.00	\$	1,590.00	300.00	\$	1,590.00	300.00	\$	1,590.00
182	VHS ( cost is for 2 content areas: 200 units )	each											-	\$	-	-	\$	-	-	\$	-	-	\$	-
183	CCR 08/16/2010 NCRC Eligibility												-	\$	-	-	\$	-	-	\$	-	-	\$	-
184	CCR 08/17/10 Select 4 Preview file layout												-	\$	-	-	\$	-	-	\$	-	-	\$	-
185													-	\$	-	-	\$	-	-	\$	-	-	\$	-
186	SUBTOTAL Preparing Accommodation Materials - Work Skills					\$	115,572.50				\$	119,942.00	-	\$	102,420.00	-	\$	106,298.88	-	\$	106,298.88	-	\$	106,298.88
187	ESTIMATED CONTRACT TOTAL					\$	13,558,993.73				\$	13,694,457.77	-	\$	11,799,916.23	-	\$	12,099,943.85	-	\$	12,099,943.85	-	\$	12,099,943.85

Form No. DMB 234 (Rev. 1/96)  
AUTHORITY: Act 431 of 1984  
COMPLETION: Required  
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN  
DEPARTMENT OF MANAGEMENT AND BUDGET  
PURCHASING OPERATIONS  
P.O. BOX 30026, LANSING, MI 48909  
OR  
530 W. ALLEGAN, LANSING, MI 48933

August 21, 2008

NOTICE  
TO  
CONTRACT NO. 071B8200257  
between  
THE STATE OF MICHIGAN  
and

NAME & ADDRESS OF CONTRACTOR		TELEPHONE (319) 337-1152
ACT, Inc. 500 ACT Drive Iowa City, IA 52243  tom.goedken@act.org		Tom Goedken
		BUYER/CA (517) 241-3768 Lance Kingsbury
Contract Compliance Inspector: Joseph Martineau (517) 241-4710 Administration of Michigan Merit Examination – College Entrance – MDE (OEAA)		
CONTRACT PERIOD: From: August 13, 2008 To: September 30, 2011		
TERMS	N/A	SHIPMENT
F.O.B.	N/A	SHIPPED FROM
MINIMUM DELIVERY REQUIREMENTS		N/A

Current Authorized Spend Limit: \$41,069,659.00

Division



**STATE OF MICHIGAN  
Department of Management and Budget  
Purchasing Operations**

**Contract No. 071B8200257**

**Department of Education for the State of Michigan's High Schools:  
Administration of the College-Entrance and Work-Skills Tests for the Michigan Merit Examination**

**Buyer Name: Lance Kingsbury  
Telephone Number: 517.241.3768  
E-Mail Address: [kingsburyl@michigan.gov](mailto:kingsburyl@michigan.gov)**



### Table of Contents

Article 1 - Statement of Work .....	7
1.000 <i>Project Identification</i> .....	7
1.001    Project Request .....	7
1.002    Background .....	8
1.100 <i>Scope of Work and Deliverables</i> .....	13
1.101    In Scope .....	13
1.102    Out of Scope .....	13
1.103    Technical Environment .....	14
1.104    Work and Deliverable .....	14
1.104.A    General Description of OEAA Assessments .....	14
1.104.B    Coordination with OEAA Contractors Multiple Contractors. ....	16
1.104.C    General Administration Tasks.....	16
1.104.D    MME Administration Tasks.....	17
1.104.E    Potential Future High School Reform Initiatives – Deleted N/A .....	22
1.104.F    General Committee Meeting Responsibilities .....	22
1.104.F.1    Responsibilities for Specific Committee Meetings .....	23
1.104.F.1.1 .....	Standard Setting Meetings
23	
1.104.F.1.2 .....	Technical Advisory Committee Meetings
23	
1.104.G    Production of Student Identification Documents. ....	23
1.104.H    Production of Student Barcode Labels. ....	24
1.104.I    Processing of Assessment Materials .....	24
1.104.J    Production and Dissemination of Reports and Guides to Reports.....	25
1.104.L    Call Center .....	29
1.104.M    Schedules, Update and Planning Meetings, and Record-Keeping.....	31
1.104.N    Security Requirements .....	32
1.104.O    Quality Control and Assurance .....	33
1.104.P    Independent Evaluation.....	34
1.104.Q    Technical Reports. ....	34
1.104.R    Psychometric and Statistical Analyses .....	37
1.104.S    OEAA Access to MME contractor's Primary Project Manager(s).....	40
1.200 <i>Roles and Responsibilities</i> .....	41
1.201    Contractor Staff – Roles and Responsibilities .....	41
1.202    State Staff – Roles and Responsibilities .....	41
1.203    Other Roles and Responsibilities .....	41
1.300 <i>Project Plan</i> .....	41
1.301    Project Plan Management .....	41
1.302    Reports .....	42
1.400 <i>Project Management</i> .....	42
1.401    Issue Management .....	42
1.402    Risk Management .....	42
1.403    Change Management .....	42
1.500 <i>Acceptance</i> .....	43
1.501    Criteria .....	43
1.502    Final Acceptance .....	43
1.600 <i>Compensation and Payment</i> .....	43
1.601    Compensation and Payment .....	43
1.700 <i>Additional Terms and Conditions Specific to this SOW</i> .....	44
1.701    Additional Terms and Conditions Specific to this SOW .....	44
ARTICLE 2 – GENERAL TERMS AND CONDITIONS.....	45
2.010 <i>Contract Structure and Administration</i> .....	45
2.011    Definitions .....	45
2.012    Attachments and Exhibits .....	45
2.013    Statements of Work.....	45
2.014    Issuing Office .....	46
2.015    Contract Compliance Inspector (CCI) .....	46



2.020	<i>Contract Objectives/Scope/Background</i> .....	46
2.021	Background – Reserved	46
2.022	Purpose – Reserved	46
2.023	Objectives and Scope – Reserved	47
2.024	Interpretation – Reserved	47
2.025	Form, Function, and Utility – Reserved	47
2.030	<i>Legal Effect and Term</i> .....	47
2.031	Legal Effect	47
2.032	Contract Term	47
2.040	<i>Contractor Personnel</i> .....	47
2.041	Contractor Personnel	47
2.042	Contractor Identification	48
2.043	Cooperation with Third Parties	48
2.044	Subcontracting by Contractor	48
2.045	Contractor Responsibility for Personnel	49
2.050	<i>State Standards</i> .....	49
2.051	Existing Technology Standards	49
2.052	PM Methodology Standards	49
2.053	Adherence to Portal Technology Tools	49
2.054	Acceptable Use Policy	50
2.060	<i>Deliverables</i> .....	50
2.061	Ordering	50
2.062	Software – Reserved	50
2.063	Hardware – Reserved	50
2.064	Equipment to be New and Prohibited Products	50
2.070	<i>Performance</i> .....	50
2.071	Performance, In General	50
2.072	Time of Performance	50
2.073	Liquidated Damages	50
2.074	Bankruptcy	50
2.075	Time is of the Essence – Deleted N/A	52
2.076	Service Level Agreements (SLAs)	49
2.080	<i>Delivery and Acceptance of Deliverables – Deleted N/A</i> .....	52
2.091	Pricing	52
2.092	Invoicing and Payment Procedures and Terms	52
2.093	State Funding Obligation	53
2.094	Holdback – Deleted N/A	53
2.095	Electronic Payment Availability	53
2.100	<i>Contract Management</i> .....	53
2.101	Contract Management Responsibility	53
2.102	Problem and Contract Management Procedures	54
2.103	Reports and Meetings	54
2.104	System Changes	54
2.105	Deleted N/A	54
2.106	Change Requests	54
2.107	Management Tools – Deleted N/A	55
2.110	<i>Records and Inspections</i> .....	55
2.111	Records and Inspections	55
2.112	Errors	56
2.120	<i>State Responsibilities</i> .....	56
2.121	State Performance Obligations	56
2.130	<i>Security</i> .....	56
2.131	Background Checks	56
2.132	PCI Data Security Requirements	57
2.140	<i>Reserved</i> .....	57



2.150	<b>Confidentiality</b>	57
2.151	Freedom of Information	57
2.152	Confidentiality	57
2.153	Protection of Confidential Information	57
2.154	Exclusions	57
2.155	No Implied Rights	58
2.156	Remedies	58
2.157	Security Breach Notification	58
2.158	Survival	58
2.159	Destruction of Confidential Information	58
2.160	<b>Proprietary Rights</b>	58
2.163	Rights in Data	59
2.164	Ownership of Materials	59
2.165	Standard Software	59
2.166	Pre-existing Materials for Custom Software Deliverables	59
2.167	General Skills	59
2.170	<b>Warranties And Representations</b>	60
2.171	Warranties and Representations	60
2.172	Software Warranties	57
2.173	Equipment Warranty – Deleted N/A	57
2.174	Physical Media Warranty – Deleted N/A	58
2.175	Standard Warranties – Deleted N/A	61
2.176	Consequences For Breach	61
2.180	<b>Insurance</b>	62
2.181	Liability Insurance	62
2.190	<b>Indemnification</b>	64
2.191	Indemnification	64
2.192	Continuation of Indemnification Obligations	64
2.193	Indemnification Procedures	64
2.200	<b>Limits of Liability and Excusable Failure</b>	65
2.201	Limits of Liability	65
2.202	Excusable Failure	65
2.203	Disaster Recovery	66
2.210	<b>Termination/Cancellation by the State</b>	66
2.211	Termination for Cause	66
2.212	Termination for Convenience	67
2.213	Non-Appropriation	67
2.214	Criminal Conviction	67
2.216	Rights and Obligations Upon Termination	68
2.217	Reservation of Rights	68
2.218	Contractor Transition Responsibilities	68
2.219	State Transition Responsibilities	68
2.220	<b>Termination by Contractor</b>	69
2.221	Termination by Contractor	69
2.230	<b>Stop Work</b>	69
2.231	Stop Work Orders	69
2.232	Cancellation or Expiration of Stop Work Order	69
2.233	Allowance of Contractor Costs	70
2.240	<b>Deleted N/A Reserved</b>	70
2.250	<b>Dispute Resolution</b>	70
2.251	In General	70
2.252	Informal Dispute Resolution	70
2.253	Injunctive Relief	70
2.254	Continued Performance	71
2.260	<b>Federal and State Contract Requirements</b>	71
2.261	Nondiscrimination	71
2.262	Unfair Labor Practices	71
2.263	Workplace Safety and Discriminatory Harassment	71



2.270	<i>Litigation</i>	71
2.271	Disclosure of Litigation	71
2.272	Governing Law	72
2.273	Compliance with Laws	72
2.274	Jurisdiction	72
2.280	<i>Environmental Provision</i>	72
2.281	Environmental Provision – Deleted N/A	72
2.290	<i>General</i>	72
2.291	Amendments	72
2.292	Assignment	72
2.293	Entire Contract; Order of Precedence	73
2.294	Headings	73
2.295	Relationship of the Parties (Independent Contractor Relationship)	73
2.296	Notices	73
2.297	Media Releases and Contract Distribution	74
2.298	Reformation and Severability	74
2.299	Consents and Approvals	74
2.300	No Waiver of Default	74
2.301	Survival	74
2.302	Covenant of Good Faith	74
2.303	Permits	74
2.304	Website Incorporation	74
2.305	Taxes	74
2.306	Prevailing Wages – Deleted N/A	74
2.307	Call Center Disclosure	75
2.308	Future Bidding Preclusion	75
2.310	<i>Reserved</i>	75
2.320	<i>Extended Purchasing</i>	75
2.321	MiDEAL - Reserved	75
Appendixes		76

**Article 1 – Statement of Work (SOW)****1.000 Project Identification****1.001 Project Request**

The purpose of this Contract is to provide the materials and processes to administer the College-Entrance and Work-Skills Tests as components of MDE's Office of Educational Assessment and Accountability (OEAA) Michigan Merit Examination (MME) for the school years 2008-2009, 2009-2010, and 2010-2011. The result of this Contract is to be the MME Administration Contractor for the College-Entrance and Work-Skills Tests and to carry out the tasks necessary to administer these tests as components of the MME to high school students in grades 11-12 and to score these tests as defined by this Contract. The Contractor will also provide psychometric leadership for combining scores from all components in preparation for reporting MME results to various interested parties.

The MME Administration Contractor for the College-Entrance and Work-Skills Tests must work closely with the OEAA and the MME Administration Contractor that is chosen for the Michigan-Developed Assessments that supplement the College-Entrance MME.

For spring 2009, all MME tests are scheduled to be administered to high school students on three (3) consecutive days in March (see MME Schedule, Appendix B). Appropriate accommodations and make-up testing are planned for implementation according to federal and state legislation. Standards-based results for all MME components are planned as integrated sets of reports. The primary tasks for the MME Administration Contractor for the College-Entrance and Work-Skills Tests are provided below.

- Use a coordinated approach with other MME Contractors and MDE staff; create a schedule for assessment administration, scheduling all tasks, subtasks, and activities to be conducted over the three (3) year period of this Contract.
- Layout, proof, and print all MME assessment documents that are related to the College-Entrance and Work-Skills Tests.
- Package and ship all College-Entrance and Work-Skills testing materials to all sites that will administer the MME, using the OEAA materials ordering information; supply prescribed data files to OEAA related to packaging and distribution.
- Provide a research plan and schedule for incorporating Michigan's state-approved accommodations into college-reportable scores for both students with disabilities and English language learners (during this three (3) year contract).
- Provide test alignment information and any test content changes to MDE staff and other MME Contractors for timely selection of items required to fully assess the Michigan standards and benchmarks (ELA, mathematics, social studies and science).
- Provide comprehensive test administration training for the MME College-Entrance and Work-Skills Tests to high school educators designated to administer or proctor the assessments to high school students.
- Answer test administration questions from local educators regarding the College-Entrance and Work-Skills components of the MME.
- Scan student answer documents for the College-Entrance and Work-Skills skills components of the MME and provide scanned images of the student answer documents to MDE.
- Score student responses to multiple-choice and constructed response questions.
- Provide files of student record data (by student barcode label) in a prescribed format to the MME Administration Contractor for Michigan-Developed Assessments for merging into a combined student file for MDE hosting of Tested Roster on the state's secure website.
- Provide leadership in technical analyses of all MME components as part of establishing MME combined scale scores and performance levels by conducting a variety of processes to establish the content and statistical equivalency of the MME, based on a College-Entrance and Work-Skills Tests; the Michigan-Developed assessments in mathematics, science and social studies; as well as all components of the MME assessment system from year to year.
- Receive combined student record data file from the MME Administration Contractor for Michigan-Developed Assessments in order to calibrate item statistics and student MME scale scores and performance levels using a 3PL scoring model.



- Develop and provide a combined file of scaled and scored data for all students and components to the MME Administration Contractor for Michigan-Developed Assessments in order to produce combined MME standards-based reports of student results.
- Provide standard College-Entrance Test reports to students, schools, and post-secondary institutions.
- Provide standard Work-Skills Test reports to schools. Student reports are delivered directly to schools for distribution.
- Make any adjustments needed in the MME due to changes in state or Federal law or policy, including potential responses to changes in the No Child Left Behind Act (NCLB), state testing requirements, or high school reform efforts.

The Contractor will work with the MDE to ensure that all administration tasks are completed with high standards of quality. These tasks include assessment form development and construction, design and production of all assessment materials, as well as packaging, distribution and retrieval of assessment materials, and security measures at all stages of tasks performed by the Contractor. Scoring, analysis, documentation and electronic data management of items, forms, scoring elements for reporting purposes, and reporting of results are all components of assessment administration.

Major technical and procedural issues inherent in the development of items and administration of the MDE assessments must also be addressed by the Contractor with final policy decisions made by the OEAA, MDE, and Michigan's State Board of Education.

## 1.002 Background

### Statistical and Other Properties of the MME Assessments

#### No Child Left Behind Peer Review Criteria

Because the State of Michigan needs to comply with the U.S. Department of Education (USED) guidance for full approval of the MME, it is imperative that the Contractor's assessments are accepted and approved by the USED. Each of the issues listed below are drawn from the "Standards and Assessment Peer Review Guidance, April 28, 2004," available from the U.S. Department of Education at their website: (<http://www.ed.gov/policy/elsec/guid/saaprguidance.doc>).

The sections below are excerpted from this document. This is followed by additional technical requirements.

1. Academic achievement standards in ELA and mathematics: The domains of skills and understandings measured by the ACT Writing Test, the ACT English Test, the ACT Reading Test and the WorkKeys Reading for Information assessment, the ACT Mathematics Test and the WorkKeys Applied Mathematics assessment cover the Michigan Standards in the relevant content areas very well. Using the ACT College Readiness Standards (which are performance descriptors at various score ranges of the ACT tests), the WorkKeys Targets for Instruction, and Michigan's Standards, ACT will work with OEAA staff to ensure that the academic achievement standards accurately describe what the students' can do based on their test scores and are tied directly to Michigan Standards.
2. Academic achievement standards in science: The domain of skills and understandings measured by the ACT Science Test matches well with the Michigan scientific inquiry/reflection standard. Using the ACT College Readiness Standards (which are performance descriptors at various score ranges of the ACT Science Test), the skills and understandings measured by the Michigan-developed science test, and Michigan's Standards, ACT will work with OEAA staff to ensure that the academic achievement standards accurately describe what the students' can do based on their test scores and are tied directly to Michigan Standards.
3. Achievement standards at three (3) levels: ACT will review the preliminary descriptions to help ensure consistency with the assessments and to provide recommendations based on our experience in working with achievement-level descriptions in setting standards. The final versions of the performance level definitions will be provided to standard setting panels as part of their advance materials and will be used to ensure accurate cut scores at the three (3) levels of achievement.



4. Applied to all students: To demonstrate that the behaviorally-related academic achievement standards apply to all students, the Contractor will work with the standard setting contractor to provide evidence in the form of documentation of the standard setting process showing that the achievement levels and cut scores were prepared taking into account all students, both via professional judgment using teacher knowledge of all students and via item data representing all students.
5. Alignment of content and achievement standards: The Contractor will work with the standard setting contractor to ensure that the documentation for the standard setting process will include a complete description of the development of academic achievement standards for three (3) performance levels—the first step to a successful standard setting process. The description of the process will include Michigan educators and other stakeholders basing all achievement standards on the content standards and then tying them to the assessments.
6. Diverse stakeholders involved: The Contractor will work with the standard setting contractor to ensure that documentation of the standard setting process will include a complete description of the development of academic achievement standards for three (3) performance levels, which is the first step to a successful standard setting process.
7. Matrix design: The Contractor will provide sections for the Technical Report for the MME describing the development process for all components of the MME and will ensure that all forms of any one component are equivalent to each other in terms of broad content coverage, difficulty and quality. All forms will also be equated to a base form. The test forms used for setting the MME scale will be the base form, and the initial scaling study will provide the scale. After equating, new form scores will be expressed on the MME scale.
8. Coherent information: The Contractor will provide sections for the Technical Report describing studies conducted to show that the assessments are aligned with the content standards. Also included will be a description of the statistical process to place each assessment component on the MME scale. This description will include the relative contribution of each assessment to the MME composite scores provided to the students on their MME score report. The MME score report will provide information on the student's performance relative to the Michigan standards.
9. Comparability of results: Analyses will be conducted to show whether accommodated forms of the assessment measure the same construct for students with disabilities as the regular assessment does for students without disabilities. Similar analyses will be conducted to determine whether accommodated forms of the assessment measure the same construct for English Language Learners as the regular assessment does for English-speaking students. These analyses will be documented and provided to OEAA for inclusion into the Technical Report.
10. Multiple measures: The MME will consist of multiple measures that together cover the Michigan standards in terms of content and cognitive skill level. The Contractor will provide sections for the Technical Report that will document this coverage and include all test blueprints and item specifications for each MME component and the process used to judge the fit of each item to the specifications in terms of content and cognitive complexity.
11. Validity: For each assessment included in the MME, the Contractor will:
  - 11.1 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of content validity, construct validity, and consequential validity. All validity evidence will relate back to the purposes and uses of the assessments, which will also be described in the documentation for the Technical Report.;
  - 11.2 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of measuring the knowledge and skills of the Michigan standards;
  - 11.3 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of tapping the intended cognitive processes at the appropriate level;
  - 11.4 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of assuring that the scoring and reporting structures are consistent with the Michigan standards;



- 11.5 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of being strongly related to intended outside variables and weakly related to irrelevant characteristics;
  - 11.6 prepare sections for the Technical Report that will provide well-documented evidence for the validity of the MME assessment components in terms of content validity, construct validity, and consequential validity. All validity evidence will relate back to the purposes and uses of the assessments, which will also be described in the documentation for the Technical Report; and
  - 11.7 ensure the MME Technical Report provides well-documented evidence for the validity of the MME assessment components in terms of content validity, construct validity, and consequential validity.
12. Reliability:
- 12.1 The Technical Report will document the reliabilities of all reported scores from the MME for the total student population taking the MME, as well as for identified subpopulations taking the MME. Documentation will include internal consistency of item responses (Cronbach's Alpha based on raw scores), interrater consistency in scoring constructed response items (percent of rater agreement reported by differences between raters scores), classification consistency, and conditional standard error of measurement at each score point. Classification consistency indices will be based on IRT model predictions of the observed score distributions that are used in construction of contingency tables. The reliability of MME scale scores will be based on the IRT test information function for the thetas. If for any reason, analyses show lower-than-expected reliabilities, a systematic approach for addressing the deficiencies will be provided and documented. Generalizability Theory analyses can be used to address issues such as inter-rater reliability.
13. Fair and accessible assessment system: The Contractor will provide sections for the Technical Report that will describe in detail the development process of each assessment component and how the process works to ensure a fair and accessible assessment system. The description will show how the development process considers the principles of good measurement, fair testing, and universal design and how these principles inform the test development process throughout, starting with the design of the test and test specifications and continuing through every stage of the test development process, including item writing and review, item selection and forms construction, and forms review. Documentation will also be provided on the policies and procedure for the selection and use of accommodations for each assessment component. This documentation will provide evidence that training occurs for the administrators of these accommodated assessments and that this training helps to ensure the comparability of results between accommodated and non-accommodated administrations.
14. Consistent Interpretation: All new forms of the MME components will be equated to the base form. The initial scaling study provides the scale on the base form. After equating, new form scores will be expressed on the MME scale. The MME equating for Writing, Mathematics, Reading, and Science uses national performance data to scale the ACT using the 3-PL model, and fixes the ACT item parameters in calibrating/equating the entire MME. Social Studies in MME is the only subject using the Rasch model to derive the scale score system for the MME. The Technical Report will include a detailed description of these equating/linking studies and will provide data showing the success of the equating.
15. Clear criteria for administration, scoring and analysis: An extensive system for training and monitoring will be set up to ensure that each person who is responsible for handling or administering any portion of the MME does so in a way that protects the security of the assessments and maintains the standardization of the administration conditions across students and schools. This extensive system will be well documented and communicated to all involved. An extensive system for scoring and analyzing any portion of the MME will also be set up to ensure that scoring, reporting, and analyzing are done accurately and under agreed upon timelines. This extensive system will be well documented and communicated to all involved.
16. Use of accommodations: The Contractor has established documentation requirements and procedures to ensure that each request for testing accommodations on the ACT is reviewed individually and each approved accommodation is appropriate for that specific student with their specific disability as determined by the students' IEP or 504 plan. Documentation will also be provided on the quality and consistency of the accommodations Michigan offers for ELL students.



17. Alignment: The Contractor will provide sections for the Technical Report that will include documentation of all alignment studies completed by or with the Contractor for the MME to the Michigan Standards. The alignment studies documentation will include a detailed description of the test domains and how they compare to the domains covered in the Michigan Standards. Documentation will also include the qualifications of the persons involved in conducting each alignment. The Contractor will also work with the standard setting contractor to ensure that documentation of the Standard Setting process will speak to the process of aligning the tests to the academic achievement standards.
18. Comprehensive alignment: The documentation discussed in number 17 above will speak to the alignment of the assessments to the full range of Michigan standards.
19. Content and process alignment: The documentation discussed in number 17 above will speak to the alignment of the assessments to the full range of Michigan standards.
20. Same degree and pattern of emphasis: The documentation discussed in number 17 above will speak to the alignment of the assessments to the full range of Michigan standards.
21. Full range of skills: The documentation discussed in number 17 above will speak to the alignment of the assessments to the full range of Michigan standards.
22. Scores expressed in terms of achievement standards: The Contractor will work closely with OEAA to map items with Michigan standards to allow the reporting of the MME to individual students in relation to the Michigan standards. The Contractor will work closely with OEAA and the Michigan-Developed Contractor to review text or data on MME reports that apply to the ACT and/or WorkKeys assessments. The Contractor will work closely with OEAA to conduct item-level analyses to develop procedures for reporting customized skill scores at levels consistent with the full set of MME tests and the Michigan Strands and Standards. The primary considerations in choice of method would be meaningfulness of scores relative to standards and instruction, reliability, and the potential for consistent application of the procedures over time. Based on prior research specific to Michigan, the Contractor believes the most advantageous method for Michigan's scoring and reporting needs are observed score methods. The Contractor will consult with OEAA to determine reporting needs and conduct further analyses as necessary to determine the most effective methodology for meeting those needs.
23. Maintain alignment: The Contractor will provide sections for the Technical Report that will include documentation of all alignment studies completed for the MME to the Michigan Standards. The alignment studies documentation will include a detailed description of the test domains and how they compare to the domains covered in the Michigan Standards. Documentation will also include the qualifications of the persons involved in conducting each alignment. Any gaps or weaknesses noted in the alignment studies will be addressed.
24. Participation of all students with disabilities: The Contractor has established documentation requirements and procedures to ensure that each request for test accommodations on the ACT is reviewed individually. The Contractor reviews each request and its supporting documentation and makes decisions about accommodations in accordance with the Contractor's established guidelines and the Americans with Disabilities Act. As appropriate, the Contractor employs the services of expert disability consultants to assist in this review. Examples of accommodations the Contractor may approve include extended time, alternate test formats (including large type, reader's script, audiocassettes/audio DVD, Braille), stop-the-clock breaks, sign language interpretation of all spoken instructions, authorization to test over multiple days, authorization for extended time only on the Writing Test and/or approval to produce the essay via computer or scribe. Students with disabilities who do not meet the Contractor's eligibility guidelines for approving accommodations may choose to test with "state-allowed" accommodations. Students testing with state-allowed accommodations will be able to test during a two-week window beginning on the initial test date and ending on the makeup test date. Scores achieved with state-allowed accommodations will be reported for MME purposes, but will not be college reportable. WorkKeys results under state-allowed accommodations are not eligible for National Career Readiness Certificates.



25. Participation of English language learners: The Contractor will continue to work with OEAA staff to facilitate the provision of “state-allowed” accommodations — including accommodations specifically for English language learners, translations of assessments into other languages such as Spanish and Arabic, and videotape/DVD versions. Students testing with state-allowed accommodations will be able to test during a two-week window beginning on the initial test date and ending on the makeup test date. Scores achieved with state-allowed accommodations will be reported for MME purposes, but will not be college reportable. The Contractor will work with OEAA staff to finalize how decisions on accommodations approved for the ACT Plus Writing and WorkKeys may also apply to other components of the MME.
26. Migrant students: To the degree the State of Michigan captures and includes data on migrant students in the pre-ID file (e.g., Appendix E – Pre-ID file format, “migratory status”), this information will be returned to the Michigan-Developed Contractor (and the state) for each ACT Plus Writing and WorkKeys record. It is clear participation in the MME is restricted to eligible 11th and 12th grade students.
27. Appropriate, credible, and defensible interpretation of assessment data: Score Reports: The Contractor will work with the Michigan-Developed Contractor and OEAA to design the presentation of ACT and WorkKeys data on MME reports. These reports will be provided in addition to the standard reports that students and schools will receive from the ACT and the WorkKeys assessments. The MME reports will contain results from the full MME including the ACT tests, the WorkKeys assessments, and the Michigan-Developed components. In developing these MME reports, the Contractor will conduct item-level analyses to develop procedures for reporting customized skill scores at levels consistent with the tests and the Michigan Standards and Benchmarks. The Contractor will consult with OEAA to determine the reporting needs and will conduct analyses to determine the most effective methodology for meeting those needs. Scores would be based on the full set of MME tests, and methods would include IRT 3-parameter and Rasch scoring methods, depending on the content area. Four (4) MME composite scores will be reported. Of these, some may be formed by combining scores from components (i.e., the ACT, WorkKeys, and Michigan-Developed tests). Interpretive Guides: The Contractor will work with the Michigan-Developed Contractor to review interpretive materials when ACT or WorkKeys data are referenced. Professional Development: The Contractor will work with OEAA staff to determine multiple workshop sites around the state to conduct in-person, one-day workshops to illustrate to Michigan educators how to use the results of the MME assessments to improve students’ achievement.
28. Individual interpretive, descriptive, and diagnostic reports: See number 27.
29. Confidentiality: Consistent with procedures outlined in “ACT Data Use Policies”, the Contractor will exercise procedures to protect the confidentiality of individuals taking the MME components. These procedures are related to the exchange of data files with the Michigan-Developed Contractor and MDE as well as the distribution of ACT and WorkKeys reports following test administration.
30. Itemized score reports: The Contractor will work closely with OEAA to map items with Michigan standards to allow the reporting of the MME to individual students in relation to the Michigan standards. The Contractor will work closely with OEAA and the Michigan-Developed Contractor to review text or data on MME reports that apply to the ACT and/or WorkKeys assessments. The Contractor will also work closely with OEAA to conduct item-level analyses to develop procedures for reporting customized skill scores at levels consistent with the full set of MME tests and the Michigan Strands and Standards. The primary considerations in choice of method would be meaningfulness of scores relative to standards and instruction, reliability, and the potential for consistent application of the procedures over time. The Contractor will consult with OEAA to determine reporting needs and conduct further analyses as necessary to determine the most effective methodology for meeting those needs.



### 1.100 Scope of Work and Deliverables

#### **1.101 In Scope**

The following pertains to all assessments related to this Contract:

- Coordinate in good faith all transition tasks with the current MME administration, any other MME administration, and any successor MME (or successor program) Administration Contractor(s) as well as with current and future MME Development Contractors. Any reasonable cost related to any transition is the responsibility of the respective party.
- Maintain assessment cycle schedules and timelines to meet the deliverables described in section 1.104 for the MME.
- Coordinate with OEAA and other MME Contractor(s) to design assessment materials, scoring analyses, and technical analyses.
- Produce all assessment materials required by section 1.104 to the specification illustrated in Appendix A and/or as amended by the OEAA CCI based on the final design of each assessment and cycle from the OEAA assessment development staff.
- Prepare and produce test booklets and answer folders for the College-Entrance and Work-Skills Tests that meet OEAA specifications as components of the MME.
- Prepare and produce accommodated versions of Michigan-Developed assessment materials to serve the students with disabilities and English language learners as special populations (i.e. audio, Braille, enlarged print, reader scripts, videos, etc.).
- Use the technical environment described in section 1.103 and coordinating with its own technical environment, the Contractor will pre-identify student answer documents for each assessment.
- Provide, perform, and accurately track the delivery and retrieval of all College-Entrance and Work-Skills testing materials (including reports) to OEAA, schools and/or districts.
- Scan all answer documents and related scannable testing materials for College-Entrance and Work-Skills Tests.
- Provide and perform accurate machine and hand-scoring services.
- Work with OEAA staff to create and produce accurate standard reports for College-Entrance and Work-Skills Tests.
- Provide files of student record data (by student barcode label) in a prescribed format to merge into a combined student file for OEAA hosting of Tested Roster on the state's secure website.
- The Contractor will utilize updated student demographics (including barcode) for reporting standard reports for College-Entrance and Work-Skills Tests.
- Work with OEAA and the Michigan-Developed Contractor staff to transfer item, student, and report data at agreed upon times throughout each cycle.
- Attend Technical Advisory Committee (TAC) meetings as described in section 1.104.F to address issues related to assessment items and results as needed.
- Deliver and retrieve all assessment materials as described within this Contract.
- Process and score all returned answer documents for College-Entrance and Work-Skills Tests.
- Combine multiple-choice and constructed-response scores to produce combined results for each test area and student.
- Produce and deliver the standard College-Entrance and Work-Skills Test results reports to students, schools, and/or their respective post-secondary educational choices.
- Provide Contractor leadership for technical analyses (item statistics, scaling, etc.) for all MME components.
- Provide Contractor leadership in preparing technical report (described in Section 1.104.Q) that incorporates all components of the MME.
- Provide psychometric review of data files that combine the college-entrance and work skills scores with the Michigan developed portion scores.

#### **1.102 Out of Scope**

The following is considered outside the scope of this Contract:

- The administration of any assessment that is not part of the College-Entrance and Work-Skills testing components.
- The administration of any MEAP tests at the elementary, middle, and high school levels.
- The administration of any MI-Access, or ELPA assessments (translated and accommodated versions of the MME college-entrance and work-skills tests are within the scope of this Contract).



- The development of assessment items for the MME, except as needed to maintain the college-entrance and work-skills tests that are a part of the MME.
- The development of the MME Development Contractor's item banking software system (the responsibility of the MME Development Contractor for Michigan-developed assessments).
- The accessing of the MME Development Contractor's item banking software system (this is the responsibility of the MME Development Contractor for Michigan-developed assessments and OEAA).
- The updating of the MME Development Contractor's item banking software (this is the responsibility of the MME Development Contractor for Michigan-developed assessments and OEAA).
- Selection of MME field-test items and/or field-test prompts to include in the Michigan-developed assessments, except as needed to maintain the college-entrance and work-skills tests that are a part of the MME.
- Any tasks not related to this Contract.

### 1.103 Technical Environment

This section addresses the information technology environment requirements of this Contract.

See Appendix D regarding the State's technology environment.

The Contractor for the College-Entrance and Work-Skills Tests shall provide all electronic Contract documentation using the Microsoft Office suite (XP version) unless otherwise agreed to by the CCI.

All software used must be compatible with MDE software for products.

The Contractor for the College-Entrance and Work-Skills Tests shall provide a separate toll-free telephone number for MDE staff and other Contractors.

In addition, the Contractor will need to provide a dedicated toll-free telephone number in effect during the duration of this Contract, between the hours of 8:00 a.m. and 5 p.m., Eastern Standard Time. This number will be used by Michigan school district personnel to inquire about issues related to the administration, scoring, and reporting of the college entrance and work skills of the MME testing system. The Contractor and their staff must be available 8 a.m. to 5 p.m. EST/EDT Monday through Friday. In addition, the Contractor will need to provide a dedicated email address. This email address will be used by Michigan school district personnel to inquire about issues related to the administration, scoring and reporting of the College-Entrance and Work-Skills Tests components. See section 1.104.N for specific call center requirements.

### 1.104 Work and Deliverable

The Contractor for the College-Entrance and Work-Skills Tests shall provide services and staff, and otherwise do all things necessary for, or incidental to, the performance of work as set forth below:

#### 1.104.A General Description of OEAA Assessments

The following is a general description of OEAA assessments, including the MME assessments, and their properties with which the Contractor will be expected to comply:

All OEAA assessments must be culturally fair in full consideration of Michigan's diverse student population. In design and content, the assessments should allow for maximum participation of students with disabilities and/or English language learners. Changes to assessment blueprints may dictate changes in the numbers and/or types of items on future forms of the assessments.

All OEAA assessments used must comply with state and federal laws, policies, and guidelines (i.e. NCLB, IDEA, ADA, and School Code). The Contractor must also be fully prepared to work with the state during the length of this Contract to address new or modified requirements of the federal and state governments. These laws, policies and guidelines may require changes that will be negotiated on an as needed basis. See section 1.403 for change control process.

On occasion, when variations in assessment administration procedures have been reported during the assessment administration window, a parallel form of each assessment has been used to re-assess students. Therefore, an "emergency" form is needed for each assessment at each grade level. The same emergency form can be used for more than one (1) school year so long as the form remains secure. The Development Contractor is responsible for providing items for the emergency form. The Contractor must coordinate with the Michigan-Development Contractor to create a new emergency form in the event that an emergency form is needed.



All OEAA assessments must be based on sound psychometric designs that ensure curricular and instructional validity and yield scores that are reliable and valid measures of student achievement or proficiency as defined by the underlying frameworks upon which the assessments are designed (e.g. benchmarks, Grade Level Expectations (GLCEs) and Course Content Expectations (CCEs) for the MME; extended GLCEs, extended CCEs and extended benchmarks for MI-Access); and English language proficiency standards for the ELPA. The overall assessment designs must address issues arising from the need for comparable year-to-year assessment results. To support high-stakes use of all OEAA assessments, the content of the assessments, including the scores produced, must be of the highest technical quality and must meet the requirements of the APA/AERA/NCME "Standards for Educational & Psychological Testing" (1999).

### **Michigan Merit Examination System**

#### **Legislative Background**

Public Acts 592-596 of 2004 were recently adopted by the Michigan Legislature to replace the High School ELA and mathematics assessments with a college entrance test. After the initial implementation of the MME in Spring 2007, all remaining peer review documentation was submitted to the U.S. Department of Education Title I program for approval. The current MME administration, scoring and reporting Contractor has worked with OEAA staff to implement needed changes in the MME program during the current three (3) year Contract period. With this Contract, the State will also negotiate any MME program changes with the Contractor if, and when, such changes are needed.

#### **Michigan Merit Examination (MME Participants)**

Spring MME participants include all students enrolled in grade 11 and students in grade 12 who qualify for retesting. Retesting with the MME can assist students in meeting score requirements of the high school Michigan Promise Scholarship program to obtain a potential \$4000 scholarship, and students who are taking the MME for the first time. At the current time, about 135,000 high school students in grades 11-12 participate in the program.

#### **MME Components**

The Michigan Merit Examination consists of the following:

- Assessment instruments that measure English language arts, mathematics, reading, and science and are used by colleges and universities in this state for entrance or placement purposes.
- One (1) or more tests from one (1) or more test developers that assess a pupil's ability to apply reading and mathematics skills in a manner that is intended to allow employers to use the results in making employment decisions.
- A social studies component.
- Any other component that is necessary to obtain the approval of the United States Department of Education to use the MME for the purposes of the federal No Child Left Behind Act of 2001, Public Law 107-110.

Currently, the social studies and science components of the MME are Michigan-Developed, although College-Entrance Tests in science may be considered for future use. The Contractor for the College-Entrance and Work-Skills Tests components will be responsible for coordinating these tests with the OEAA and the MME Administration Contractor for Michigan-Developed assessments, as well as the other components of the MME program. The decisions for the current MME components are based on the alignment study conducted by Dr. Norman Webb, University of Wisconsin, for the Michigan Department of Education (2005).

The MME is administered in the Spring of grade 11 each year. The State will pay the cost of the Spring grade 11 assessment, and currently will pay for one (1) retest for qualifying grade 12 students. These students should be permitted to retest in the spring of their senior year at state expense.

Currently, Test Centers are required to administer the College-Entrance and Work-Skills Tests, and Michigan-Developed components of the MME at the same dates and times indicated below. These Test Centers are for non-public school students that are unable to take the test at their own school. These Test Centers may be at mutually agreed upon sites on the same dates of administration as public schools.

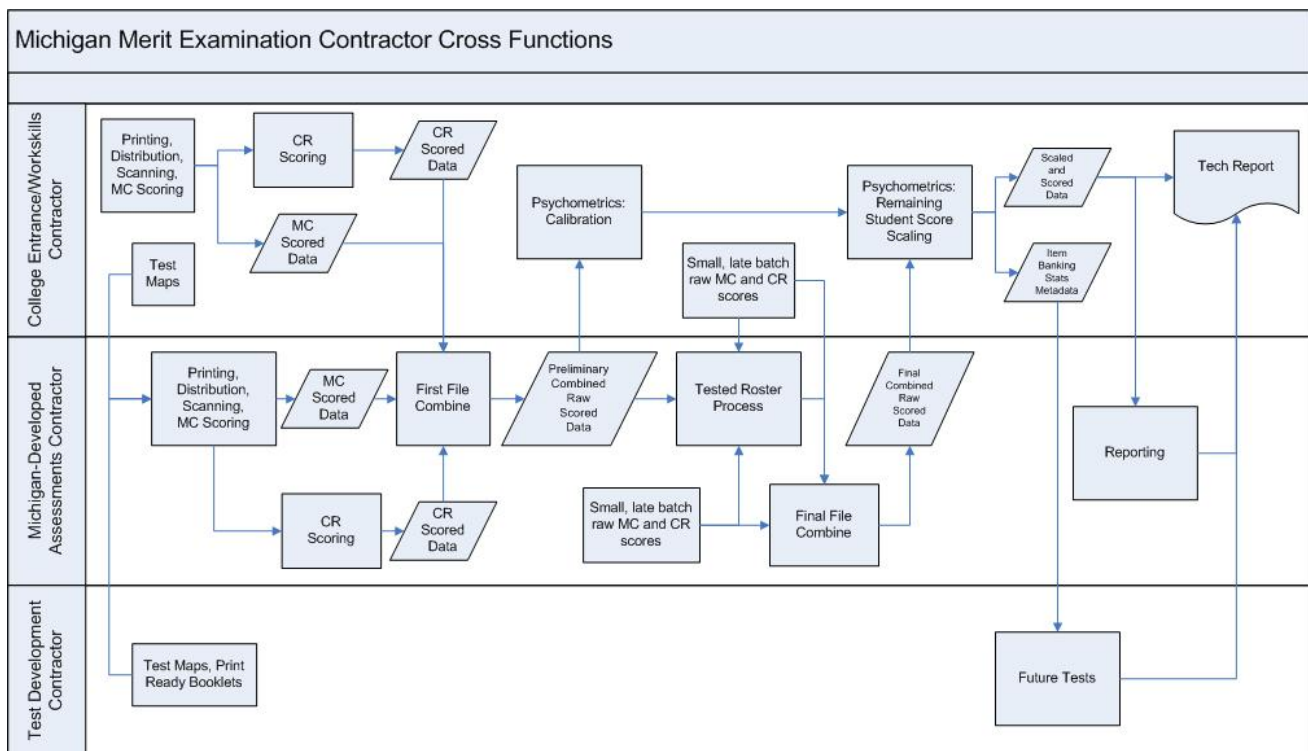


The assessment administration is planned to occur statewide on three (3) school days, with day one (1) devoted to all components of the college-entrance test; day two (2) devoted to work-skills tests; and day three (3) devoted to the Michigan-Developed assessments (science, social studies, mathematics, and any other assessments that the State would need to administer to supplement College-Entrance and Work-Skills Tests content). All three (3) assessment administration days will be school days. A three (3) day make-up period will be scheduled two (2) weeks later, also falling on three (3) school days. See Appendix B for MME Spring Testing Schedules.

#### 1.104.B Coordination with OEAA Contractors

**Multiple Contractors:** The Contractor for the College-Entrance and Work-Skills Tests will have the responsibility of coordinating with the contractor for the Michigan-Developed Assessments and the MME Development Contractor, which will produce items for the Michigan-Developed assessments of the MME.

**General Coordination Responsibilities:** The Contractor and both of the MME Administration Contractors for Michigan-Developed Assessments have the responsibility for MME assessment booklet design. The Contractor will deliver press-optimized files for all non-scannable materials for the Michigan-Developed Assessments, along with initial design and layout of machine-scannable documents. The MME Administration Contractor for the Michigan-Developed Assessments will develop, proof, and print the scannable documents for these assessments. Designs must be coordinated so that administration, scoring and reporting is streamlined, reliable and accurate, administration by school personnel is realistic, and costs are minimized. The Contractor and the MME Development Contractor for Michigan-Developed Assessments must have agreement on and ensure that all items and assessments comply with the OEAA style guide that identifies standards for all items and assessments and subject specific standards (see Appendix H).



Version 1.3  
02/14/2008

#### 1.104.C General Administration Tasks

The following is an analysis of the major tasks involved in developing the end products of this project, relating to the Contractor for the College-Entrance and Work-Skills Tests. The Contractor is not, however, constrained from supplementing this listing with additional steps, subtasks or elements deemed necessary to permit the development of alternative approaches or the application of proprietary analytical techniques.



The Contractor for the College-Entrance and Work-Skills Tests must address these primary tasks as well as all supporting tasks. The main supporting tasks, with the assumption that quality processes exist throughout, include:

- Create a schedule for assessment administration, scheduling all tasks, subtasks, and activities to be conducted in coordination with the OEAA staff and other MME Contractors;
- Create new forms of the college-entrance and work skills tests;
- Determine, in cooperation with OEAA staff, the alignment of new tests to Michigan's content standards according to pre-established timelines;
- Pilot-test new items within operational versions of the College-Entrance and Work-Skills Test assessments, if needed;
- Layout, proofing, and printing of all assessment documents;
- Scan answer documents;
- Score student responses;
- Provide a coordinated program of psychometric services for all MME assessment components, including the Michigan-Developed assessments;
- Provide College-Entrance and Work-Skills Test items for standard-setting;
- Provide documentation and electronic data management;

The Contractor for the College-Entrance and Work-Skills Tests will be responsible for coordinating the schedules, the layout, and shipment timing of testing materials for the college-entrance and works-skills tests. In addition, the Contractor will be the lead Contractor responsible for all psychometric processes, coordinating on the format and integration of documentation (the technical report, see Section 1.104.S). The MME Development Contractor is responsible for cooperation with the MME Administration Contractors so that the coordination goes as smoothly as possible.

Assessment administration procedures, rules, direction and guidelines must be developed cooperatively by the OEAA and all MME Contractors. These will also address scoring, reporting, accommodations and other required assessment administration procedures. Although these may differ for the college-entrance, work-skills, and Michigan-Developed components, a coordinated approach to management is expected from all MME Contractors.

Major technical and procedural issues inherent in the development of items and administration of the MME must also be addressed with final policy decisions made by the OEAA, MDE, and Michigan's State Board of Education.

#### **1.104.D MME Administration Tasks**

This section addresses the 2008-2009, 2009-2010, and 2010-2011 school years. The Contractor for the College-Entrance and Work-Skills Tests will carry out a variety of tasks for the administration of the MME. Approximate dates for each task are provided for the Spring 2009 Cycle.

If any testing component, such as the college-entrance test is new or substantially altered, additional steps will need to be taken as part of the MME administration process. For example, if a new college-entrance test is chosen, a formal statistical alignment study would be required to determine possible differences between the new test and the current MME College-Entrance test. Also, if the content of the MME is substantially altered, a standard setting involving Michigan-developed assessment components (ELA, mathematics and science) would need to occur. The extent to which the following schedule can be carried out without additional steps is dependent on any substantial changes in the content of MME testing components, which would require additional approval from the U.S. Department of Education.

During each academic year, the Contractor for the College-Entrance and Work-Skills Tests will be responsible for the administration of the College-Entrance and Work-Skills Tests as an initial administration for all 11<sup>th</sup> grade students on MME and a retest for all qualifying 12th grade students. The Contractor will also serve as the Contractor for combining student results from all components into a single record for Tested Roster, psychometric analyses, and reporting MME results for all components in an integrated, standards-based format for a variety of audiences.

The MME testing conducted each school year will be administered in the spring. The dates listed at the end of each point below will serve for the 2009 testing and each subsequent test will follow the same date pattern for that testing cycle (i.e. number three (3) has September 2008; then it will be September 2009 for the 2010 testing cycle).



1. Participate in Project Kick-Off Meeting (Within two (2) weeks of contract award then in July for future cycles): Key staff from both of the MME Administration Contractors, OEAA, and sub-contractors (if used) will meet for three (3) days to review project plans, schedules, and activities. The goal is to revise schedules and planned activities accordingly, and to get to work to produce the materials needed for the Spring 2009 MME administration.

This project kick-off meeting will also serve to review assessment development plans and schedules, in order to assure that the MME item development schedule meshes appropriately with both MME Administration Contractors. The OEAA will identify appropriate staff to document the initial meeting and update the electronic project schedule as needed.

If there are new or different components to be included in the MME, a plan and schedule for conducting statistical alignment studies, etc. will need to be included. This would include announcements to schools about any new testing components of the MME assessment system and how schools would be selected to participate in the statistical alignment studies.

2. Finalize Assessment Administration Plans (Within four (4) weeks of contract award then in July for future cycles): The Contractor for College-Entrance and Work-Skills Tests must provide a plan to develop the materials needed to administer, score (College-Entrance and Work-Skills Tests only) and provide technical analyses MME assessment components each spring. This will include, at a minimum, a detailed electronic project schedule, along with appropriate psychometric designs, to assure that the assessments will produce accurate and sound information about all students and schools.
3. Develop Answer and Other Scannable Documents for Spring 2009 Cycle (September 2008): The MME assessment and scoring Contractors will develop answer folders to collect the multiple-choice and the constructed-response answers from students.

The student demographic pages of scannable answer documents for all MME testing components should be similar in format, with the ability to accept Michigan-designed elements, such as Unique Identification Code (State student number), pre-identification barcodes, and school codes from the School Code Master file, etc. These codes are to be captured as part of the scanning process and carried on all Michigan-related scan, score and research files as identifiable fields.

Answer documents (including scannable booklets) must provide space for responding to the written-response questions, and all pages must be linked physically and/or by identifiers. Answer documents must also provide space to collect a handwriting sample (signature) suitable for use in conducting security investigations and birth date. Space must also be provided for a bar-code label that is affixed to all answer documents at schools and electronically read/recorded as part of the scanning/scoring process. An OEAA barcode will be locally generated for students who are registered at during the spring assessment cycle. See section 1.104.K, part nine (9) for the Barcode Labeling Website for student pre-identification specifications.

4. MME Administration Contractor for College-Entrance and Work-Skills Tests Selects forms for Spring 2009 Cycle (Within two (2) weeks of contract award then in June for future cycles): The Contractor for College-Entrance and Work-Skills Tests determines forms of the tests for the following spring cycle. Both MME Administration Contractors will then work with OEAA and the statistical alignment study to identify the quantity and specifications of the items needed for each portion of the Michigan-Developed components of the MME.
5. MME Administration Contractor for College-Entrance and Work-Skills Tests Selects Accommodated and Emergency Forms for Spring 2009 Cycle (Within two (2) weeks of contract award then in July for future cycles): The Contractor for College-Entrance and Work-Skills Tests selects accommodated forms of the test (if different than the operational tests). One (1) additional form, an emergency form to be used in the event of a security breach, must also be prepared for each operational form of the College-Entrance and Work-Skills Tests. This form will contain items measuring the same core skills but with different test items. Emergency forms may be reused from one (1) assessment cycle to another so long as they remain secure, but one (1) emergency form must be available for each assessment cycle.



6. Develop Report Formats and Supporting Materials (October, 2008): The MME Administration Contractors, working with OEAA staff, should design easy-to-read, and informative standards-based reports of individual student, classroom, school, and district results that integrates all MME testing components. These reports are required by federal legislation and serve to supplement the regular reports of results that students and schools receive from the college-entrance and work-skills components of the MME. Samples of current MME reports that contain the results of both the college-entrance and work-skills tests, as well as the Michigan-developed components are included as Appendix K.
7. Identify and establish Test Centers (Within four (4) weeks of contract award then in August for future cycles): The Contractor for the College Entrance and Work Skills Tests will work with OEAA staff to identify appropriate test centers across the state that will administer the MME to non-public school students where the test is not administered at their school. MME reports for these students will be sent to the school of attendance.
8. Develop Training Plan and Materials for MME Administration (August 2008): The Contractor will work with OEAA staff to develop coordinated plans and related materials for training high school assessment coordinators, assessment administrators, and proctors for the Spring 2009 cycle.
9. Develop Student-Identification Documents for Students Registered After Printing Materials (February 2009): The Contractor will develop student identification labels (bar-coded labels) process for registering students after materials have been printed, as specified in Section 1.104.G).
10. Develop Spring 2009 Administration Manuals (August-September, 2008): The MME administration manuals provide planning information and directions to the District and School Assessment Coordinators for managing all MME components in the Spring 2009 cycle. Only non-secure MME information is included. Currently, there is a separate manual for students testing with accommodations. Since these manuals provide MME Coordinator directions for all components of the Spring 2009 cycle (college entrance tests and Michigan-developed tests), the content and layout should be coordinated with both MME Administration Contractors. Samples of current manuals are provided on the MME website, <http://www.michigan.gov/mme>.
11. Develop and Produce Needed Materials for Accommodating Students With Disabilities and English language learners (ELLs) (August-October 2008): The Contractor will work with OEAA staff to determine which accommodations will be offered to students with disabilities and English language learners. For students with disabilities, the Contractor will develop enlarged print (18-point) and Braille versions for visually impaired students for at least one (1) assessment form per test or content area, and for students with other disabilities, both audio and video recorded versions of at least one (1) assessment form per content area, to be made available to districts in a DVD format and, as a special request, in a audiocassette tape format. The DVD should be sectioned so as to permit students to re-listen to a passage, a question, or the responses to the question without listening to the entire section all over again. For ELLs—with the exception of reading—testing materials will need to be produced in a video format for the languages of English, Spanish and Arabic. These videos are to be offered in a DVD format that is sectioned so as to permit ELLs to re-listen to a passage, question, or the responses to a question without listening to the entire section again. Videocassette tapes are also to be made available as a special request.

The Contractor will also include materials for test accommodation coordinators to use for working with IEP teams and instructors of ELLs to assist them in applying for accommodations, the review and approval request processes.
12. OEAA hosts Pre-ID File for Local District Update (December 2008-January 2009): The OEAA will host the Pre-ID file as described in Section 1.104.K.
13. The State Delivers Pre-ID File to both MME Administration Contractors for printing Student Labels with Barcodes (January 2009): The Contractor must provide the printing of student labels with barcodes that can be affixed to MME scannable answer documents at local schools and testing sites. Labels will contain the student Unique Identification Code (state student no.) and Barcode, along with school name, number (from School Code Master) and other student demographics in a pre-identified format.



14. MME Test Coordinator supervisor training (October-November 2008): If on-site training is required by the Contractor, conduct one (1) day test administration workshops in 12 counties around the state (Wayne, Oakland, Macomb, Ingham, Kalamazoo, Kent, Alpena, Clare, Traverse City, Cheboygan-Otsego-Presque Isle, Marquette, and Escanaba ISDs/RESAs).
15. Develop Packaging Lists (January 2009): In coordination with OEAA staff, the Contractor will be responsible for utilizing electronic submissions of enrollment numbers that will be provided by MME coordinators on the OEAA secure site. These electronic submissions are designed to improve accuracy with numbers and quantities of materials to be sent to MME Coordinators at each school district or testing site.
16. Use Pre-ID File(s) to Pre-Print Student Answer Folders (February, 2009): The Contractor will use the state-produced Pre-ID file to pre-print barcodes for student answer folders as described in Section 1.104.K.
17. Package MME Assessment Materials (February, 2009): The Contractor for the College-Entrance and Work-Skills tests will package all assessment and ancillary materials as specified in section 1.104.I for delivery to schools and districts using state-produced contact names and "ship to" addresses.
18. Participate in MME Assessment Administration Briefings (February, 2009): OEAA staff and staff of the Contractor will conduct assessment administration briefings for the State. OEAA staff will conduct a statewide live teleconference assessment briefing from Wayne RESA during this month (which will also be streamed via the Internet and re-broadcast), and respond to requests for regional training sessions as well. Contractors are encouraged to propose innovative ways of assuring that the individuals who will administer or proctor the administration of MME assessment components will be prepared to do so.

The purpose of these briefings will be to review the procedures that the MME Coordinators need to carry out before, during, and after assessment, including their briefings on similar duties for School MME Coordinators and Assessment Administrators. The Contractor will explain how materials are shipped to districts, how to order extra materials, how to get answers to assessment administration questions, and how to return the assessment materials after assessment for scoring.

19. Verify Accuracy of the Scanning, Scoring, and Reporting Systems Using a Test Deck (by February 1, 2009): The Contractor will be responsible for demonstrating the accuracy of the scanning and scoring systems as detailed in Section 1.104.K.

Once all MME assessment components are scored, the Contractor for the Michigan-Developed Assessments will provide a pre-formatted score file to the Contractor for the College-Entrance and Work-Skills Tests as input for combined reporting of all MME assessment components. The Contractor for the College-Entrance and Work-Skills Tests will be responsible for demonstrating the accuracy of the reporting system as detailed in Section 1.104.O.

20. Distribute MME Assessment Materials to Schools (March, 2009): Contractor will monitor and facilitate the distribution of MME for the College-Entrance and Work-Skills Test assessment materials to the schools or district MME Coordinators as specified in Section 1.104.I.
21. Facilitate the Creation of Bar-Coded Labels by Individual Schools for Students Registered Between the Printing of Materials and the End of the Assessment Window (March, 2009): The State provides a secure website (see Section 1.104.K) for schools to use in creating bar-coded student identification labels for students without assessment materials printed specifically for them. The Call Center (Section 1.104.L) must be equipped to assist MME Coordinators and schools in the labeling process. In addition, for districts with high student mobility (i.e. Detroit, Grand Rapids and others) there must be an opportunity to load pre-identified students as an addendum file by February 20, 2009 for March testing. These students, in the addendum file, must be matched against those students already entered to ensure no duplicates are pre-printed. Labels will be produced by the Contractor from this addendum file and shipped overnight to districts and schools within 48 hours of the receipt of the file.



22. Assessment (March, 2009): Michigan schools will administer the assessments during this time period, see schedule - Appendix B. The scheduled dates for MME are provided for the next three (3) years. Within this window, schools will administer the MME College-Entrance Test in its entirety, on the first day of testing to all eleventh graders and any twelfth graders who are eligible for a retest. This single day of administration will be the same for all schools in that assessment window, the work skills tests are to be administered on the second day of testing; and all Michigan-developed assessments on the third day, embedding pilot test items in all components (mathematics, ELA, social studies and science).
23. Return of Assessment Materials to Contractor (April 2009): The Contractor will facilitate and monitor the return of for the College-Entrance and Work-Skills Tests to their stated location for scanning and scoring these materials, providing clearly-designed labels and instructions for shipment as specified in Section 1.104.I.
24. Make-up Testing of High School Students (March 2009): Currently, make-up testing is scheduled exactly two (2) weeks after the initial assessment period, a make-up test session will be scheduled, again with the College-Entrance Test on day one (1), Work-Skills and the Michigan-Developed components on days two (2) and three (3).
25. Return of Make-up Testing Materials to Contractor (April 2007): The MME Administration Contractor for college-entrance and work-skills tests will facilitate and monitor the return of make-up assessment materials to the Contractor scoring site as specified in Section 1.104.I.
26. Log-In of Assessment Materials (March 2009): The Contractor will log in the returned assessment materials at their scoring sites as specified in Section 1.104.I. The Contractor will follow up with schools to assure timely return of those testing materials, as well as to track schools that have not returned all for the College-Entrance and Work-Skills Testing materials.
27. Locate Any Missing Materials (April 2009): The Contractor is responsible for locating all materials returned from schools and districts. This also includes being able to identify which materials have not been returned and working with the schools to ensure their return. Before this task is complete, all pertinent materials (i.e. test booklets, answer documents, recordings) will need to be returned and verified.
28. Scanning of Answer Documents (April, 2009): The Contractor will scan answer documents as specified in Section 1.104.I.
29. Hand-Scoring of Operational Constructed-Response Items: The Contractor is responsible for conducting hand-scoring.
30. Hosting of Tested Roster Files (April 2009 ): After scanning, the Contractor will send demographic files (in a prescribed format) that include scanned barcode information for each test taken to the MME Administration Contractor for Michigan-Developed assessments, which will serve as the lead Contractor for merging demographic information and MME components taken into one (1) student record in preparation for Tested Roster, which will be hosted on the OEAA secure web site, which is accessible to authorized Michigan educators as specified in Section 1.104.K. The purpose of this hosting is to make certain that demographics are coded correctly, that students are assigned to the correct school and district, and that answer documents for all students who were tested with a MME component have been received and scanned by the appropriate MME Administration Contractor.
31. Update of Tested Roster File Hosted (April 2009): As specified in Section 1.104.K, the State will host the tested roster file for all MME assessment components. Resolution of missing tests, multiple tests for one (1) student, or requested changes indicated by local school districts, such as changing the school of record for testing, which will be determined in conjunction with MME Administration Contractors, with the use of test images of student answer folders as a research tool. The resulting updated tested roster files will be provided to the appropriate MME Administration Contractor, which will merge the updated demographics and other information for preparing finalized score files, with integrated demographic updates and edited files of scored student results.
32. Student Reports Shipped to School Districts (May 2009): The Contractor for the Michigan-Developed Assessments will ship the reports and Guides to Reports to each school's MME Coordinator as specified in Section 1.104.J.



33. Statewide Debriefing of MME Results (May-June 2009): Through the use of multiple workshops (or optional state teleconference) with appropriate materials, the Contractor will illustrate to schools how to improve students' achievement on the MME assessments.
34. Technical and Other Summary Reports Produced (August 2009): The Contractor will serve as the lead Contractor in preparing a series of reports and analyses immediately following the public release of the statewide results for each assessment and testing cycle. These analyses include the following:
- Technical Report of the MME assessment system (see Section 1.104.Q for an outline of the Technical report);
  - Summary of MME Results for Each Demographic Subgroup;
  - Summary of District Results by Intermediate School District or Regional Educational Service Area;
  - Item analytic data for operational items (DIF performance; upper-lower 27% analyses, and so forth);
  - Strand- and benchmark-related analyses (KR-20s and other analyses for each set of items measuring a given strand and/or benchmark);
  - Subject matter analyses (e.g., Mathematics) including KR-20s and other analyses for each entire set of items used to measure the content area;
  - Item analytic data for the field test items that can be used to select the items to replace the released items the following year; and
  - Industry standard analyses of horizontal linkages (to prior years' score scales) and vertical linkages.

These analyses should be performed at the immediate conclusion of the statewide reporting (or in the case of field-tested constructed response items, as soon as the scores are available), so that the results can be used to communicate about the assessments used, as well as to plan for improvements in the assessments for subsequent MME assessment cycles.

#### **1.104.E Potential Future High School Reform Initiatives – Deleted N/A**

#### **1.104.F General Committee Meeting Responsibilities**

The Contractor will have separate responsibility for standard-setting and other committee meetings specific to MME for the College-Entrance and Work-Skills Tests. The OEAA staff will have overall responsibility for all Technical Advisory Committee meetings (note that the MME Administration Contractor for College-Entrance and Work-Skills Tests may be required to attend and/or provide presentations for many of the TAC meetings. In these circumstances, this Contractor is responsible for its employee expenses, except for meals and snacks provided during those meetings by OEAA).

Except for the TAC meetings, responsibilities for the Contractor for College-Entrance and Work-Skills Tests include:

- Making all arrangements for meetings, including developing an agenda, securing the meeting location, and paying for meeting expenses with approval of meeting arrangements by OEAA;
- Inviting potential participants, and verifying their intent to attend;
- Arranging suitable lodging for participants traveling more than 50 miles one (1) way;
- Paying travel expenses for participants at state rates. All travel reimbursements shall be paid at the state rate in effect on the date of travel. The state rates can be found at [http://michigan.gov/dmb/0,1607,7-150-9141\\_13132---,00.html](http://michigan.gov/dmb/0,1607,7-150-9141_13132---,00.html);
- Keeping records of participant attendance;
- Providing either reimbursement of district substitute teacher fees or a daily honorarium according to participant request (the daily honorarium is to be \$250 for standard-setting and range-finding participants);
- Providing a continental breakfast, lunch, and snacks for all participants, including OEAA and other MME Administration Contractor staff;
- Providing dinner reimbursement at the state rate for those staying overnight;
- Training participants using OEAA-approved training materials;
- Preparing (in consultation with OEAA staff) all materials needed by the committee participants to perform their tasks;
- Conducting meetings according to OEAA-approved protocols;
- Providing sufficient experienced staff in coordination with OEAA to facilitate and monitor each large-group and break-out session;



- Providing for appropriate security of the OEAA assessment data and items;
- Administering security agreements for participants, and monitoring compliance with those agreements; and
- Recording the proceedings of the meetings with sufficient detail to provide appropriate and timely follow-up of records with OEAA staff.

Each MME Contractor will be responsible for all travel and lodging costs of their staff and OEAA staff related to their Contract activities where OEAA staff needs to be present. Approval by OEAA for each meeting and participant is required before scheduling each meeting.

#### **1.104.F.1 Responsibilities for Specific Committee Meetings**

##### **1.104.F.1.1 Standard Setting Meetings**

It is likely that during the course of this Contract the standards (cut scores) will need to be reset. When this is deemed necessary, OEAA will notify the MME Administration Contractors of this request.

The MME Administration Contractor for Michigan-Developed Assessments will have the responsibility for all standard-setting tasks. This includes meetings specific to all MME components, including the college-entrance and work-skills tests as well as the Michigan-developed assessment(s) that the Administration Contractor is responsible for. All OEAA approval for the following activities must come from the OEAA Technical staff in consultation with the TAC. Depending on final Federal approval of MME, the design of the ELA and Mathematics components may not require standard setting during the timeframe of this Contract. However, standard setting for the Science and social studies components will be required when the new CCEs are approved.

If MME operational items from the for the College-Entrance and Work-Skills Tests contribute to the score for a content area, they must be included as part of the standard setting process. Therefore, in preparation for standard-setting in a content area (currently ELA, mathematics, or science), the Contractor for for the College-Entrance and Work-Skills Tests must provide any and all test items that will be needed for standard-setting purposes.

##### **1.104.F.1.2 Technical Advisory Committee Meetings**

The OEAA has sole responsibility for conducting and paying for Technical Advisory Committee (TAC) meetings regardless of the agenda for the TAC meetings. Representatives of both MME Administration Contractor and the MME Development Contractors will be required to attend those portions of the TAC meetings related to MME administration topics, such as review of psychometric procedures, report formats, or technical reports. MME Administration and Development Contractors will be expected to coordinate their needs for time on the agenda with the OEAA staff, and will be expected to pay all of their own employees' (or subcontractor(s)) expenses except for meals and snacks provided by the OEAA during the meetings.

TAC meeting responsibilities for the Contractor for College-Entrance and Work-Skills Tests include, but are not limited to, the following:

- Working with OEAA staff and other MME Contractors, as needed, to schedule presentations for the TAC.
- Developing materials for requested presentations to the TAC with submission of draft documents to the OEAA staff according to pre-established timelines.
- Preparing (in consultation with OEAA staff) all materials needed by the committee participants to perform their tasks (except for tasks on the agenda at the request of the Development Contractor).
- Conducting presentations according to OEAA-approved protocols for TAC meetings.
- Providing for appropriate security of the MME assessment data and items.
- Recording TAC comments regarding presentations in sufficient detail to provide suitable follow-up with OEAA staff.

#### **1.104.G Production of Student Identification Documents**

The Contractors for all OEAA assessments must coordinate the layout of student identification documents/labels so that they appear to come from the same office. The OEAA staff will take the lead in the development of pre-ID files for use by MME Administration Contractors in designing and developing coordinated student identification documents.

**1.104.H Production of Student Barcode Labels**

MME Student Barcode Labels will be used to identify all answer documents. A file of these Student Barcode Labels will be provided by OEAA for students who are pre-identified prior to a determined cut-off date and will be printed as labels by the Contractor for delivery to Michigan high schools for attachment. Since it is not possible for schools to include students (as part of the pre-ID file) who transfer or enroll between the pre-ID cut-off date and the assessment cycle, OEAA barcode labels for students who are pre-identified after the cut-off date will be printed at the schools on blank labels that will have been provided by the Contractor.

In designing the answer document for each assessment, the Contractor will create space that is sufficient to accommodate the Student Barcode Label Pre-ID section on the first page to allow for student information, including the OEAA Barcode to be collected and returned as part of all MME demographic and scoring files (see Appendix I: Sample Answer Document Cover).

Only answer documents with these bar-coded labels will be used to produce test reports for college-entrance, work-skills or Michigan-developed components of the MME reports.

Develop Bar-coded Labels: The Contractor will develop both the process of creating, and the format for printing, student identification labels to adhere to assessment materials. The information that is necessary on the printed bar code labels is as follows: Unique Identification Code (State-issued UIC), student name (last, first and middle initial), district code, school building code, school building name, date of birth, gender, ethnic code, district student number and 10-digit barcode number (printed as a Code 39 barcode and as a legible number under the barcode.) The checksum for the barcode shall be based on the Mod 10 method.

**1.104.I Processing of Assessment Materials**

The Contractor must coordinate the processing of student materials so that the multiple OEAA assessment programs appear to come from a single office. Therefore, the schedules for shipment and return of materials must be coordinated with the OEAA staff taking the lead. The OEAA secure website is developed and maintained by the State, and is used by all MME Administration Contractors as needed.

The image storage and retrieval systems may be coordinated among Contractors, but such coordination is not required.

Develop Packaging Lists: The Contractor will use the updated Pre-ID file (see Section 1.104.K), particularly the number of students enrolled in each school and the assessments designated for each student to build a packaging list of the materials (including standard and nonstandard accommodations) to be sent to each school and to each district. OEAA will provide a file of the Assessment Coordinators for the MME and their mailing address and shipping address. The State will also provide summary figures of the numbers of students enrolled in each school at each grade within each district. OEAA will provide these two (2) files to the Contractor by three (3) months prior to the assessment window, as specified in Appendix E.

The Contractor will send a letter to the MME Assessment Coordinator(s) (addressed both to the position and the person, using the address in the above mentioned file), requesting (1) address to which the assessment materials are to be sent, which may not be the same as the address to which letters or memoranda are sent via U.S. Mail, and (2) the e-mail addresses and phone numbers of the Assessment Coordinators and the School District Superintendents.

A list of the materials to be shipped is provided in Appendix A for the MME. The figures from the second file mentioned above, are the figures that the Contractor should use to build packaging lists for materials shipment. Each school is to receive a five percent (5%) overage over the figures that OEAA provides. In addition, each Assessment Coordinator is also to receive a five percent (5%) overage of the materials, in order to meet short-shipment requests from school buildings. Materials will be packaged and sorted in school order, and sent to the district or school as indicated by the Assessment Coordinator.

Package Assessment Materials for MME District or School Coordinators: If there is a request to ship materials to a district, the materials for each building should be packaged separately within boxes which are delivered to the district. Ship to the District Assessment Coordinator (including specified name) at the designated shipping address, which may be different than the district mailing address. The MME District Coordinator is responsible to deliver MME materials to schools two (2) weeks prior to testing. If MME assessment materials are shipped directly to schools, the package should list the name of the MME Coordinator for the building and be shipped to the building address listed for the school in the School Code Master file.



Ship Assessment Materials: The materials shall be sent by means that will track whether the materials have been received, and if so, by whom. This means that the U.S. Postal Service may not be used. Private trucking companies or shippers, such as UPS or Federal Express (Air or Ground), may be used, so long as they can track when, where, and by whom each shipment was received.

Distribute Assessment Materials to Schools: The Assessment Coordinator should distribute the assessment materials to each school two (2) weeks prior to assessment. Before doing so, the Contractor will ask each Assessment Coordinator to inventory the materials sent, making sure that there are adequate numbers of assessment booklets, answer sheets, Assessment Administration Manuals, and other assessment materials, so that any shortages can be filled by the Contractor prior to the start of assessment in the district. Assessment Coordinators will be asked to call the Contractor's toll-free number (see Section 1.104.L concerning the Call Center) to obtain the needed materials.

Assessment Coordinators will also call the appropriate toll-free number if they have any questions about the assessment administration process. These calls should be answered by the Contractor's Call Center staff, or if they cannot answer the questions, referred to OEAA staff for a response.

Return of Assessment Materials from Schools to the MME Administration Contractors: Contractor will provide a pre-paid means for each school district to return their assessment materials for scoring, separately for the initial and retest MME administrations. This will, at a minimum, include: sturdy boxes for the safe return of assessment booklets and answer sheets, shipping labels to attach to each box (differentiating between assessment booklets and assessment answer sheets) that indicate the Contractor's shipping address, as well as the district or school name and code number, and the shipper's tracking number. The Contractor will also provide a means for the district to indicate to the Contractor the quantities of each type of assessment materials that are being shipped. The Contractor will have a system to indicate that the shipments have been entered into the shipper's system (e.g. UPS) that is capable of being updated as materials are received (noting discrepant shipments) and logged in (see Section 1.104.K (3) for technical specifications of the Materials Return Status Website).

Processing Assessment Materials Returned by Schools: Contractor will have a system in place so that all materials received will be logged in within 24 hours of receipt, and will be prepared for scanning within 72-hours of receipt. The status of each district should be readily discernable, ideally from a web-based application that the OEAA (and the Contractor's Call Center) can readily access, and that each Assessment Coordinator can consult (for their district only). This will permit OEAA staff to track district shipments (thus permitting OEAA and the Contractor staff to contact schools whose materials are not received by the end of this period), as well as verifying that materials have been received from each school district. The database underlying this web-based application should be updated at least daily, so that staff can quickly ascertain the status of each district's shipment of answer sheets.

Scanning Student Answer Documents and Identifying Materials: All student responses on answer documents (machine-scorable assessment booklets or the machine-scannable answer sheets) will be imaged for record-keeping purposes, as well as to facilitate the hand-scoring of student responses to constructed-response items. Therefore, all student identification documents must also be imaged as specified in Section 1.104.K.

Image Storage and Retrieval: Because OEAA desires to eliminate the need for paper storage, the Contractor is required to provide storage of images of all answer documents (scannable answer sheets and test booklets) in 120 dots per inch (dpi) resolution as an eight (8) bit grayscale .TIFF format. See Section 1.104.K for a more detailed description of this image storage and retrieval system.

#### **1.104.J Production and Dissemination of Reports and Guides to Reports**

The Contractor will need to coordinate the layout and format of reports so that they appear to come from the same office (OEAA). The Contractor for Michigan-Developed Assessments will take the lead in the development of coordinated standards-based reports incorporating All MME components (College-Entrance, Work-Skills, and Michigan-Developed assessments).

The following reporting tasks are applicable to all assessments and cycles:

College-Entrance Test Result: The Contractor shall produce their traditional reports of for the College-Entrance and Work-Skills Test results and deliver them to the respective students, their schools, and their post-secondary educational choices.



High School Feedback and Retention Reports: Using the National Student Clearinghouse information, the Contractor shall provide university-by-university high school data showing which students end up in remedial courses and showing the percentage of returning sophomores. Other similar reports will be considered. These data may be imbedded within the school report and summarized in the district, ISD and state summary reports.

All Other Reports: With the exception of the traditional report of College-Entrance Test Results, all other reports may combine results from the for the College-Entrance and Work-Skills Testing components as long as each component is clearly identified to illustrate performance on each and in combination. Please note that the design and layout of the reports may change throughout the term of this Contract, but will be comprised of data available within the systems available to the Contractor.

#### **1.104.K Software, Database, and Website Development and Maintenance**

This section describes the information technology system development requirements for this Contract. Michigan has a separate state agency (the Michigan Department of Information Technology - DIT) that is responsible for all state-paid information technology activities. Thus, DIT staff will assist MDE staff in monitoring the IT development activities as well as IT implementation activities throughout the life of this Contract.

Project progress will be closely monitored during the initial development period and the engagement will be terminated if, in the judgment of the CCI, the Contractor is not performing adequately.

#### **General IT Development Requirements for All System Modules**

Complete requirements definition, design, development, testing, training and implementation deliverables for each system module as defined in the IT Quality Plan (Appendix C). All sign-offs required in the IT Quality Plan must be obtained for each module.

Contractor must facilitate requirement gathering sessions for all IT systems work. If facilitation of requirement gathering sessions is not conducted by the Contractor, they must subcontract with a proven IT Contractor to perform the requirement gathering sessions at no additional cost to MDE.

Assure that all project and program quality standards are observed through planning, review and inspection as defined in the IT Quality Plan in Appendix C. State technical and project management standards are referenced in section 2.050 State Standards. Bidders should note that a Standard Exception Request has been approved for the use of Microsoft.NET as the development tool for this Contract and Microsoft IIS will be used as the web server. Any proposed changes in the quality plan or standards must be approved at project startup.

All Web sites designed under this Contract by the Contractor must have the general look and feel of the official State of Michigan Web sites, including adherence to the IT standards (Section 2.050). All Web sites must include online help documentation. All system modules must include the ability for a system administrator to update database reference code tables.

#### **Browser Requirements:**

For private internet sites which require secured login, software must work with a Web browser that supports HTML 4.0 and later (Example: Internet Explorer 3.02 [and greater] / Netscape Navigator 3.0 [and greater])

For public accessible internet sites refer to State of Michigan standards at:

[http://www.michigan.gov/documents/Look\\_and\\_Feel\\_Standards\\_2003v2\\_72379\\_7.0.pdf](http://www.michigan.gov/documents/Look_and_Feel_Standards_2003v2_72379_7.0.pdf) and

[http://www.michigan.gov/documents/Usability\\_guidelines\\_2003v1\\_72381\\_7.pdf](http://www.michigan.gov/documents/Usability_guidelines_2003v1_72381_7.pdf)

#### **Platform Requirements:**

Must follow requirements in section 1.103 Technical Environment. The web pages must be operational in both a Windows and Mac environment.

#### **Security Requirements:**

Must follow the specification in the security section (Section 1.104.N Security Requirements).

**Required System Modules**

The following system modules are to be developed and implemented as detailed in this section.

- 1) Develop Imaging/Scanning System
- 2) Develop Scoring System

One important multi-module requirement is that the modules must allow for data from a single student (including barcode information) to be tracked from the receipt of materials through processing, scanning, scoring, and reporting.

**MDE existing system modules that will require interfaces with contractor's systems**

The following system modules are in place at MDE and will require Contractor to develop interfaces that will allow sharing of information and data as efficiently as possible (direct reading and updating of MDE database's is strongly encouraged).

- 3) Materials Return Status and Shipment Tracking
- 4) Coordinator Data Collection
- 5) Teacher, Student, and Manual Counts and Additional Material Order Collection
- 6) Security Administration System
- 7) Pre-ID hosting Web site
- 8) Demographic file hosting Web site
- 9) Student barcode labeling Web site
- 10) Electronic report hosting Web site

**1) Develop Imaging/Scanning System**

Verification that the imaging/scanning system is operational must be completed by March 1 each year of this Contract.

Contractor will develop the system to scan all answer documents (including answer folders and all student identification documents, including pre-printed answer folders, and bar-coded adhesive labels) for assigned MME components. This scanning/imaging process is performed both for record-keeping purposes and to facilitate the hand-scoring of constructed response items.

Contractor can propose to use whatever scanning solution they wish to use, mindful that only five (5) weeks has been allotted to scanning, scoring, demographic cleanup and reporting.

The system developed by the Contractor must be capable of indexing all image documents in a manner that allows for all of a single student's images to be accessed as a unit. The demographic data from the assessment document (barcode, lithocode) is also included in the record as an identifier of the student and index information to the stored TIFF image. MDE would prefer an image of the entire document (not image clips) and would also prefer images of the documents that are not template created.

Contractor must provide a method of transferring high-definition images with an image index to MDE within two (2) weeks of scanning for hosting on MDE servers.

Technical Requirements:

- Adhere to all security requirements.
- The quality of the scan must be at least 120 dpi and as an eight (8) bit grayscale .TIFF format.

**2) Develop Scoring System**

Verification that the scoring system is operational must be completed by March 1 each year of this Contract.

This system applies to translation of demographic information and selected-response data only, except for the combination of hand-scored responses with machine-scorable responses for purposes of creating a scaled score and determining a performance level.



Contractor will need to demonstrate that their scanners are capable of distinguishing between actual student marks and stray marks or distortions caused by dust, dirt, misaligned answer sheets, and so forth. In addition, Michigan requires 100% verification of double marks, blank answers, and assessments where only an item or two (2) is responded to. The Contractor will use computer-based routines or human-editing stations to assure that the MDE assessment data files are 100% clean and accurate.

Documents are to be scanned on equipment that is capable of Optical Mark Reading (OMR) of pencil marks and producing a hex level read output of the darkness of the mark. The 0 value of the mark should be equivalent to paper and the F value of the mark is the highest (darkest) level. These data are required as well as the student's selected intended mark (the darkest mark) in a string, the raw score for a mark in an item and a TIFF image of the form.

Contractor will develop the system to score answer documents for assigned MME components. The scoring system should incorporate translation of the pre-printed or bar code demographic information, and all multiple-choice answers. The system must be capable of translating images of item responses to designations of the answer option chosen (e.g. 1, 2, 3 or A, B, C). The system must also be capable of translating answer options to a score for each item (e.g. 0 /1). The system should also be capable of updating records by adding scores from the constructed-response items after they are hand-scored in an accurate, time-efficient manner.

All items must be scored accurately, efficiently, and reliably. All exam information must be made available both to CCI for the MDE and to the independent evaluator for analysis and evaluation. Efficient, timely, and accurate scoring of performance items within the statutory timeline will require extraordinary effort on the part of the Contractor. The high-stakes nature of MDE assessments requires that the highest standard of quality assurance be applied to all phases of scoring and analysis.

Although scoring Contractors may use a batch processing system, the MDE student data system can be transaction based with each student as an individual. Thus, data files of all records scanned and the corresponding document tiff images are required via a secure FTP site according to predetermined schedules for MME. Although tiff images that closely mirror the originals (including background) is preferred, MDE recognizes that a dropout process in scanning can be used. Therefore, scanned images that create the data (non-dropped out) with a template-produced background is acceptable. The Contractor must ensure that the overlaying process is not conducted in such a manner to render the image unreadable to a human during a review audit process. A description of this quality process is required.

The State requires that the transfer file is provided (specified in Appendix E – File Formats) that includes the hex read level (O-F) values of all bubbles read, the Contractor scanner's interpretation of the darkest mark, the raw score against the score key, the demographics (ID bar-code) and the tiff images of the document.

At all phases of production related to test materials and scanning student answer documents, Contractor must create data files from the results. The Contractor must be able to share test plans and results with MDE for review and approval. MDE has the option of adding test scenarios to determine if omissions are present.

The MME Administration Contractor for College-Entrance and Work Skills Tests will be the lead Contractor for translating item scores to scale scores for all MME components using Item Response Theory. This MME Administration Contractor must demonstrate a system that is capable of producing performance levels based on cut scores. The scale scores must be calculated using both machine-scored item responses and hand-scored item responses using a simultaneous IRT scaling procedure.

This MME scoring system must also allow for corrections to be made to data during/after an appeals/corrections window after the initial district "go-live" date. The appeals/corrections window is handled on a State-owned Web site, and is not the responsibility of the Administration Contractor. The MME Administration Contractor for College-Entrance and Work-Skills Tests must be capable, however, of receiving files of corrections from MDE and updating student data.

**MDE Modules which require interface with Administration Contractor's Systems:****3) Materials Return Status and Shipment Tracking**

Contractor will provide a pre-paid means for each school district (and/or individual school buildings) to return their assessment materials for scoring. This will, at a minimum, include: sturdy boxes for the safe return of assessment booklets and answer documents, shipping labels to attach to each box) that indicate the Contractor's shipping address, as well as the district name and code number, and the shipper's tracking number. Contractor will have a system to indicate that the shipments have been entered into the shipper's system (e.g. UPS, FedEx) which is capable of being updated as materials are received (noting discrepant shipments) and logged in.

Contractor will also use a system to log in all materials received within 24 hours of receipt, and will be prepared for scanning within 72-hours of receipt. The Contractor's system will feed on a regular basis (at least daily) material return and shipment tracking data to the OEAA Secure Site database. The status of each district will readily discernable, from the OEAA Secure Site which the Administration Contractor's Call Center can readily access, and that each Coordinator can consult (for their district only). This will permit MDE staff to track district shipments (thus permitting MDE and Administration Contractor staff to contact schools not received by the end of this period), as well as verifying that materials have been received from each school district. The database underlying this web-based application should be updated at least daily, so that staff can quickly ascertain the status of each district's shipment of answer sheets.

**4) Coordinator Data Collection Web site**

Contractor will access a State of Michigan system (Educational Entity Master (EEM) formerly known as School Code Master) for school, district, ISD and coordinator information. This EEM will allow Coordinators and other authorized users throughout the state access to their contact information to update at anytime throughout the year.

**5) Teacher, Student, and Manual Counts and Additional Material Order Collection**

Contractor will receive from the OEAA Secure Site database the district's estimate of the quantities of each type of all assessment materials (also known as enrollment or student counts) that are needed for each assessment cycle. Contractor will have access to the OEAA Secure Site system which will include school and district teacher, student and manual counts.

Contractor will identify all material to be produced for each assessment cycle and provide these data to MDE in a format to be determined for loading into the OEAA Secure Site database. School and district OEAA Secure Site users will access the Order Additional Materials section via OEAA Secure Site database. During the additional order window, Contractor will access additional order data for production and shipping via a direct database read from the OEAA Secure Site database.

**6) Security Administration System**

MDE will maintain the IDs and passwords for users of the OEAA Secure Site. The district and school users must have only one (1) login and password for all the system updates that will be required of them throughout the assessment cycle.

**7) Pre-ID hosting Web site**

MDE will provide database views for the Contractor to use via VPN connection in order to access student demographic information in the OEAA Secure Site Database. This Web site permits entry of students for assessment purposes, allowing each student to have a barcode created which uniquely identifies the students at a building for each assessment cycle.

**8) Demographic file hosting Web site**

OEAA Secure Site allows entry of student demographics for demographic update within the OEAA Secure Site database and barcode creation purposes.

**9) Student Barcode labeling Web site**

OEAA Secure Site provides a web-based capability for student barcode label printing to be performed at the local districts and schools.

**10) Electronic report hosting Web site**

OEAA Secure Site provides a web-based capability for access of all electronic PDF reports from the OEAA Secure Site database.

Contractor modules that interface with the MDE report hosting Web site must NOT cause bandwidth and/or capacity failures with heavy loads on the MDE report hosting Web site.

**1.104.L Call Center (Ongoing Throughout the Duration of the Contract)**

The Contractor is responsible for hosting a call center. The Contractor needs to set up a separate phone number so that all assessment help calls for college-entrance or work-skills tests can come in on a single line. The Contractors are responsible for hosting their own call centers, unless multiple MME Contractors choose to collaborate on call center responsibilities. Contractor's Call center will also be an e-mail center with a single e-mail address to which questions may be directed.

Provide Call Center Assistance: Contractor is to provide a toll-free number, staffed by persons knowledgeable about the MME, from 8 am to 5 pm EDT/EST on Monday through Friday excluding federal Holidays (but including summer vacation days) throughout the entire duration of this Contract. The MME Assessment Coordinators will use this number to order any extra materials, but will also use the Call Center to ask questions. Routine questions that have approved answers can be provided by the Call Center staff. New or unique situations should be forwarded to a designated OEAA staff member for response. The staffing of this Call Center can be variable, but should be adequate that individuals are not put on hold for long periods (10 minute maximum), unable to reach someone due to busy signals, or otherwise be unable to receive assistance.

Provide Call Center Support: To ensure success of the MME, it is essential that the Call Center is ready and capable to implement and support this assessment program. Contractor's Call Center support is a single-point-of-contact solution. Contractor will handle all types of calls from shipment of materials (never received, need additional, etc.) to coordination with OEAA system administration (forgot password, can't download file, etc.).

The types of calls that should be routed to other State of Michigan agencies will be identified during the first Kick-Off meeting.

The primary customer will be MME Assessment Coordinators, but will also include others. The stronger the help system, the more valuable this program will be, which will result in less frustration for both school districts and OEAA staff. Contractor is to provide a toll-free telephone number, toll-free fax number, and an e-mail address for issues to be submitted 24 hours a day through the duration of this Contract.

MME call centers should use three (3) levels of support. Level one (1) is the call center agent. Call center agents assist with the calls when possible. If they are unable to provide resolution, and it is a technical call or mailing sub-contractor call, it would be escalated to level two (2). Level two (2) is a technical support person that could assist with system administration issues (such as download problems, etc.) or the mailing sub-contractor that could assist with shipping issues. Level three (3) is OEAA staff. In the case that level three (3) support is required, the Contractor will notify OEAA staff that Level three (3) support is required by e-mail and a follow-up phone call. The OEAA staff member will find the answer, if necessary contact the Michigan Department of Information Technology (DIT), and provide resolution to the Contractor's Call Center. This notification will be with an e-mail and followed up with a phone call. All callers should be called back with a status update within two (2) working hours of their original service request, and every 24 hours thereafter until a solution is found.

Provide call center reports: The following information is a list of data and information that must be provided on a monthly basis for the Call Center Detail Report:

- Date/Time (hours, minutes and a.m. or p.m.) service request received, problem, and name and location of requester.
- Date/Time (hours, minutes and a.m. or p.m.) service request closed and resolution.
- Name of person providing resolution.
- Service report control number.

The following information may also be required for the monthly Call Center report:

- Volume of calls by day and hour
- Average time on hold by day and hour
- Number of dropped calls by day and hour.



Additional information may also be required for the monthly Call Center report upon request of the CCI for OEAA based upon experience with the performance of the Call Center and/or unanticipated types or volumes of support calls.

#### **1.104.M Schedules, Update and Planning Meetings, and Record-Keeping**

Contractor must provide a comprehensive, highly detailed schedule for project deliverables and activities for all MME components, lead contractor responsibilities and cycles. This should be made available electronically (using MS Project software or other comparable planning software; MS Project is preferable) to OEAA after each modification of the schedule throughout the course of this Contract. This comprehensive schedule should include all detailed assessment administration, scoring, and reporting activities, since the administration procedures and schedule will determine when materials needed in the assessment programs must be prepared and when hand-offs involving other MME Contractors are required.

In order to monitor project activities, OEAA will require bi-weekly written progress reports, plus weekly update telephone meetings and monthly face-to-face meetings with Contractor's staff. Additionally, the Contractor will report to the CCI of OEAA and at times will meet with other groups regarding this project. Contractor must address all the subtasks and activities as specified in Section 1.101 and as outlined below:

Narrative Timeline: Contractor must include a detailed narrative timeline or schedule that outlines by assessment cycle, school year, task/subtask, and overall chronological order for this entire Contract period, each activity to be performed under this Contract. The chronological schedule must include proposed task initiation and completion dates and levels of effort (i.e. hours) by task for proposed personnel including all Subcontractors. The schedule should show which organization is responsible for each task. The schedule will also serve as a monitoring document to assure timely completion of tasks as scheduled.

Since the schedule may need revision and updating during the term of this Contract, each Contractor must follow the change management process in Section 1.403 with the CCI for OEAA when changes are anticipated by providing an updated version in writing. Two (2) copies of any updated schedule must be submitted 30 days in advance for approval. The CCI for OEAA shall respond in writing to each updated schedule within 10 working days of receipt. Timeline revision may require a Contract amendment.

Progress Reports: Contractor will produce bi-weekly progress reports with relevant tasks and activities from the schedule included and progress noted for each. The reports will also indicate unanticipated outcomes or problems. Contractor will e-mail the written report to the CCI for OEAA by noon EST/EDT of the first Tuesday of each month, covering the previous month's activities.

Management Meetings - The successful operation of the project will require weekly telephone conference call meetings between the Contractor and OEAA staff, or as requested by the CCI for OEAA. These conference calls will provide an opportunity to review and discuss task implementation and status. Monthly in-person meetings will also alternate between Contractor's office and the OEAA location. Subcontractors will meet jointly with the Contractor and OEAA staff as appropriate to the tasks to be discussed. The Contractor and any Subcontractors will be responsible for the cost of sending its staff to meetings and other project-related meetings in Lansing, MI. Contractor should also budget for three (3) OEAA staff to attend six (6) two (2) day monthly meetings at the Contractor's site. The Contractor should also budget for six (6) Lansing, MI based two (2) day project meetings per year.

Other Meetings: Contractor may be required to make periodic reports to the State Board of Education (oral and written) and meet with the CCI for OEAA and advisory committees, or other groups as required by the CCI for OEAA. For the purposes of this project, Contractor must plan and budget for at least six (6) additional two (2) day meetings per year, each attended by two (2) persons from the MME Administration Contractor.

Records and Minutes: The CCI for OEAA will determine appropriate staff to take meeting minutes. All minutes must be electronically maintained and submitted to the CCI for OEAA within 48 hours.

**1.104.N Security Requirements**

Ensuring security is of paramount importance in establishing and maintaining the highest possible standards of technical quality, perceived fairness, integrity, and public confidence of the high-stakes OEAA assessments. It is the responsibility of the Contractor to identify a system that ensures that documentation and all assessment items, assessment materials, electronic files, and data are developed, used, and maintained in a secure manner, protecting the confidentiality of all materials, records, and files. It is required that the Contractor obtain a third-party certification annually regarding the level of security practiced by the Contractor and based on the COBIT framework which may include the following:

- IS Risk Assessment
- Digital Signatures
- Intrusion Detection
- Viruses and other Malicious Logic
- Control Risk Self-assessment
- Firewalls
- Irregularities and Illegal Acts
- Security Assessment (penetration testing and vulnerability analysis)

All data and document handling under this Contract is highly sensitive. All electronic transfer of data needs to be encrypted with a minimum of 128 bit encryption including Contractor to state, state to Contractor, and Contractor to Contractor as required by this Contract.

Contractor must assure that only the appropriate personnel with direct responsibilities for item development and review, assessment development and construction, and assessment administration have access to assessment materials.

**State's Security Guidelines**

All Contractor personnel must comply with the state's security guidelines published on [http://www.michigan.gov/dit/0,1607,7-139-30639\\_30655---,00.html](http://www.michigan.gov/dit/0,1607,7-139-30639_30655---,00.html). For example, 1310.02 Information Processing Security; 1460.00 Acceptable Use Agreements; etc.

MME Contractor's staff assigned to the project will also be expected to:

- sign non-disclosure agreements
- sign acceptable use and security agreements
- submit to background checks.

**Acceptable Use Policy and Security Agreement**

All Contractor personnel will also be expected to comply with the State's acceptable use policies for State IT equipment and resources. Furthermore, Contractor personnel will be expected to sign an annual State of Michigan Contractor Security Agreement before the Contractor personnel will be accepted as a resource to perform work for the State. It is expected the Contractor will present these documents to the prospective employee before the Contractor presents the individual to the State as a proposed resource. Contractor staff will be expected to comply with all Physical Security procedures in place within the facilities where they are working.

**Background Checks**

Contractor will be required to authorize the investigation of its personnel proposed to have access to State facilities and systems. The scope of the background check is at the discretion of the State and the results will be used to determine Contractor personnel eligibility for working within State facilities and systems. Such investigations may include Michigan State Police Background checks (ICHAT) as well as the National Crime Information Center (NCIC) Finger Prints. Proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the NCIC Finger Print Check.

**Secure Transfer of Data**

All electronic transfer of data needs to be encrypted with a minimum of 128 bit encryption as all data and document handling under this Contract is highly sensitive.

**Secure Materials**

The numbers of booklets sent to a school or Local Education Agency (LEA) is recorded and based on previous use, as well as, numbers of students registered for an assessment through the state's pre-identification process. All answer documents are numbered, using best practices for electronic tracking of assessment materials. Security measures must be documented for all aspects of item development, item reviews, and assessment administrations. This documentation must be provided to the OEAA as part of the monthly progress reports and summarized in the Technical Report, Section 1.104.Q.

**Assessment Monitoring**

The Contractor will monitor selected sites for Day 1 and Day 2 of the MME according to procedures comparable to those used for National ACT testing. The sample size of sites to be audited will be proportionate to the number of sites normally audited by Contractor on a National ACT test date. Auditors will be Contractor employees, who will be trained by the Contractor in detailed audit procedures. Each auditor will be provided an official letter of introduction, and a complete packet of site-specific information to prepare for the audit. Auditors will be required to submit a written report. The written report will form the basis of a letter to the school with specific findings of the audit and recommendations for improvement for future administrations.

**Security Breaches**

Investigations conducted by the Contractor must be summarized and outcomes reported in writing and by e-mail to the CCI for the OEAA within five (5) working days of a security breach being uncovered.

**Erasure Analyses**

Scanners used under this Contract have the ability to detect multiple intensity levels of pencil marks on the answer documents. The intensity levels of darker to lighter allow discrimination between smudges and erasures and pencil marks intended by the student. The processes will collect the mark intensity data and identify for each item in the student record the following erasure patterns: incorrect to correct; correct to incorrect; and incorrect to incorrect.

**1.104.O Quality Control and Assurance**

Contractor must provide the facilities, personnel, equipment, processes, procedures, and safeguards necessary to ensure that all materials including answer documents, assessment booklets, administration materials, and ancillary materials are handled securely. At the request of the CCI, the Contractor must demonstrate and provide evidence that the quality control procedures are being followed.

1. **Description of the initial process:** Interface with the OEAA staff in identifying the appropriate students to be tested. As an effort to increase accuracy, data is collected four (4) to six (6) weeks prior to assessment for printing barcode labels which are affixed to answer documents at local school testing sites.
2. **Quality scoring:** This is vital to the success of the MME operations. Contractor must provide information regarding quality assurance and control methods that will be implemented. Specifically, Contractor must address accuracy and timeliness of data associated with, but not limited to: students, classrooms, districts, schools, ISDs, and State of Michigan.
3. **Building in quality control checks:** At all phases of production related to assessment materials and scanning student answer documents create data files [XML or flat text file format (see website [http://www.michigan.gov/documents/131038\\_36330\\_7.pdf](http://www.michigan.gov/documents/131038_36330_7.pdf) for the state's recommended XML specifications)] from the results. The Contractor must be able to share assessment plans and results with the State for review and approval. The State has the option of adding assessment scenarios to determine if omissions are present.



4. Verifying: Data processing and programs are monitored to ensure accuracy. The answer documents will be returned directly to the Contractor. The Contractor provides moisture resistant Tyvek envelopes for returning all answer documents. Contractor staff opens the envelopes and check-in the returned contents. When preparing answer documents for scanning, Contractor staff will review the documents and determine whether any special handling is necessary due to irregularities or other production conditions. Contractor staff will check in the returned documents and make a note of any school with documents suspected of unusual moisture content. These are flagged as potential “wet documents,” to keep the records from being reported until the documents are hand scored by Contractor staff to verify that the hand calculation matches what the scanner picked up. Contractor will ensure that all answer documents from a school are associated with the correct, pre-gridded, scannable header form. This header form is a critical mean for ensuring individual student records are associated with the correct school. The barcode labels affixed to all answer documents provide a direct link to Michigan’s pre-ID file which includes demographic information for each student; thereby, ensuring each assessment correctly ties each student to the correct school, district, county, and/or other subgroups.
5. Checking output from scoring programs to ensure accuracy: After each operational administration, Contractor must run a set of preliminary item analyses. The analysis is conducted to ensure that items are performing as expected and that the scoring key has been correctly applied as described in Section 1.104.I. No reports will be produced until the analysis is approved by Contractor psychometric staff.
6. Technical Reports on Operational Administrations and Field Testing: The Contractor for College-Entrance and Work-Skills Tests will be the lead MME Contractor for technical analyses and will produce a Technical Report annually for OEAA for the spring cycle. The MME Technical Report must describe all methods and analyses used for calibrating, scaling, equating, item analyses, summary statistical analyses, analyses to assess differential item functioning, weighting, and all other analyses, required or proposed. The MME Technical Report must detail all analyses used for both the operational items and the field test items. This report must also include a comparison of the characteristics of the current assessment administration to previous administrations. The MME Technical Report must be reviewed by OEAA staff prior to production of final copy.

The MME Technical Report must include a section of field-test administrations for both multiple-choice and constructed-response items, as well as any additional items developed. The report must include tabular and graphic displays of data to illustrate the characteristics and quality of assessment scores. The report, to be completed by August following the spring assessment cycle, is to be distributed to the independent evaluator, and the CCI; five (5) copies to the OEAA, and one (1) electronic copy. The Technical Report is to follow the form specified in Section 1.104.Q.

#### **1.104.P Independent Evaluation**

Evaluation of the MME is supported by its Technical Advisory Committee (TAC) that will independently monitor all assessment development and implementation processes, including information gathered in field assessment and review of item development. The TAC may also make recommendations for revisions in design, administration, scoring, processing, or use in the examination. Part of the work of this committee, in conjunction with OEAA staff and the representatives from the selected Contractors, is to create an annual school survey regarding various aspects of the assessment administration process.

The Contractor will have the responsibility to answer questions and provide documentation requested by the TAC, and to attend TAC meetings when the agenda addresses topics that require their attendance. See Section 1.104.F for the various Contractor responsibilities for TAC meetings.

#### **1.104.Q Technical Reports**

The Contractor for the College-Entrance and Work-Skills Tests is the lead Contractor for technical analyses of all MME components. The Contractor also has primary responsibility for writing the Technical Report. The Technical report will follow a specified format with sections specific to each of the MME assessment components so that it appears that all sections the Technical Report comes from the same office. The Contractor is responsible for coordinating the design and format of their Technical Report sections.

The Technical Report is produced in sections; at the end of the MME spring cycle, a consolidated, complete technical report with all sections and all MME components administered is to be produced with the leadership of the Contractor for the College-Entrance and Work-Skills Tests.



The Contractor's Technical Report will consist of two (2) volumes. The first volume will consist of descriptions of activities, analyses, and results produced up to, and including, the return of testing materials to the Contractors and preliminary processing of returned testing materials (such as scanning and imaging). Unless major programmatic changes are made, this volume may require modest updates from one (1) cycle to another. The second volume will consist of descriptions of activities, analyses, and results produced after the point of initial test material processing, such as scoring, standard setting, equating, scaling, and item/test analyses (i.e. a traditional technical report). Where it makes sense, in addition to analysis on the overall sample by grade, the analyses are to be presented in every case for the following three (3) groups within each grade: Traditional Public Schools, Charter schools, and Non-Public Schools.

Summary statistics and DIF analyses are to be presented within these three (3) classifications for gender, ethnicity, and accommodated/non-accommodated students (critical AYP subgroups).

An outline of the technical report is described below, with the understanding that each section of the report is to contain descriptions and analyses of the student groups listed above, and that the Contractor may rearrange the order, add to this outline, delete from this outline, and otherwise modify this outline with prior approval of the OEAA CCI. Comparably, OEAA may request a rearrangement of order of the document sections, additions to the outline and/or deletions to the outline. All decisions will be discussed with the Contractor with the understanding that final report content and formatting decisions lie with OEAA. The Contractor will also have the responsibility of providing the technical and programmatic information to OEAA that it needs for any peer review of the MME by the U.S. Department of Education Title I, OSEP, or other offices.

#### Outline of Technical Report

- 1) Executive Summary
  - a) Introduction and overview of the technical report
  - b) Review of coordination with the Development Contractor(s) and with OEAA, detailing in particular any major unexpected problems and methods of resolution
- 2) Review of test booklets provided by the MME Development Contractor
  - a) Description of each test form, including enlarged-print, Braille, and other accommodations
  - b) General description of test forms
  - c) Tabulations of item characteristics including type of item (core, extended core, etc), strand, and GLCE
- 3) Pre-administration processing
  - a) Description of student identification processes, including Pre-ID, barcode Labels, and locally-printed barcode labels for late enrollees
  - b) Description of planned procedures for utilizing OEAA pre-ID files to produce Pre-ID Barcode labels, and processes for reading locally printed barcode labels
  - c) Description of departures from planned procedures, unanticipated problems, and methods of resolution
  - d) General results of student identification procedures, including number of students identified through each process
  - e) Aberrant results of student identification procedures (e.g. urban districts tended to have more late enrollees, Pre-ID concerns targeted in school, district, or intermediate school district X)
  - f) Description of the printing/quality control process for test booklets, student answer documents, school or district headers (if required), and packaging lists
  - g) Description of the packaging/distribution/tracking process in accordance with procedures and security measures laid out in this Contract.
- 4) Field Operations
  - a) Preparing for the assessments (training, planning, and interacting with local MME Assessment Coordinators to prevent/solve pre-assessment and assessment problems)
  - b) Conducting the assessment sessions
  - c) General assessment procedures
  - d) Procedures for adequately handling aberrations from normal procedures such as accommodations, school cancellations, suspected cheating, problems with delivery and printing, etc.
  - e) Description of departures from planned procedures, unanticipated problems, and methods of resolution



- f) Results of the assessments such as general reports on eligible student participation within schools and school districts, highlighting aberrations from expected results (e.g. only 50% of eligible minorities were assessed in school X, or only 60% of students were assessed without accommodations in district Y)
  - g) Description of the process of packaging, returning, and tracking of completed, ruined, and unused assessment materials; including procedures used to locate and retrieve materials not returned in a timely manner
  - h) Processing Assessment Materials
  - i) Description of procedures used to assure appropriate tracking of materials after receipt (e.g. procedures for accurately tracking materials through opening, processing, and physical storage)
  - j) Document scanning procedures
  - k) Description of document scanning procedures
  - l) Description of quality control mechanisms to ensure reliability and accuracy of scanning procedures
  - m) Description of image storage procedures
  - n) Data translation and validation
  - o) Description of procedures used to translate from document images to header (if required), barcode, and item-response data (e.g. the alternative chosen on multiple-choice items, or the text written for short-answer or extended-response items)
  - p) Description of quality control procedures used to validate accurate translation from document images to non-image data, including methods of identifying erasures, distinguishing stray marks from intended responses, and detecting aberrant responses
  - q) For multiple-choice items, the percentage of students selecting each alternative as the correct answer
- 5) Scoring
- a) Description of procedures used to assure appropriate tracking of student responses through the scoring process
  - b) Description of procedures used to score multiple-choice items
  - c) Description of procedures used to score short-answer and extended-response items
  - d) Process of selecting raters
  - e) Process of training raters
  - f) Description of the calibration process
  - g) Description of the procedures followed in assigning student responses to the various raters
  - h) Description of the procedures for reading and scoring student responses
  - i) Description of special procedures for reading and scoring responses of students tested with accommodations (if any)
  - j) Quality control mechanisms used to monitor rater performance, trigger retraining, and dismiss poorly performing raters
  - k) Quality control mechanisms used to assure valid and reliable student scores, including descriptions of conflict resolution procedures for scores rating the same response more than one (1) category apart.
  - l) Documentation of the prevalence of implementing the various quality control mechanisms.
  - m) Results of extended-response scoring
  - n) Inter-rater reliability results
  - o) Intra-rater consistency results
  - p) Summary statistics and score distributions
- 6) Psychometric Analyses
- a) Description of procedures used to assure appropriate tracking of student responses through the scoring process
  - b) Classical Test Theory analyses for each form (as described in the statistical analysis section).
  - c) Raw-score distributions on core and core+extended core with summary statistics including internal consistency reliability
  - d) Item p-values, corrected item-total correlations, discrimination indices
  - e) Summary statistics and score distributions on GLCE item clusters and for content strands
  - f) Item Response Theory analyses for each form and for overall grade-level scales (as described in the statistical analysis section) for each content area
  - g) Step-by-step description of procedures used to calibrate student responses using Item Response Theory techniques, including rationales for decisions concerning which IRT model(s) and items to use in performing calibrations and final scoring



- h) Post-calibration score distributions on core and core+extended core with summary statistics including empirical IRT reliability estimates
  - i) Item statistics including calibrated item parameters, standard errors of item parameters, and fit statistics.
  - j) Expected cumulative true score distributions by latent trait
  - k) Test information/standard error curves
  - l) Model fit analyses, including analyses of the adequacy of the local dependence and unidimensionality assumptions
- 7) Standard setting procedures
- a) Step-by-step description of the intended procedures for setting cut scores intended to separate the four (4) performance categories
  - b) Description of results from the various cycles of standard setting procedures, and a description of the stabilization of cut scores across cycles to the point of finalizing cut scores at each grade level for each content area
  - c) Documentation of departures from intended procedures, problems in standard setting, and methods of resolution.
  - d) Documentation of procedures used to place cut scores on the appropriate grade's metric
- 8) Prior-Year and Within-Grade Equating Analyses
- a) Step-by-step description of procedures used to horizontally equate scores on the complete scale from later years of the Contract's span to metric of the complete scale from the first year of the Contract
  - b) Estimates of equating error and quality of linkages by test form and item.
  - c) Step-by-step description of procedures used to equate cut scores on the complete scale from later years of the Contract's span to the metric of the complete scale from the first year of this Contract
  - d) Item and test statistics on the prior-year metric, with overlapping grade-specific test information/standard error curves, and ability distributions
- 9) DIF Analyses
- a) Step-by-step description of procedures used in DIF analyses
  - b) Description of the rationale for setting a cut-point for identifying possibly biased items
  - c) Differential Item Functioning analyses for focal groups versus reference groups, with DIF statistics for each item and rationale for identifying/not identifying items as biased when DIF flags are raised
- 10) Data Manipulation and Storage
- a) Description of the procedures for assuring accurate attribution of derived test, item, and student data
  - b) Description of the database used to store MEAP data (including images), including capacities for relational access to data by the MME Administration Contractor and OEAA staff for downloading and updating purposes
  - c) Description of the quality control mechanisms used to ensure data integrity throughout the data entry and data update processes
- 11) Reporting
- a) Description of the procedures used to prepare reporting services via the web, including security measures to transmit and protect confidential data
  - b) Description of procedures used to disseminate individual hardcopy/electronic results to various stakeholders who are to receive results.

Materials Appendix: Exemplar copies of all forms of assessment materials, manuals, handbooks, answer documents, header sheets (if required), barcode labels, scannable answer documents, each type of report, and any other assessment materials produced during the assessment cycle.

#### **1.104.R Psychometric and Statistical Analyses**

The Contractor for College-Entrance and Work-Skills Tests will serve as the lead Contractor for all technical analyses. Details of all statistical analyses must be included in the Technical Report (Section 1.104.Q).



The psychometric model currently used for the MME assessments is the Generalized Partial Credit Model as implemented in Parscale. The equating design is a fully-pre-equated design in which all operational items have stable item statistics from large-scale field tests as items embedded in field-test positions on operational assessments. The scoring shall take place using software capable of taking fixed item parameters and estimating student achievement based on their item score patterns. The software used must be at least as accurate as Parscale and must provide estimates for all score patterns. Field-test calibrations are conducted by holding constant all operational item parameters at the pre-equated values, and allowing the field test item parameters to float in the calibration.

Details of all statistical analyses must be included in the Technical Report (Section 1.104.Q). The Contractor will provide the psychometric/statistical analyses for the three (3) following types of schools: Traditional Public Schools, Charter schools, and Non-Public Schools.

The analyses are to be performed and presented within the three (3) types of schools for gender, ethnicity, and accommodated/non-accommodated students. The Contractor may add to, clarify, modify or eliminate analyses with the approval of the CCI.

### **Non-Psychometric Analyses**

The Contractor will perform statistical analyses and/or tabulations of the proportions of students tested, proportions of students identified through each procedure (Pre-ID, XXXX), number of customer service cases, number of multiply-coded responses, number of aberrant response-patterns detected, number of accommodated students, number of deviations from normal assessment procedures, and number of changes to student data by demographic characteristics of schools (e.g. urban/suburban/small town/rural, economic disadvantage, proportion minority, school size, etc.). Additionally, analyses must use procedures for identifying specific outlying schools in these distributions.

Industry-standard measures of scanning and scoring reliability and validation for multiple-choice items will be employed. These measures are to include, but are not limited to, detection or erasures, multiple marks, omit, and stray marks.

### **Psychometric Analyses**

The Contractor will follow industry-standards when performing psychometric analyses. Analyses to be conducted can be classified by the theory underlying the methodology. Specifically, a set of analyses founded in Classical Test Theory (CTT) and a set of analyses founded in Item Response Theory (IRT) are to be performed by the MME Administration Contractor. OEAA will determine the appropriate thresholds for use in item review and define 'flags' for undesirable statistical/psychometric properties. The Contractor will refer to those guidelines when providing such information to OEAA.

Classical Test Theory analyses:

#### **Form level**

- Raw-score distributions with summary statistics including internal consistency reliability and the omnibus standard error of measurement
  - Summary statistics and score distributions by GLCE item clusters by content strands
- Analyses aimed at determining form comparability to include but not be limited to exploratory and confirmatory factor analytic methods

#### **Item Level**

- Adjusted p-values (the average score divided by the maximum possible score) for the overall population as well as by subgroup
  - Difficulty flag for extraordinarily difficult items for the overall population
  - Difficulty flag for extraordinarily easy items for the overall population
- Item standard deviation overall and by subgroup
- Frequencies by subgroup and overall
  - Option frequencies (numbers and percents) for MC items
  - Score frequencies (numbers and percents) for CR items
  - Omit frequencies (numbers and percents)
  - Comment and condition code frequencies (numbers and percents)
- Corrected item-total correlations, or the correlation between item scores and the corrected total score (the total score minus the score on the item to be analyzed)
  - Item-total correlation flag for possible miskey or poor item quality



- Corrected option/score point biserials, meaning:
  - For MC items, the correlation between selection of an individual response option (or omit) and the corrected total score
  - For CR items, the correlation between attaining a score of X (or omit) and the corrected total score
  - Option-total correlation flags for possible miskey or poor item quality

The IRT statistics to be calculated are the following:

- Indices of overall model fit as well as the following diagnostic statistics related to model fit:
  - Item fit estimates and flags for potentially poor items. OEAA will work with the Contractor to define appropriate rules for the flagging of items deemed not to fit the model
  - Person fit estimates for all examinees as well as an aggregate measure of the proportion of examinees not fitting the model for each calibration run
- a-parameter (discrimination) estimates
- b-parameter (difficulty) estimates
- c-parameter (guessability/pseudo-guessing) estimates
- step-parameter estimates (for CR items)
- standard errors of all parameter estimates
- flags for potentially poor items (flag criteria to be determined by OEAA)
  - Very low *b* estimates
  - Very high *b* estimates
  - Unexpected negative step parameter estimates
  - Very large step parameters estimates
  - Negative or very low *a* estimates
  - Very high *a* estimates
  - Very high *c* estimates

Scale-referenced statistics to be calculated are the following:

- Decile mean theta scale points (mean thetas of deciles of the population of test takers on the overall theta scale, calculated by ordering **all** examinees on resulting thetas, dividing the examinee population into 10 equal groups, and calculating the median theta for each of the 10 groups)
- Conditional item mean by decile and overall group
- Conditional item means by decile and subgroup (for creating empirical Item Characteristic Curves by subgroup based on mean thetas for each population-defined decile).

### **Differential Item Functioning (DIF) Analyses**

The identification of potentially biased items is a crucial assessment development activity. This function becomes increasingly important under the guise of a fully pre-equated administration model. Therefore, it is expected that the Contractor work with OEAA in identifying potentially troublesome items. OEAA expects the following to be produced by the Contractor:

- Step-by-step description of procedures used in DIF analyses with the final decision on which procedures to employ to be determined by OEAA.
- Description of the rationale for setting a cut-point for identifying possibly biased items. As previously mentioned, OEAA will work with Contractor on determining the criteria for flagging possibly biased items.
- DIF indices by subgroup and by accommodation will be produced with a full description of results including the following pieces of information: Focal group designation; Reference group designation; Favored group designation; Mantel-Haenszel (MH) Chi Square; MH Delta; ETS DIF category (A, B, C); Standardized Mean Difference (SMD); Effect size of SMD; Effect size of SMD category (AA, BB, CC); and Effect size of SMD category (AA, BB, CC).

**Equating Analyses**

As previously mentioned, OEAA seeks a fully pre-equated assessment. In order to ensure that the pre-equated parameters are appropriate, a pre-equating reasonability check will be conducted when a representative sample no less than 50% of the anticipated overall sample size (with the caveat that at least two (2) schools from Detroit Public Schools must be present in the sample) is available to the Scoring Contractor. This will include a full calibration of the 50% sample item-person response matrix. The purpose is to determine the value of the item parameters that would be obtained if a post-equating process were utilized for scoring.

At a minimum, the Contractor will provide scatterplot displays of item parameters from the current administration and the previous year's administration with a linear fit line superimposed to check for parameter comparability. In addition, a tabular presentation of the current parameter values (from the calibration run based on the 50% sample) and the value intended to be fixed in the pre-equating paradigm along with displacement values will be furnished to OEAA. Based on the results of this reasonability check, OEAA will determine the appropriate scoring strategy to apply to the student responses. Once a decision has been made on the equating strategy, the Contractor will produce the following information for review by OEAA:

- Step-by-step description of procedures used to horizontally equate. OEAA prefers item response theory based equating procedures, but will work with the Contractor to determine the most appropriate method; the final decision shall rest with OEAA.
- Estimates of equating error and quality of linkages by test form and item.

**Prior-Year Equating Analyses**

- Step-by-step description of procedures used to horizontally equate scores on the complete vertical scale from later years of this Contract's span to metric of the complete vertical scale from the first year of this Contract.
- Estimates of equating error and quality of linkages by test form and item.
- Step-by-step description of procedures used to equate cut scores on the complete vertical scale from later years of this Contract's span to the metric of the complete vertical scale from the first year of this Contract.
- Item and test statistics on the prior-year vertical metric, with overlapping grade-specific test information/standard error curves, and ability distributions.

**DIF Analyses**

- Step-by-step description of procedures used in DIF analyses
- Description of the rationale for setting a cut-point for identifying possibly biased items
- Differential Item Functioning analyses for focal groups versus reference groups, with DIF statistics for each item and rationale for identifying/not identifying items as biased when DIF flags are raised
- A measure of growth will be devised by OEAA using the vertically scaled scores. The MME Administration Contractor must be prepared to implement this measure of growth. The measure will include a hierarchical model capable of tracking student growth, a difference score model, or a model of similar complexity.

**1.104.S OEAA Access to MME contractor's Primary Project Manager(s)**

OEAA shall have direct access to the Contractor's and its Subcontractors' primary project manager(s) assigned to the various OEAA assessments. Direct access shall be available from 8:00 AM until 5:00 PM EST/EDT, Monday through Friday, throughout the duration of this Contract. Additional hours of direct access shall be available as appropriate to current tasks (e.g. printing may occur over the weekend and at nights, websites may go down outside office hours). Such access shall be by cell phone or home phone number. When the Contractor's (or its Subcontractors') primary project manager(s) are sporadically unavailable (e.g. vacation, illness, travel), OEAA shall have the same access to a designated proxy who is knowledgeable on current issues.

1.200 Roles and Responsibilities**1.201 Contractor Staff – Roles and Responsibilities**

Key personnel Contract roles:

- Contract project manager - Craig Walker
- Operations manager – Diane Weyer
- Production manager – Phil Levitt
- Distribution manager – Phil Levitt
- Scoring/reporting manager – Phil Levitt
- Lead psychometrician – Deb Harris
- Information Technology – Jeff Maynard
- Call center manager – Phil Levitt
- Committee meeting coordinator(s) – Craig Walker

**1.202 State Staff – Roles and Responsibilities**

MDE Contract Project Coordinator & Manager (OEAA Project Manager)

James Griffiths

Manager, Assessment Administration  
Michigan Department of Education

Financial Officer

Al Gat

Financial Manager, OEAA  
Michigan Department of Education

Information Systems Project Specialist

David Judd

Department Project Specialist, OEAA  
Michigan Department of Education

Information Technology Project Manager

Scott Thompson

Client Service Director for OEAA/CEPI  
Department of Information Technology

Contract Compliance Inspector

Joseph Martineau, Interim Director

Office of Educational Assessment & Accountability  
Department of Education

**1.203 Other Roles and Responsibilities**

Assessment items will be developed under a separate Contract. The Contract for item development will overlap with the timeframe of this Contract. The assessment item developer and other MDE staff will be responsible for creating, evaluating, designing and selecting all operational and pilot items for the assessments. They will also be responsible for designing the layout of the assessment materials and the try-out of new items requiring less than 100 students.

1.300 Project Plan**1.301 Project Plan Management**

This Contract covers three (3) academic years. The timeline for all three (3) academic years (2008-09, 2009-10, and 2010-11) is illustrated in Section 1.104.D. Any adjustments to major deliverable deadlines (i.e. students taking assessments or reporting results) can only be approved by the CCI. The Contractor will maintain the project plan and timeline on a continuous basis. Any changes to the timeline shall be communicated to the CCI and designated OEAA staff in writing explaining the reason for the change and the impact to the overall schedule.



### 1.302 Reports

The Contractor will provide reports to the CCI and all appropriate parties illustrating the plan and timeline for the respective assessment cycle at the beginning of each Kick-Off meeting. Then follow up with a revised plan and timeline with any changes noted within five (5) business days after the conclusion of the respective Kick-Off meeting. If anything should arise after that point, the Contractor shall refer to section 1.401.

## 1.400 Project Management

### 1.401 Issue Management

Issues are those things that endanger the project. It includes imminent threats and events that may have already occurred. Once an issue(s) has (have) been identified by the Contractor, the Contractor shall follow these steps:

- Immediately communicate the issue in writing to the CCI, OEAA Director, the respective OEAA manager and other appropriate state staff.
- The Contractor will log it into an issue tracking system.
- Identify what needs to be done and resources needed to correct the issue.
- Receive approval from the CCI for appropriate action.
- Keep CCI and appropriate State staff informed on status of issue based on frequency established by the CCI.
- At least monthly, provide a listing of all issues with their current status, deadlines to correct and actual dates of completion that have occurred over the previous six (6) months to the CCI.

### 1.402 Risk Management

The assessments within this Contract are large-scale and high-stakes, quality and deadlines are of the essence. Therefore, the risk assessment shall be reviewed, at minimum, during the Kick-Off meeting for each assessment cycle and shall include, but not limited to, the following:

- Reviewing the project plan and timelines to ensure resources are, or will be, available.
  - Identify deadlines for items and assessment material designs to allow sufficient time to produce.
  - Qualitative review and approval of assessment materials by OEAA staff designated by the CCI; at a minimum, at the beginning, middle and end of production.
  - Approval for actual quantities to produce shall be given in writing by the CCI, or designee.
  - Accurate tracking of the delivery, retrieval, logging, scanning, and storage of all assessment materials.
  - Preventative maintenance and accurate calibration of scanning equipment.
- Identify data management and backup procedures.

### 1.403 Change Management

If a proposed Contract change is approved by the CCI, the CCI will submit a request for change to the Department of Management and Budget, Purchasing Operations Buyer, who will make recommendations to the Director of Purchasing Operations regarding ultimate approval/disapproval of change request. If the DMB Purchasing Operations Director agrees with the proposed modification, and all required approvals are obtained (including State Administrative Board), the Purchasing Operations Buyer will issue an addendum to this Contract, via a Contract Change Notice. **Contractors who provide products or services prior to the issuance of a Contract Change Notice by the DMB Purchasing Operations, risk non-payment for the out-of-scope/pricing products and/or services.**

Any changes to timelines or project deliverables shall be proposed to the CCI for approval prior to the change taking effect.

### Alternations to the Statement of Work

If either of the parties wishes to alter the Specifications or the Statement of Work the following procedure will apply:

- a. The person who requests the change (the Originator) will forward to the OEAA Project Manager, a Change Control Request Form. Include a priority/classification on the request. This form must be completed as much as possible. It may be necessary at times if a lot of detail is required to include a Statement of Work (SOW).
- b. The OEAA Project Manager will assign a number to and log each Change Control Request.
- c. The OEAA Project Manager will consult with the DIT Project Manager, if the request is IT related.
- d. The OEAA Project Manager will send the Change Control Request (and SOW if included) to the Contractor.
- e. The Contractor will determine a cost and estimated time to complete and send this info back to the Project Manager.



- f. The OEAA Project Manager will negotiate the formal quote with the Contractor and determine if the change will be made.
- g. If the change is rejected or no confirmation is made, the change will not be implemented
- h. If the OEAA Project Manager agrees with the Contractor on the change, the Contractor will sign the Change Control Request.
- i. The OEAA Project Manager will send the signed Change Control Request (and SOW, if it was included), along with the Contractor quote to the CCI.
- j. The CCI will track all changes and determine the final approval process.
- k. Either the CCI or the Contract Administrator will send the Contractor, the DIT Project Manager, and the OEAA Project Manager, the approved Change Control Request (and SOW, if it was included).
- l. Upon approval of the Change Control Request, work can begin at the scheduled time.

#### 1.500 Acceptance

##### **1.501 Criteria**

The following criteria will be used by the State to determine Acceptance of the Services and/or Deliverables provided under this SOW.

- Materials produced match the design provided and approved in writing by the CCI.
- The quantity of materials produced equals what was approved in writing by the CCI.
- The quality of the materials meets the specifications of this Contract.
- The Content Advisory, Committee, Bias/Sensitivity Committee, Technical Advisory Committee and Standard Setting meetings conducted as specified within this Contract.
- All materials produced have been accurately tracked and current location is on record. Any materials considered lost, misplaced, or in a condition of not readable are not acceptable.
- All reports and data files meet the specification of this Contract.
- All designated reports and data files are delivered to the State with acceptance in writing from the CCI.
- All answer documents are stored in a secure and environmentally controlled location during the length of this Contract.
- All materials to be destroyed are done so in confidential manner.

##### **1.502 Final Acceptance**

Each assessment cycle is viewed as a project and is considered complete after:

- The CCI has approved the final reports.
- The final reports have been delivered to the appropriate location.
- All final data files related to the cycle have been transferred to the State and approved by the CCI.

#### 1.600 Compensation and Payment

##### **1.601 Compensation and Payment**

Notwithstanding any adjustments due to Article 2, compensation will be through an invoicing process for actual items and quantities approved in writing by the MDE CCI and actually provided/produced by the Contractor that meets the specification of this Contract and using the appropriate rates provided by the Contractor in this Contract. With each invoice, the Contractor shall provide a report that lists, at minimum, for each line item being billed, the quantities ordered, the quantities actually provided/produced, and the actual quantities used.

All rates shall be stand-alone. If any line in the pricing list is reduced or increased in part, or in its entirety, it shall not affect that or any other price/rate. The Contractor must have written approval of quantities and/or tasks from the MDE CCI (or designee) before beginning work on any line item.

With the exception of severe market changes outside the control of the Contractor, the Contractor will provide sufficient resources for the deliverables of this Contract and within the established timelines shall not be an acceptable reason for changing any price/rate.

1.700 Additional Terms and Conditions Specific to this SOW**1.701 Additional Terms and Conditions Specific to this Contract**

Items contained in this **Section 1.701** supersede all other sections where items appear to conflict or not mentioned:

- Translated versions of WorkKeys are not eligible for the National Career Readiness Certificate (NCRC).
- OEAA will have late processing for selected accommodations.
- The five (5) Auxiliary Test Centers will test on initial test dates only with the Contractor managing all three (3) days of testing.
- The Contractor for the Administration of Michigan-Developed Components will provide Tier 1 Call Center support with the Contractor for College-Entrance providing Tier 2 support for ACT and WorkKeys.
- The Call Center Tier 2 reports must include daily counts of: inbound calls, average wait time, length of time customer on call, and the number and percentage of dropped calls.
- During the Kick-Off Meeting, it will be determined who will provide what files to what Contractor during the scoring process.
- The Contractor for the Administration of Michigan-Developed Components is responsible for file matching and duplicate resolution.
- The Contractor will use standard ACT and WorkKeys file formats with Pre-ID data appended to the files as the vehicle for data transfer to the Contractor for the Administration of Michigan-Developed Components (it is noted the WorkKeys file will be modified to include "locating" information).
- Erasure Analysis: the Contractor will provide raw data and file denoting – incorrect to incorrect, incorrect to correct, correct to incorrect – to the Contractor for the Administration of Michigan-Developed Components.
- Any erasure analysis aggregate level reporting will be done by the Contractor for the Administration of Michigan-Developed Components.
- WorkKeys "Locating Information" will be included as part of the MME.
- Off the shelf ACT and WorkKeys tests, AFs, headers and supervisor manuals will be standard off the shelf products (with the Supervisor manual listing the tests in the same testing sequence).
- All shipping for Day one (1) and Day two (2) will be to schools.
- The Contractor will follow standard shipping practices for assessments – secure materials will not arrive in schools earlier than two (2) weeks in advance of testing.
- With the exception of "pilot", there are no browser requirements as there are no web facing systems.
- During the first year, all data transfers will be "flat files" posted to FTP sites; however, the Contractor and OEAA will look at options for years two (2) and three (3). The Contractor will set up the FTP site for MME (for file transfers, etc.) and OEAA will have direct access, therefore, no third party intervention will be needed to share data.
- The scope of Customer Acceptance Testing will be limited to MME scoring routine and data files that will include Michigan specific data.
- The Contractor for Administration of Michigan-Developed Components or OEAA will be responsible for all facility arrangements and production costs at the Wayne RESA Workshops. The Contractor will establish, and contract with, all training facilities for Test Supervisor Training and Auxiliary sties.
- ACT / WorkKeys Standard Report and data source – student gridded with the exception of limited data (if blank will take from Pre-ID file).
- MME Military Testing is the administration of all components of the MME assessments to students that are Michigan residents, but are living outside of the state due to their parent/guardian, being in one (1) of the United States military services (U.S. Army, U.S. Navy, U.S. Air Force, U.S. Marines, U.S. Coast Guard, U.S. National Guard, as well as any of the respective military reserves and divisions) being stationed outside of the state. The Contractor will provide secure MME Military Testing to qualifying students upon their request and the Contractor's documented validation.



## Article 2 – General Terms and Conditions

### 2.010 Contract Structure and Administration

#### **2.011 Definitions**

Capitalized terms used in this Contract (including its Exhibits) shall have the meanings given below, unless the context requires otherwise:

- (a) "Days" means calendar days unless otherwise specified.
- (b) "24x7x365" means 24 hours a day, seven (7) days a week, and 365 days a year (including the 366th day in a leap year).
- (c) "Additional Service" means any Services/Deliverables within the scope of this Contract, but not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration. "Additional Service" does not include New Work.
- (d) Deleted N/A.
- (e) "Audit Period" see **Section 2.111**.
- (f) "Business Day," whether capitalized or not, shall mean any day other than a Saturday, Sunday, or State-recognized legal holiday (as identified in the Collective Bargaining Agreement for State employees) from 8:00am EST through 5:00pm EST unless otherwise stated.
- (g) "Incident" means any interruption in Services.
- (h) "Business Critical" means any function identified in any Statement of Work as Business Critical.
- (i) "Deliverable" means physical goods and/or commodities as required or identified by a Statement of Work
- (j) "Key Personnel" means any Personnel designated in **Section 1.201**.
- (k) "New Work" means any Services/Deliverables outside the scope of this Contract and not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration. "New Work" does not include Additional Service.
- (l) "Services" means any function performed for the benefit of the State, as set forth in this Contract.
- (m) "State Location" means any physical location where the State performs work. State Location may include state-owned, leased, or rented space.
- (n) "Subcontractor" means a company Contractor delegates performance of a substantial portion of the Services to, but does not include independent contractors engaged by Contractor solely in a staff augmentation role, such staff augmentation role includes, but is not limited to, item writers, essay scorers, printers, shippers, common carriers, suppliers, individuals or entities providing similar or related services (such as NCS Pearson, Inc) or other de minimus roles.
- (o) "Work in Process" means a Deliverable that has been partially prepared, but has not been presented to the State for Approval.
- (p) "Article 1 Contractor" means the Administration Contractor for Michigan-Developed Test.

#### **2.012 Attachments and Exhibits**

All Attachments and/or Exhibits attached to any and all Statement(s) of Work, attached to, or referencing this Contract, are incorporated in their entirety into, and form part of, this Contract.

#### **2.013 Statements of Work**

- (a) The parties agree that the Services/Deliverables to be rendered by Contractor pursuant to this Contract (and any future amendments of it) will be defined and described in detail in Statements of Work or Purchase Orders (PO) executed under this Contract. Contractor shall not be obliged or authorized to commence any work to implement a Statement of Work until authorized via a PO issued against this Contract, or an amendment to this Contract (**see Section 2.106**). Contractor shall perform in accordance with this Contract, including the Statements of Work/Purchase Orders executed under it.
- (b) Unless otherwise agreed by the parties, each Statement of Work (as defined in Article 1) will include, or incorporate by reference to the appropriate Article 1 Attachment containing, the following information:
  - a description of the Services to be performed by Contractor under the Statement of Work;
  - a project schedule (including the commencement and completion dates for all tasks, subtasks (for all projects of sufficient duration and complexity to warrant sub task breakdown), and Deliverables;
  - a list of the Deliverables to be provided, if any, including any particular specifications and acceptance criteria for such Deliverables, and the dates on which the Deliverables are scheduled to be completed and delivered to the State;



- all Deliverable price schedules and other charges associated with the Statement of Work, the overall fixed price for such Statement of Work and any other appropriate pricing and payment terms;
- a specification of Contractor's and the State's respective performance responsibilities with respect to the performance or completion of all tasks, subtasks and Deliverables;
- a listing of any Key Personnel of Contractor and/or its Subcontractors for that Statement of Work and any future Statements of Work;
- any other information or provisions the parties agree to include.

(c) Deleted N/A.

(d) The initial Statements of Work, as of the Effective Date, are attached to this Contract.

#### **2.014 Issuing Office**

This Contract is issued by the Department of Management and Budget, Purchasing Operations ("Purchasing Operations") and Department of Education (MDE) (collectively, including all other relevant State of Michigan departments and agencies, the "State"). Purchasing Operations is the sole point of contact in the State with regard to all procurement and contractual matters relating to this Contract. **Purchasing Operations is the only State office authorized to change, modify, amend, alter or clarify the prices, specifications, terms and conditions of this Contract.** The Contractor Administrator within Purchasing Operations for this Contract is:

Lance Kingsbury  
Purchasing Operations  
Department of Management and Budget  
Mason Bldg, 2nd Floor  
PO Box 30026  
Lansing, MI 48909  
[kingsburyl@michigan.gov](mailto:kingsburyl@michigan.gov)  
517.241.3768

#### **2.015 Contract Compliance Inspector (CCI)**

Upon receipt at Purchasing Operations of the properly executed Contract, it is anticipated that the Director of DMB Purchasing Operations, in consultation with MDE, will direct that the person named below, or any other person so designated, be authorized to monitor and coordinate the activities for this Contract on a day-to-day basis during its term. However, monitoring of this Contract implies **no authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions and specifications of such Contract as that authority is retained by Purchasing Operations.** The CCI for this Contract is:

Joseph Martineau  
Office of Educational Assessment & Accountability  
Department of Education  
PO Box 30008  
Lansing, MI 48909  
[martineauj@michigan.gov](mailto:martineauj@michigan.gov)  
517.241.4710

#### **2.016 Project Manager**

The following individual will oversee the project:

James Griffiths  
Office of Educational Assessment & Accountability  
Department of Education  
P.O. Box 30008  
Lansing, MI 48909

#### **2.020 Contract Objectives/Scope/Background**

#### **2.021 Background – Deleted N/A**

#### **2.022 Purpose – Deleted N/A**

**2.023 Objectives and Scope – Deleted N/A****2.024 Interpretation – Deleted N/A****2.025 Form, Function, and Utility – Deleted N/A**2.030 Legal Effect and Term**2.031 Legal Effect**

Except as otherwise agreed in writing by the parties, the State assumes no liability for costs incurred by Contractor or payment under this Contract, until Contractor is notified in writing that this Contract (or Change Order) has been approved by the State Administrative Board (if required), approved and signed by all the parties, and a Purchase Order against this Contract has been issued.

**2.032 Contract Term**

This Contract is for a period of 38 months beginning approximately August 11, 2008 through September 30, 2011. All outstanding Purchase Orders shall also expire upon the termination (cancellation for any of the reasons listed in 2.210) of this Contract, unless otherwise extended pursuant to this Contract. Absent an early termination for any reason, Purchase Orders issued but not expired, by the end of this Contract's stated term, will remain in effect for the balance of the fiscal year for which they were issued.

**2.033 Renewal(s)**

This Contract may be renewed in writing by mutual agreement of the parties not less than 30 days before its expiration. This Contract may be renewed for up to two (2) additional one (1) year periods. Successful completion of negotiations surrounding the terms of the extension, will be a pre-requisite for the exercise of any option year.

2.040 Contractor Personnel**2.041 Contractor Personnel****(a) Personnel Qualifications.**

Except as set forth in **Section 2.011(n)**, all persons assigned by Contractor to the performance of Services under the Contract shall be employees of Contractor or its majority-owned (directly or indirectly, at any tier) subsidiaries (or a State-approved Subcontractor) and shall be fully qualified to perform the work assigned to them. Contractor shall include a similar provision in any subcontract entered into with a Subcontractor. State understands that the relationship between Contractor and Subcontractor is an independent contractor relationship.

**(b) Key Personnel**

- (i) In discharging its obligations under the Contract, Contractor shall provide the named Key Personnel, as listed in the Statement of Work on the terms indicated in this Contract.
- (ii) Key Personnel shall be dedicated to the Project for its duration in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work.
- (iii) The State will have the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, will introduce the individual to the appropriate State representatives, and will provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection. Additionally, the State's request shall be based on legitimate, good-faith reasons. Proposed alternative for the individual denied, shall be fully qualified for the position.
- (iv) Contractor shall not remove any Key Personnel from their assigned roles or this Contract without the prior written consent of the State. If the Contractor does remove Key Personnel without the prior written consent of the State, it shall be considered an unauthorized removal ("Unauthorized Removal"). It shall not be considered an Unauthorized Removal if Key Personnel must be replaced for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation, or for cause termination of the Key Personnel's employment.



It shall not be considered an Unauthorized Removal if Key Personnel must be replaced because of promotions or other job movements allowed by Contractor personnel policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides 30 days of shadowing unless parties agree to a different time period. The Contractor with the State shall review any Key Personnel replacements, and appropriate transition planning will be established. Any Unauthorized Removal may be considered by the State to be a material breach of this Contract, in respect of which the State may elect to exercise its rights under **Section 2.210**.

(c) **Re-assignment of non-Key Personnel.**

Prior to re-deploying to other projects, at the completion of their assigned tasks on the Project, teams of its non-Key Personnel who are performing Services on-site at State facilities or who are otherwise dedicated primarily to the Project, Contractor will give the State at least 10 Business Days notice of the proposed re-deployment to give the State an opportunity to object to the re-deployment if the State reasonably believes such team's Contract responsibilities are not likely to be completed and approved by the State prior to the proposed date of re-deployment.

(d) **Re-assignment of Personnel at the State's Request.**

The State reserves the right to require the removal from the Project if Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good-faith reasons. Replacement personnel for the removed person shall be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with removed personnel results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable Service Level Agreements (SLAs) for the affected Service will be for a time as agreed to by the parties.

(e) **Staffing Levels.**

- (i) All staff requirements not specified in the applicable Statement of Work or State-approved project plan as State personnel will be supplied by Contractor.
- (ii) Contractor shall provide sufficient personnel resources for the completion of Contract tasks indicated in Contractor's project plan approved by the State. If the level of personnel resources is insufficient to complete any Contractor Contract tasks in accordance with this Contract time schedule as demonstrated by Contractor's failure to meet mutually agreed to time schedules, Contractor shall promptly add additional qualified personnel resources to the performance of the affected tasks, at no additional charge to the State, in an amount sufficient to complete performance of Contractor's tasks in accordance with this Contract's time schedule.

(f) **Personnel Turnover.**

The Parties agree that it is in their best interests to keep the turnover rate of employees of Contractor and its Subcontractors who are performing the Services to a reasonable minimum.

**2.042 Contractor Identification**

Contractor employees shall be clearly identifiable while on State property by wearing a State-issued badge, as required. Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with State personnel by telephone or other means.

**2.043 Cooperation with Third Parties**

Contractor agrees to cause its personnel and the personnel of any its Subcontractors or its independent contractors to cooperate with the State and its agents and other contractors including the State's Quality Assurance personnel, and, as reasonably requested by the State, to provide to the State's agents and other contractors with reasonable access to Contractor's Project personnel, systems and facilities to the extent they relate to activities specifically associated with this Contract and will not interfere or jeopardize the safety or operation of the systems or facilities and provided Contractor receives reasonable prior written notice of such request and all State agents and other contractors execute Contractor's standard Nondisclosure and Confidentiality Agreement, except as required by the Freedom of Information Act (Act 442 of 1976). The State acknowledges that Contractor's time schedule for this Contract is very specific and agrees not to unnecessarily or unreasonably interfere with, delay, or otherwise impeded Contractor's performance under this Contract with such requests for access.

**2.044 Subcontracting by Contractor**

- (a) Contractor shall have full responsibility for the performance and completion of all of the Services and Deliverables. The State will consider Contractor to be the sole point of contact with regard to all contractual matters under this Contract, including payment of any and all charges for Services and Deliverables.



- (b) Except as set forth in **Section 2.011(n)**, Contractor may not subcontract any obligations under this Contract without the prior written content of the Department of Management and Budget, Purchasing Operations. Notwithstanding anything to the contrary in the preceding sentence, Contractor shall not require the prior consent to subcontract any portion of the work covered under this Contract to : a) any subcontractor specifically mentioned in Contractor's Proposals b) any individual required to fill temporary staffing requirements; c) any subcontractor whose performance constitutes a de minimus contribution to the Party's overall performance of its contractual obligations; d) item writers, essay scorers, printers, shippers, suppliers or individuals or entities providing similar or related services (such as NCS Pearson, Inc.) or e) information technology consultants and software developers, quality assurance personnel, psychometricians and technical writers, or other parties providing non-State specific services.
- (c) In any subcontracts entered into by Contractor for the performance of the Services, Contractor shall require the Subcontractor, to the extent of the Services to be performed by the Subcontractor, to be bound to Contractor by the terms of this Contract and to assume toward Contractor all of the obligations and responsibilities that Contractor, by this Contract, assumes toward the State. The State reserves the right to receive copies of and review all subcontracts, although Contractor may delete or mask any proprietary information, including pricing, contained in such contracts before providing them to the State. The management of any of its Subcontractors or independent contractors will be the responsibility of Contractor, and Contractor shall remain responsible for the performance of its Subcontractors or independent contractors to the same extent as if Contractor had not subcontracted such performance. Contractor shall make all payments to its Subcontractors or independent contractors or suppliers of Contractor. Except as otherwise agreed in writing by the State and Contractor, the State will not be obligated to direct payments for the Services other than to Contractor. The State's written approval of any Subcontractor engaged by Contractor to perform any obligation under the Contract shall not relieve Contractor of any obligations or performance required under this Contract.
- (d) Except where specifically approved in writing by the State on a case-by-case basis, Contractor shall flow down the obligations in **Sections 2.040, 2.110, 2.150, 2.160, 2.171(c), 2.172(b), 2.180, 2.260, 2.276, 2.297** in all of its agreements with any Subcontractors.
- (e) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of this Contract.

#### **2.045 Contractor Responsibility for Personnel**

Contractor shall be responsible for all acts and omissions of its employees, as well as the acts and omissions of any other personnel furnished by Contractor to perform the Services.

#### 2.050 State Standards

#### **2.051 Existing Technology Standards**

The Contractor will adhere to all existing standards as described within the comprehensive listing of the State's existing technology standards at <http://www.michigan.gov/dit>.

#### **2.052 PM Methodology Standards**

The State has adopted a standard documented Project Management Methodology (PMM) for use on all Information Technology (IT) based projects. See the State's PMM website at <http://www.michigan.gov/projectmanagement>.

The Contractor shall use the State's PPM to manage this Contract. If the Contractor requires training on the PMM, those costs shall be the responsibility of the Contractor, unless otherwise stated.

#### **2.053 Adherence to Portal Technology Tools**

The State has adopted the following tools for its Portal Technology development efforts:

- Vignette Content Management and personalization Tool
- Inktomi Search Engine
- E-Pay Payment Processing Module
- Websphere Commerce Suite for e-Store applications

Unless otherwise stated, Contractor must use the Portal Technology Tools to implement web content management and deployment efforts. Tools used for web-based application development must work in conjunction with Vignette and Inktomi. The interaction with Vignette and Inktomi must be coordinated with DIT, Enterprise Application Services Office, e-Michigan Web Development team.



Contractors that are compelled to use alternate tools must have received an exception from DIT, Enterprise Application Services Office, e-Michigan Web Development team, before this Contract is effective.

#### **2.054 Acceptable Use Policy**

To the extent that Contractor has access to the State computer system, Contractor must comply with the State's Acceptable Use Policy, see <http://www.michigan.gov/dit>. All Contractor employees must be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State system. The State reserves the right to terminate Contractor's access to the State system if a violation occurs.

### 2.060 Deliverables

#### **2.061 Ordering**

Any Services/Deliverables to be furnished under this Contract shall be ordered by issuance of written Purchase Orders/Blanket Purchase Order by the State after approval by the Contract Administrator or his/her designee. All orders are subject to the terms and conditions of this Contract. In the event of conflict between an order and this Contract, this Contract shall take precedence as stated in **Section 2.293**. In no event shall any additional terms and conditions contained on a Purchase Order/Blanket Purchase Order be applicable, unless specifically contained in that Purchase Order/Blanket Purchase Order's accompanying Statement of Work.

#### **2.062 Software – Deleted N/A**

#### **2.063 Hardware – Deleted N/A**

#### **2.064 Equipment to be New and Prohibited Products – Deleted N/A**

### 2.070 Performance

#### **2.071 Performance, In General**

The State engages Contractor to execute this Contract and perform the Services/provide the Deliverables, and Contractor undertakes to execute and complete this Contract in its entirety in accordance with the terms and conditions of this Contract and with the participation of State representatives as specified in this Contract.

#### **2.072 Time of Performance**

- (a) Contractor shall use commercially reasonable efforts to provide the resources necessary to complete all Services and Deliverables in accordance with the time schedules contained in the Statements of Work and other Exhibits governing the work, and with professional quality.
- (b) Without limiting the generality of **Section 2.072(a)**, Contractor shall notify the State in a timely manner upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely and successful completion of any Deliverables/Services on the scheduled due dates in the latest State-approved delivery schedule and, in such event, shall inform the State of the projected actual delivery date.
- (c) If Contractor believes that a delay in performance by the State has caused or will cause Contractor to be unable to perform its obligations in accordance with specified Contract time periods, Contractor shall notify the State in a timely manner and shall use commercially reasonable efforts to perform its obligations. Contractor will not be in default for a delay in performance or liable for any damages, costs or expenses (liquidated or other) to the extent such delay is caused by the State, its contractors or agents, or other third parties not within Contractor's control.

#### **2.073 Liquidated Damages**

The State and the Contractor hereby agree to the specific standards set forth in this Contract. It is agreed between the Contractor and the State that the actual damages to the State as a result of Contractor's failure to provide certain promised services expressly described below as a "Liquidated Damages Event" would be difficult or impossible to determine with accuracy. The State and the Contractor therefore agree that liquidated damages as set out herein ("The Liquidated Damages") shall be a reasonable approximation of the damages that shall be suffered by the State as a result thereof. Accordingly, in the event of such damages, at the written direction of the State, the Contractor shall pay the State the indicated amount as Liquidated Damages, and not as a penalty.



Amounts due the State as Liquidated Damages, if not paid by the Contractor within 15 days of notification of assessment, may be deducted by the State from any money payable to the Contractor pursuant to this Contract. The State will notify the Contractor in writing of any claim for Liquidated Damages pursuant to this paragraph on or before the date the State deducts such sums from money payable to the Contractor.

Notwithstanding anything in this Contract to the contrary, Contractor shall not be liable for damages arising out of a Liquidated Damages Event unless the State notifies the Contractor in writing of its intention to assess the Liquidated Damages no later than 18 months after the corresponding test administration in each year of this Contract, or 18 months after the final test administration under this Contract.

The Contractor shall not be liable for Liquidated Damages when, in the opinion of the State, incidents or delays result directly from causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God, fires, floods, epidemics, and labor unrest; but in every case the delays must be beyond the control and without the fault or negligence of the Contractor. Contractor is not responsible for Liquidated Damages if the incidents or delays are caused by the State, its contractors or agents, or other third parties not within Contractor's control, including, but not limited to school districts and the Article 1 Contractor.

Liquidated Damages Events are as follows:

- (1) Materials Distributed to School Districts on Time:  
Consistent with standard Contractor practice, all Necessary Assessment Materials for the ACT and WorkKeys, which are test booklets, answer folders, and supervisor manuals (the "Necessary Assessment Materials"), will arrive in schools typically one week prior to testing for local school review, but no later than one day prior to the scheduled test date. This delivery requirement does not include late accommodation requests from schools, as described in the Scope of Work, or supplemental materials. **Failure to meet this requirement:** \$10,000 per business day for any or all Necessary Assessment Materials missing from any or all Michigan school districts.
- (2) All Answer Documents Returned for Scoring:  
All materials must be returned by schools in accordance with the Contractor's return procedures which are provided to the schools during Contractor training and outlined in the supervisor manuals. It is a requirement of this Contract that no completed answer folders are lost or destroyed by Contractor once they are received by Contractor from each local school. **Failure to meet this requirement:** \$75 per completed answer document lost by Contractor.
- (3) Final MME Assessment Scores are Accurate:  
It is essential to the credibility of the OEAA assessments that the scores produced are accurate. Contractor shall compute final MME scores which are materially accurate according to the specifications provided by OEAA. This liquidated damage applies to any or all scores within any one (1) school district. **Failure to meet this requirement:** \$2,500 per district in which a final MME score is materially inaccurate when transmitted to the Article 1 Contractor. This is the total assessable for any and all scoring errors in final MME scores in a district for all of the assessments at any grade or subject area.
- (4) Scanning, scoring, and data transmission systems verified with a test deck:  
Failure to verify the scanning, scoring, and data transmission systems with a test deck to the Article 1 Contractor by a date in February of each year of this Contract, the date is to be mutually agreed to by the parties within two (2) weeks following the annual kick-off meeting, will result in liquidated damages of \$10,000/day, including weekends and holidays, until the systems are approved by the CCI for OEAA or his or her designee as meeting the specifications set forth in this Contract.
- (5) Assessment Results Returned on Time:  
It is essential to the credibility of the OEAA assessments that the scores be returned on time. This date presumes that the State and Article 1 Contractor have met their portions of the schedule. If not, the schedule will be adjusted accordingly by mutual agreement of the parties, and the revised schedule will be used for determination of whether the Contractor has met this portion of the requirements of this Contract.



Within two (2) weeks following the annual kick-off meeting for each year of this Contract, the parties shall mutually agree to a date on which Contractor will deliver to the Article 1 Contractor a scored match file(s).

**Failure to meet this delivery requirement:** \$40,000 per week day (including weekends). Notwithstanding anything in this Contract to the contrary, if a record(s) is placed on hold for a reason, unrelated to the Contractor, the Contractor will not be liable for Liquidated Damages under this subsection related to records on hold.

Notwithstanding anything in this Contract to the contrary, the total sum of the Liquidated Damages under this Contract shall not exceed \$1,600,000.

#### **2.074 Bankruptcy**

If Contractor shall file for protection under the bankruptcy laws, or if an involuntary petition shall be filed against Contractor and not removed within 30 days, or if the Contractor becomes insolvent, be adjudicated bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver shall be appointed due to its insolvency, and Contractor and/or its affiliates are unable to provide reasonable assurances that Contractor and/or its affiliates can deliver the services provided herein, the State may, without prejudice to any other right or remedy, terminate this Contract, in whole or in part, and, provided Contractor has been paid for all work approved prior to termination at the State's option, may take possession of the "Work in Process" and finish such Works in Process by whatever appropriate method the State may deem expedient. To secure the State's progress payments before the delivery of any services or materials required for the execution of Contractor's obligations hereunder, and any work which Contractor may subcontract in the support of the performance of its obligations hereunder, title shall vest in the State to the extent the State has made progress payments hereunder.

#### **2.075 Time is of the Essence – Deleted N/A**

#### **2.076 Service Level Agreements (SLAs) – Deleted N/A**

2.080 Delivery and Acceptance of Deliverables – Deleted N/A

2.090 Financial

#### **2.091 Pricing**

##### **(a) Fixed Prices for Services/Deliverables**

Each Statement of Work/PO issued under this Contract shall specify (or indicate by reference to the appropriate Contract Exhibit) the firm, fixed prices for all Services/Deliverables, and the associated payment milestones and payment amounts. To the extent the parties agree that certain specific Services will be provided on a time and materials basis. The State may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by this Contract Administrator, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

##### **(b) Adjustments for Reductions in Scope of Services/Deliverables**

If the scope of the Services/Deliverables under any Statement of Work issued under this Contract is subsequently reduced by the State, the parties shall negotiate an equitable reduction in Contractor's charges under such Statement of Work commensurate with the reduction in scope.

##### **(c) Services/Deliverables Covered**

For all Services/Deliverables to be provided by Contractor (and its Subcontractors, if any) under this Contract, the State shall not be obligated to pay any amounts in addition to the charges specified in this Contract.

##### **(d) Labor Rates – Deleted N/A**

#### **2.092 Invoicing and Payment Procedures and Terms**

##### **(a) Invoicing and Payment – In General**

- (i)** Each Statement of Work issued under this Contract shall list (or indicate by reference to the appropriate Contract Exhibit) the prices for all Services/Deliverables, equipment and commodities to be provided, and the associated payment milestones and payment amounts.
- (ii)** Each Contractor invoice will show details as to charges by Service/Deliverable component and location at a level of detail reasonably necessary to satisfy the State's accounting and charge-back requirements. Prompt payment by the State is contingent on the Contractor's invoices showing the amount owed by the State minus any holdback amount to be retained by the State in accordance with **Section 2.094**.



- (iii) Correct invoices will be due and payable by the State, in accordance with the State's standard payment procedure as specified in 1984 Public Act No. 279, MCL 17.51 et seq., within 45 days after receipt, provided the State determines that the invoice was properly rendered.

(b) Taxes

The State is exempt from Federal Excise Tax, State and Local Sales Taxes, and Use Tax with respect to the sale to and use by it of tangible personal property. Such taxes shall not be included in these Contract prices as long as the State maintains such exemptions. Copies of all tax exemption certificates shall be supplied to Contractor, if requested.

(c) Out-of-Pocket Expenses

Contractor acknowledges that the out-of-pocket expenses that Contractor expects to incur in performing the Services/ providing the Deliverables (such as, but not limited to, travel and lodging, document reproduction and shipping, and long distance telephone) are included in Contractor's fixed price for each Statement of Work. Accordingly, Contractor's out-of-pocket expenses are not separately reimbursable by the State unless, on a case-by-case basis for unusual expenses, the State has agreed in advance and in writing to reimburse Contractor for such an expense at the State's current travel reimbursement rates. See [www.michigan.gov/dmb](http://www.michigan.gov/dmb) for current rates.

(d) Pro-ration

To the extent there are any Services that are to be paid for on a monthly basis, the cost of such Services shall be pro-rated for any partial month.

(e) Antitrust Assignment

The Contractor assigns to the State any claim for overcharges resulting from antitrust violations to the extent that those violations concern materials or services supplied by third parties to the Contractor, toward fulfillment of this Contract.

(f) Final Payment

The making of final payment by the State to Contractor does not constitute a waiver by either party of any rights or other claims as to the other party's continuing obligations under this Contract, nor will it constitute a waiver of any claims by one party against the other arising from unsettled claims or failure by a party to comply with this Contract, including claims for Services and Deliverables not reasonably known until after acceptance to be defective or substandard. Contractor's acceptance of final payment by the State under this Contract shall constitute a waiver of all claims by Contractor against the State for payment under the Contract, other than those claims previously filed in writing on a timely basis and still unsettled.

### 2.093 State Funding Obligation

The State's obligation under this Contract is payable only and solely from funds appropriated for the purpose of this Contract. Contractor acknowledges and agrees that all funds for payments after the end of the current fiscal year are subject to the availability of a legislative appropriation for the purpose of this Contract. Events of non-appropriation are addressed further in **Section 2.210** of this Contract.

### 2.094 Holdback – Deleted N/A

### 2.095 Electronic Payment Availability

Public Act 533 of 2004 requires that payments under this Contract be processed by electronic funds transfer (EFT). Contractor is required to register to receive payments by EFT at the Contract & Payment Express website ([www.cpexpress.state.mi.us](http://www.cpexpress.state.mi.us)). Failure to register for EFT may result in disqualification of the Bidder.

## 2.100 Contract Management

### 2.101 Contract Management Responsibility

- (a) Contractor shall have overall responsibility for managing and successfully performing and completing the Services/Deliverables, subject to the overall direction and supervision of the State and with the participation and support of the State as specified in this Contract. Contractor's duties will include monitoring and reporting the State's performance of its participation and support responsibilities (as well as Contractor's own responsibilities) and providing timely notice to the State in Contractor's reasonable opinion if the State's failure to perform its responsibilities in accordance with Article 1, (Project Plan) is likely to delay the timely achievement of any Contract tasks.
- (b) The Services/Deliverables will be provided by the Contractor either directly or through its affiliates, subsidiaries, Subcontractors, resellers, or others as referenced in **Section 2.011(n)**. Regardless of the entity providing the Service/Deliverable, the Contractor will act as a single point of contact coordinating these entities to meet the State's need for Services/Deliverables. Nothing in this Contract, however, shall be construed to authorize or require any party to violate any applicable law or regulation in its performance of this Contract.

**2.102 Problem and Contract Management Procedures**

Problem Management and Contract Management procedures will be governed by this Contract and the applicable Statements of Work.

**2.103 Reports and Meetings – Deleted N/A****2.104 System Changes**

Contractor is not responsible for and not authorized to make changes to any State systems without written authorization from the State. Any changes Contractor makes to State systems with the State's approval shall be done in accordance with applicable State procedures, including security, access and configuration management procedures.

**2.105 Deleted N/A****2.106 Change Requests**

The State reserves the right to request from time to time, any changes to the requirements and specifications of this Contract and the work to be performed by the Contractor under this Contract. During the course of ordinary business, it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables. At a minimum, to the extent applicable, the State would like the Contractor to provide a detailed outline of all work to be done, including tasks necessary to accomplish the services/deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

If the State requests or directs the Contractor to perform any Services/Deliverables that are outside the scope of the Contractor's responsibilities under this Contract ("New Work"), the Contractor must notify the State promptly, and before commencing performance of the requested activities, that it believes the requested activities are New Work. If the Contractor fails to notify the State before commencing performance of the requested activities, any such activities performed before notice is given by the Contractor shall be conclusively considered to be in-scope Services/Deliverables, not New Work.

If the State requests or directs the Contractor to perform any services or provide deliverables that are consistent with and similar to the Services/Deliverables being provided by the Contractor under this Contract, but which the Contractor reasonably and in good faith believes are not included within the Statements of Work, then before performing such services or providing such deliverables, the Contractor shall notify the State in writing that it considers the services or deliverables to be an Additional Service/Deliverable for which the Contractor should receive additional compensation. If the Contractor does not so notify the State, the Contractor shall have no right to claim thereafter that it is entitled to additional compensation for performing that service or providing that deliverable. If the Contractor does so notify the State, then such a service or deliverable shall be governed by the Change Request procedure in this Section.

In the event prices or service levels are not acceptable to the State, the Additional Services or New Work shall be subject to competitive bidding based upon the specifications.

**Process for Change Requests:**

- (i) **State Requests**  
If the State should require Contractor to perform New Work, Additional Services or make changes to the Services that would affect this Contract's completion schedule or the amount of compensation due Contractor (a "Change"), the State shall submit a written request for Contractor to furnish a proposal for carrying out the requested Change (a "Change Request").
- (ii) **Contractor Recommendations**  
Contractor shall be entitled to propose a Change to the State, on its own initiative, should it be of the opinion that this would benefit this Contract.
- (iii) **Upon receipt of a Change Request or on its own initiative, Contractor shall examine the implications of the requested Change on the technical specifications, Contract schedule and price of the Deliverables and Services and shall submit to the State without undue delay a written proposal for carrying out the Change. Contractor's proposal will include any associated changes in the technical specifications, Contract schedule and price and method of pricing of the Services. If the Change is to be performed on a time and materials basis, the Amendment Labor Rates shall apply to the provision of such Services. If Contractor provides a written proposal and should Contractor be of the opinion that a requested Change is not to be recommended, it shall communicate its opinion to the State but shall nevertheless carry out the Change as specified in the written proposal if the State directs it to do so.**



- (iv) By giving Contractor written notice within a reasonable time, the State shall be entitled to accept a Contractor proposal for Change, to reject it or to reach another agreement with Contractor. Should the parties agree on carrying out a Change, a written Contract Change Notice shall be prepared and issued under this Contract, describing the Change and its effects on the Services and any affected components of this Contract (a "Contract Change Notice").
- (v) No proposed Change shall be performed until the proposed Change has been specified in a duly executed Contract Change Notice issued by the Department of Management and Budget, Purchasing Operations.
- (vi) If the State requests or directs Contractor to perform any activities that Contractor believes constitute a Change, Contractor must notify the State that it believes the requested activities are a Change prior to commencing the performance of the requested activities. If Contractor fails to so notify the State prior to commencing performance of the requested activities, such activities shall be considered to be performed gratuitously by Contractor, and Contractor shall not have any right thereafter to assert any claim for additional compensation or time for the performance of such activities. If Contractor commences performance of gratuitous services outside the scope of this Contract and subsequently elects to stop performing such out-of-scope services, Contractor must, at the request of the State, back out or reverse any changes resulting from such performance that would adversely affect this Contract.

## 2.107 Management Tools – Deleted N/A

### 2.110 Records and Inspections

#### **2.111 Records and Inspections**

- (a) Inspection of Work Performed. The State's authorized representatives shall, at all reasonable times and with 10 business days prior written request, have the right to enter Contractor's premises, or any other places, where the Services are being performed, and shall have access, upon reasonable request, to interim drafts of Deliverables or work-in-progress. Upon 10 days prior written notice and at all reasonable times, the State's representatives shall be allowed to inspect, monitor, or otherwise evaluate the work being performed and to the extent that such access will not reasonably interfere or jeopardize the safety or operation of the systems, facilities, or any secure test environment. Contractor must provide all reasonable facilities and assistance for the State's representatives.

Notwithstanding the preceding paragraph, the State shall only have access to or inspect, monitor, or otherwise evaluate the Contractor processes that directly impact the validity and accuracy of the MME scores, including any and all financial records relating to the billing of this Contract.

- (b) Examination of Records. Contractor agrees that the State, including its duly authorized representatives, until the expiration of seven (7) years following the creation of the material (collectively, the "Audit Period"), shall, upon 20 days prior written notice, have access to and the right to examine and copy during normal business hours, any of Contractor's books, records, documents, and papers pertinent to establishing Contractor's invoices or billing statements in compliance with this Contract and with applicable laws and rules, including the State's procurement rules, regulations, and procedures, and actual performance of this Contract for the purpose of conducting an audit, examination, excerpt and/or transcription but the State shall not have access to any information deemed confidential to Contractor to the extent such access would require such confidential information to become publicly available. This provision also applies to the books, records, accounts, documents, and papers, in print or electronic form, of any parent, affiliated or subsidiary organization of Contractor, or any Subcontractor of Contractor performing services in connection with this Contract. Such audit of Contractor or its Subcontractors will take place at Contractor's or Subcontractor's headquarters, respectively, at State's sole cost and expense except as identified in **Section 2.112(b)**.
- (c) Retention of Records. Contractor shall maintain at least until the end of the Audit Period, all pertinent financial and accounting records (including time sheets and payroll records, and information pertaining to this Contract and to the Services, equipment, and commodities provided under this Contract) pertaining to the invoices or billing statements under this Contract in accordance with generally accepted accounting principles and other procedures specified in this Section. Financial and accounting records shall be made available, upon reasonable prior written request, to the State at any time during normal business hours during the Audit Period at Contractor's or its Subcontractors' headquarters, respectively, at State's sole cost and expense except as identified in **Section 2.112(b)**.



If an audit, litigation, or other action involving Contractor's records is initiated before the end of the Audit Period, the records must be retained until all issues arising out of the audit, litigation, or other action are resolved or until the end of the Audit Period, whichever is later.

- (d) **Audit Resolution.** If necessary, the Contractor and the State shall meet to review each audit report promptly after issuance. The Contractor will respond to each audit report in writing within 30 days from receipt of such report, unless a shorter response time is agreed to by the parties. The Contractor and the State shall develop, agree upon and monitor an action plan to promptly address and resolve any deficiencies, concerns, and/or recommendations in such audit report.

#### **2.112 Errors**

- (a) If the audit demonstrates any material errors in the statements provided to the State, then the material amount in error shall be reflected as a credit or debit on the next invoice and in subsequent invoices until the amount is paid or refunded in full. However, a credit or debit may not be carried for more than four (4) quarterly statements. If a balance remains after four (4) quarterly statements, then the remaining amount will be due as a payment or refund within 45 days of the last quarterly statement that the balance appeared on or termination of this contract, whichever is earlier.
- (b) In addition to other available remedies, if the difference between the payment received and the correct payment amount is greater than 10%, then the Contractor shall pay all of the reasonable costs of the audit.

### 2.120 State Responsibilities

#### **2.121 State Performance Obligations**

- (a) **Equipment and Other Resources.** To facilitate Contractor's performance of the Services/Deliverables, the State shall provide to Contractor such equipment and resources as identified in the Statements of Work or other Contract Exhibits as items to be provided by the State.
- (b) **Facilities.** The State shall designate space as long as it is available and as provided in the Statement of Work, to house Contractor's personnel whom the parties agree will perform the Services/Deliverables at State facilities (collectively, the "State Facilities"). Contractor shall have reasonable access to, and unless agreed otherwise by the parties in writing shall observe and comply with all rules and regulations relating to, each of the State Facilities (including hours of operation) used by Contractor in the course of providing the Services. Contractor agrees that it will not, without the prior written consent of the State, use any State Facilities or access any State information systems provided for Contractor's use, or to which Contractor otherwise gains access in the course of performing the Services, for any purpose other than providing the Services to the State.
- (c) **Return.** Contractor shall be responsible for returning to the State any State-furnished equipment, facilities and other resources when no longer required for this Contract in the same condition as when provided by the State, reasonable wear and tear excepted.
- (d) Except as otherwise provided in **Section 2.220**, the State's failure to perform its responsibilities as set forth in this Contract shall not be deemed to be grounds for termination by Contractor. However, Contractor will not be liable for any default or delay in the performance of its obligations under this Contract to the extent such default or delay is caused by nonperformance of the State's obligations under this Contract, provided Contractor provides the State with reasonable written notice of such nonperformance and Contractor uses commercially reasonable efforts to perform notwithstanding the State's failure to perform. In addition, if the State's nonperformance of its responsibilities under this Contract materially increases the time required for Contractor's performance or Contractor's cost of performance, Contractor shall be entitled to seek an equitable extension via the Change Request process described in **Section 2.106**.

### 2.130 Security

#### **2.131 Background Checks**

The Contractor shall perform background checks on Contractor's (including Subcontractor) personnel proposed to have access to State facilities and the electronic exchange systems between the State and Contractor. Contractor shall use the background check results to determine Contractor personnel eligibility for working within State facilities and accessing the electronic exchange system between the State and Contractor. Contractor shall provide the State with confirmation that background checks have been completed for the appropriate Contractor personnel.



All Contractor (including Subcontractor) personnel proposed to have access to State facilities and the electronic exchange systems between the State and Contractor will also be expected to comply with the State's security and acceptable use policies for State IT equipment and resources. See [www.michigan.gov/dit](http://www.michigan.gov/dit). Furthermore, Contractor personnel will be expected to agree to the State's security and acceptable use policies before the Contractor personnel will be accepted as a resource to perform work for the State. It is expected the State will provide an acceptance form to the Contractor and then the Contractor will present these documents to the prospective employee before the Contractor presents the individual to the State as a proposed resource. Contractor staff will be expected to comply with all Physical Security procedures in place within the facilities where they are working.

#### **2.132 PCI Data Security Requirements – Deleted N/A**

2.140 Deleted N/A

2.150 Confidentiality

#### **2.151 Freedom of Information**

All information in any proposal submitted to the State by Contractor and this Contract is subject to the provisions of the Michigan Freedom of Information Act, 1976 Public Act No. 442, as amended, MCL 15.231, et seq (the "FOIA").

#### **2.152 Confidentiality**

Contractor and the State each acknowledge that the other possesses and will continue to possess confidential information that has been developed or received by it. As used in this Section, "Confidential Information" of Contractor shall mean all non-public proprietary information of Contractor (other than Confidential Information of the State as defined below) which is marked confidential, restricted, proprietary or with a similar designation. All assessment materials shall also be handled as confidential materials and may have copyright restrictions printed on the materials instead of confidentiality notices. "Confidential Information" of the State shall mean any information which is retained in confidence by the State (or otherwise required to be held in confidence by the State pursuant to applicable federal, state and local laws and regulations) or which, in the case of tangible materials provided to Contractor by the State pursuant to its performance under this Contract, is marked as confidential, proprietary or with a similar designation by the State. In the case of information of either Contractor or the State "Confidential Information" shall exclude any information (including this Contract) that is publicly available pursuant to the Michigan FOIA.

#### **2.153 Protection of Confidential Information**

The State and Contractor will each use at least the same degree of care to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure, publication or dissemination of its own confidential information of like character, but in no event less than reasonable care. Neither Contractor nor the State will (i) make any use of the Confidential Information of the other except as contemplated by this Contract, (ii) acquire any right in or assert any lien against the Confidential Information of the other, or (iii) if requested to do so, refuse for any reason to promptly return the other party's Confidential Information to the other party. Each party will limit disclosure of the other party's Confidential Information to employees and Subcontractors who must have access in order to fulfill the purposes of this Contract. Disclosure to, and use by, a Subcontractor is permissible where (A) use of a Subcontractor is authorized under this Contract, (B) such disclosure is necessary or otherwise naturally occurs in connection with work that is within such Subcontractor's scope of responsibility, and (C) Contractor obligates the Subcontractor in a written Contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor and of any Subcontractor having access or continued access to the State's Confidential Information may be required to execute an acknowledgment that the employee has been advised of Contractor's and the Subcontractor's obligations under this Section and of the employee's obligation to Contractor or Subcontractor, as the case may be, to protect such Confidential Information from unauthorized use or disclosure.

#### **2.154 Exclusions**

Notwithstanding the foregoing, the provisions of this Section will not apply to any particular information which the State or Contractor can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving party; (iii) was in the possession of the receiving party at the time of disclosure to it without an obligation of confidentiality; (iv) was received after disclosure to it from a third party who had a lawful right to disclose such information to it without any obligation to restrict its further disclosure; or (v) was independently developed by the receiving party without reference to Confidential Information of the furnishing party.



Further, the provisions of this Section will not apply to any particular Confidential Information to the extent the receiving party is required by law to disclose such Confidential Information, provided that the receiving party (i) promptly provides the furnishing party with notice of the legal request, and (ii) assists the furnishing party in resisting or limiting the scope of such disclosure as reasonably requested by the furnishing party.

#### **2.155 No Implied Rights**

Nothing contained in this Section shall be construed as obligating a party to disclose any particular Confidential Information to the other party, or as granting to or conferring on a party, expressly or impliedly, any right or license to the Confidential Information of the other party.

#### **2.156 Remedies**

Each party acknowledges that, if it breaches (or attempts or threatens to breach) its obligations under **Section 2.150**, the other party may be irreparably harmed. Accordingly, if a court of competent jurisdiction should find that a party has breached (or attempted or threatened to breach) any such obligations, the non-breaching party shall be entitled to seek an injunction preventing such breach (or attempted or threatened breach).

#### **2.157 Security Breach Notification**

In the event of a breach of this Section, Contractor shall take (i) prompt corrective action to cure any such deficiencies and (ii) any action pertaining to such unauthorized disclosure required by applicable federal and state laws and regulations. Contractor and the State will cooperate to mitigate, to the extent practicable, the effects of any breach, intrusion, or unauthorized use or disclosure. Contractor shall report to the State in writing any use or disclosure of Confidential Information, whether suspected or actual, other than as provided for by this Contract within 10 days of becoming aware of such use or disclosure or such shorter time period as is reasonable under the circumstances.

#### **2.158 Survival**

The parties' respective obligations under this Section shall survive the termination or expiration of this Contract for any reason.

#### **2.159 Destruction of Confidential Information**

Promptly upon termination or cancellation of this Contract for any reason, Contractor shall certify to the State that Contractor has destroyed all State Confidential Information. Within 10 business days of termination or cancellation of this Contract for any reason, State shall immediately return to Contractor all Contractor Confidential Information.

#### 2.160 Proprietary Rights

#### **2.161 Ownership**

Except as specifically provided in this **Section 2.161**, all Deliverables shall be owned by the State and shall be considered works made for hire by the Contractor for the State. The State shall own all United States and international copyrights, trademarks, patents, or other proprietary rights in the Deliverables.

The Contractor shall assign, and upon creation of each Deliverable automatically assigns, to the State, ownership of all United States and international copyrights, trademarks, patents, or other proprietary rights in each and every Deliverable, whether or not registered by the Contractor, insofar as any such Deliverable, by operation of law, may not be considered work made for hire by the Contractor for the State. From time to time upon State's request, the Contractor and/or its personnel shall confirm such assignment by execution and delivery of the assignments, confirmations of assignment, or other written instruments as the State may request. The State shall have the right to obtain and hold in its own name all copyright, trademark, and patent registrations and other evidence of rights that may be available for Deliverables.

*Contractor owns the assessments, including all testing materials, documentation, related materials, derivatives and all intellectual property rights therein (collectively, the "Contractor Materials"). State does not acquire any right, title, or interest in or to the Contractor Materials. State shall not copy, modify, enhance, reverse engineer, or make any addition to the Contractor Materials. Notwithstanding anything in this Contract to the contrary, Contractor shall retain all right, title, and interest in and to all Contractor Materials which shall not be considered "Deliverables."*

#### **2.162 Source Code Escrow – Deleted N/A**

**2.163 Rights in Data**

- (a) The State will be and remain the owner of all data made available by the State to Contractor or its agents, Subcontractors or representatives pursuant to this Contract. Except as otherwise set forth in this **Section 2.163**, Contractor will not use the State's data for any purpose other than providing the Services, nor will any part of the State's data be disclosed, sold, assigned, leased, or otherwise disposed of to the general public or to specific third parties or commercially exploited by or on behalf of Contractor, nor will any employee of Contractor other than those on a strictly need to know basis have access to the State's data. Contractor will not possess or assert any lien or other right against the State's data. Except as otherwise set forth in this **Section 2.163** without limiting the generality of this Section, Contractor shall only use personally identifiable information as strictly necessary to provide the Services and shall disclose such information only to its employees who have a strict need to know such information. Contractor shall comply at all times with all laws and regulations applicable to such personally identifiable information.
- (b) The State is and shall remain the owner of all State-specific data pursuant to this Contract. The State may use the data provided by the Contractor for any purpose. The State will not possess or assert any lien or other right against the Contractor's data. Without limiting the generality of this Section, the State shall only use personally identifiable information as strictly necessary to utilize the Services and shall disclose such information only to its employees who have a strict need to know such information, except as provided by law. The State shall comply at all times with all laws and regulations applicable to such personally identifiable information. Other material developed and provided to the State shall remain the State's sole and exclusive property.
- (c) The parties acknowledge and agree that Contractor may use and disclose the data collected from the administration of the ACT and WorkKeys assessments, as set forth in Contractor's data usage policies, as amended from time to time. The data usage policies will at a minimum allow for the disclosure of student specific data results to each student, their respective school and school district, and the State.

**2.164 Ownership of Materials**

State and Contractor will continue to own their respective proprietary technologies developed before entering into this Contract. Any hardware bought through the Contractor by the State, and paid for by the State, will be owned by the State. Any software licensed through the Contractor and sold to the State, will be licensed directly to the State.

**2.165 Standard Software**

If applicable and necessary, all Standard Software used in performing the Services shall be provided to the State under a separate license agreement between the State and the owner (or authorized licensor) of such software. Standard Software to be licensed to the State is listed in this Contract.

**2.166 Pre-existing Materials for Custom Software Deliverables**

Neither Contractor nor any of its Subcontractors shall incorporate any preexisting materials (including Standard Software) into Custom Software Deliverables or use any pre-existing materials to produce Custom Software Deliverables if such pre-existing materials will be needed by the State in order to use the Custom Software Deliverables unless (i) such pre-existing materials and their owners are identified to the State in writing and (ii) such pre-existing materials are either readily commercially available products for which Contractor or its Subcontractor, as the case may be, has obtained a license (in form and substance approved by the State) in the name of the State, or are materials that Contractor or its Subcontractor, as the case may be, has the right to license to the State and has licensed to the State on terms and conditions approved by the State prior to using such pre-existing materials to perform the Services.

**2.167 General Skills**

Notwithstanding anything to the contrary in this Section, each party, its Subcontractors and their personnel shall be free to use and employ its and their general skills, know-how and expertise, and to use, disclose and employ any generalized ideas, concepts, know-how, methods, techniques or skills gained or learned during the course of performing the Services, so long as it or they acquire and apply the foregoing without disclosure of any confidential or proprietary information of the other party.

2.170 Warranties And Representations**2.171 Warranties and Representations**

The Contractor represents and warrants:

- (a) It is capable in all respects of fulfilling and shall fulfill all of its obligations under this Contract. The performance of all obligations under this Contract shall be provided in a timely, professional, and workman-like manner and shall meet the performance and operational standards required under this Contract.
- (b) This Contract signatory has the power and authority, including any necessary corporate authorizations, necessary to enter into this Contract, on behalf of Contractor.
- (c) It is qualified and registered to transact business in all locations where required.
- (d) Neither the Contractor nor any Affiliates, nor any employee of either, has, shall have, or shall acquire, any contractual, financial, business, or other interest, direct or indirect, that would conflict in any significant/material manner or degree with Contractor's performance of its duties and responsibilities to the State under this Contract or otherwise create an appearance of impropriety with respect to the award or performance of this Agreement. Contractor shall notify the State within two (2) days of becoming aware of any such interest that may be incompatible with the interests of the State.
- (e) Neither Contractor nor any Affiliates, nor any employee of either has accepted or shall accept anything of value based on an understanding that the actions of the Contractor or Affiliates or employee on behalf of the State would be influenced. Contractor shall not attempt to influence any State employee by the direct or indirect offer of anything of value.
- (f) Neither Contractor nor any Affiliates, nor any employee of either has paid or agreed to pay any person, other than bona fide employees and consultants working solely for Contractor or such Affiliate, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract.
- (g) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other Bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other Bidder; and no attempt was made by Contractor to induce any other person to submit or not submit a proposal for the purpose of restricting competition.
- (h) All financial statements, reports, and other information furnished by Contractor to the State in connection with the award of this Contract fairly and accurately represent the business, properties, financial condition, and results of operations of Contractor as of the respective dates, or for the respective periods, covered by such financial statements, reports, other information. Since the respective dates or periods covered by such financial statements, reports, or other information, there have been no material adverse change in the business, properties, financial condition, or results of operations of Contractor.
- (i) All written information furnished to the State by or behalf of Contractor in connection with this Contract, including its bid, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make such information not misleading.
- (j) It is not in material default or breach of any other Contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any Contract with the State or any of its departments that was terminated by the State or such department within the previous five (5) years for the reason that Contractor failed to perform or otherwise breached an obligation of such contract.

**2.172 Software Warranties****(a) Performance Warranty**

The Contractor represents and warrants that Deliverables, after Final Acceptance, will perform and operate in compliance with the requirements and other standards of performance contained in this Contract (including all descriptions, specifications and drawings made a part of this Contract) for a period of 90 days. In the event of a breach of this warranty, Contractor will correct the affected Deliverable(s) at no charge to the State, by direction of the CCI.

**(b) No Surreptitious Code Warranty**

The Contractor represents and warrants that no copy of licensed Software provided to the State contains or will contain any Self-Help Code or any Unauthorized Code as defined below. This warranty is referred to in this Contract as the "No Surreptitious Code Warranty."



As used in this Contract, "Self-Help Code" means any back door, time bomb, drop dead device, or other software routine designed to disable a computer program automatically with the passage of time or under the positive control of a person other than the licensee of the software. Self-Help Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

As used in this Contract, "Unauthorized Code" means any virus, Trojan horse, spyware, worm or other Software routines or components designed to permit unauthorized access to disable, erase, or otherwise harm software, equipment, or data; or to perform any other such actions. The term Unauthorized Code does not include Self-Help Code. Unauthorized Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

In addition, Contractor will use up-to-date commercial virus detection software to detect and remove any viruses from any software prior to delivering it to the State.

(c) Calendar Warranty

The Contractor represents and warrants that all software for which the Contractor either sells or licenses to the State of Michigan and used by the State prior to, during or after the calendar year 2000, includes or shall include, at no added cost to the State, design and performance so the State shall not experience software abnormality and/or the generation of incorrect results from the software, due to date oriented processing, in the operation of the business of the State of Michigan.

The software design, to insure calendar year rollover compatibility, shall include, but is not limited to: data structures (databases, data files, etc.) that provide four (4)-digit date century; stored data that contain date century recognition, including, but not limited to, data stored in databases and hardware device internal system dates; calculations and program logic (e.g., sort algorithms, calendar generation, event recognition, and all processing actions that use or produce date values) that accommodates same century and multi-century formulas and date values; interfaces that supply data to and receive data from other systems or organizations that prevent non-compliant dates and data from entering any State system; user interfaces (i.e., screens, reports, etc.) that accurately show four (4)-digit years; and assurance that the year 2000 shall be correctly treated as a leap year within all calculation and calendar logic.

(d) Third-party Software Warranty

The Contractor represents and warrants that it will disclose the use or incorporation of any third-party software into the Deliverables. At the time of Delivery, the Contractor shall provide in writing the name and use of any Third-party Software, including information regarding the Contractor's authorization to include and utilize such software. The notice shall include a copy of any ownership agreement or license that authorizes the Contractor to use the Third-party Software.

**2.173 Equipment Warranty – Deleted N/A**

**2.174 Physical Media Warranty – Deleted N/A**

**2.175 Standard Warranties – Deleted N/A**

**2.176 Consequences For Breach**

In addition to any remedies available in law, if the Contractor breaches any of the warranties contained in this section, such breach may be considered as a default in the performance of a material obligation of this Contract.

2.180 Insurance**2.181 Liability Insurance****(a) Liability Insurance**

The Contractor is required to provide proof of the minimum levels of insurance coverage as indicated below. The purpose of this coverage shall be to protect the State from claims which may arise out of or result from the Contractor's performance of services under the terms of this Contract, whether such services are performed by the Contractor, or by any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.

The Contractor waives all rights against the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents for recovery of damages to the extent these damages are covered by the insurance policies the Contractor is required to maintain pursuant to this Contract.

All insurance coverages provided relative to this Contract/Purchase Order are PRIMARY and NON-CONTRIBUTING to any comparable liability insurance (including self-insurances) carried by the State.

The insurance shall be written for not less than any minimum coverage specified in this Contract or required by law, whichever is greater.

The insurers selected by Contractor shall have an A.M. Best rating of A or better, or as otherwise approved in writing by the State, or if such ratings are no longer available, with a comparable rating from a recognized insurance rating agency. All policies of insurance required in this Contract shall be issued by companies that have been approved to do business in the State.

Where specific limits are shown, they are the minimum acceptable limits. If Contractor's policy contains higher limits, the State shall be entitled to coverage to the extent of such higher limits.

Before this Contract is signed by both parties or before the purchase order is issued by the State, the Contractor must furnish to the Director of Purchasing Operations, certificate(s) of insurance verifying insurance coverage ("Certificates"). The Certificate must be on the standard "accord" form or equivalent. **THIS CONTRACT OR PURCHASE ORDER NO. MUST BE SHOWN ON THE CERTIFICATE OF INSURANCE TO ASSURE CORRECT FILING.** All Certificate(s) are to be prepared and submitted by the Insurance Provider. All Certificate(s) shall contain a provision indicating that coverages afforded under the policies WILL NOT BE CANCELLED, MATERIALLY CHANGED, OR NOT RENEWED without 30 days prior written notice, except for 10 days for non-payment of premium, having been given to the Director of Purchasing Operations, Department of Management and Budget. The notice must include this Contract or Purchase Order number affected and be mailed to: Director, Purchasing Operations, Department of Management and Budget, P.O. Box 30026, Lansing, Michigan 48909. Failure to provide evidence of coverage, may, at the State's sole option, result in this Contract's termination.

The Contractor is required to pay for and provide the type and amount of insurance checked ☒ below:

☒ 1. Commercial General Liability with the following minimum coverage:

\$2,000,000 General Aggregate Limit other than Products/Completed Operations  
\$2,000,000 Products/Completed Operations Aggregate Limit  
\$1,000,000 Personal & Advertising Injury Limit  
\$1,000,000 Each Occurrence Limit  
\$500,000 Fire Damage Limit (any one fire)

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents as ADDITIONAL INSURED(S) on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

☒ 2. If a motor vehicle is used to provide services or products under this Contract, the Contractor must have vehicle liability insurance on any auto including owned, hired and non-owned vehicles used in Contractor's business for bodily injury and property damage as required by law.



The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents as ADDITIONAL INSUREDS on the vehicle liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

- ☒ 3. Workers' compensation coverage must be provided in accordance with applicable laws governing the employees and employers work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, proof must be provided of approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of qualification, Contractor must provide appropriate certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

Any certificates of insurance received must also provide a list of states where the coverage is applicable. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company. This provision shall not be applicable where prohibited or limited by the laws of the jurisdiction in which the work is to be performed.

- ☒ 4. Employers liability insurance with the following minimum limits:

\$100,000 each accident  
\$100,000 each employee by disease  
\$500,000 aggregate disease

- ☒ 5. Employee Fidelity, including Computer Crimes, providing coverage for direct loss to the State and any legal liability of the State arising out of or related to fraudulent or dishonest acts committed by the employees of Contractor or its Subcontractors, acting alone or in collusion with others, in a minimum amount of \$1,000,000.00 with a maximum deductible of \$50,000.00.

(b) Subcontractors

Except where the State has approved in writing a Contractor subcontract with other insurance provisions, Contractor shall require all of its Subcontractors under this Contract to purchase and maintain the insurance coverage as described in this Section for the Contractor in connection with the performance of work by those Subcontractors. Alternatively, Contractor may include any Subcontractors under Contractor's insurance on the coverage required in this Section. Subcontractor(s) shall fully comply with the insurance coverage required in this Section. Failure of Subcontractor(s) to comply with insurance requirements does not limit Contractor's liability or responsibility.

(c) Certificates of Insurance and Other Requirements

Contractor shall furnish to Purchasing Operations certificate(s) of insurance verifying insurance coverage or providing satisfactory evidence of self-insurance as required in this Section (the "Certificates"). Before this Contract is signed, and not less than 20 days before the insurance expiration date every year thereafter, the Contractor shall provide evidence that the State and its agents, officers and employees are listed as additional insureds under each commercial general liability and commercial automobile liability policy. In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

Contractor shall maintain all required insurance coverage throughout the term of this Contract and any extensions thereto and, in the case of claims-made Commercial General Liability policies, shall secure tail coverage for at least three (3) years following the expiration or termination for any reason of this Contract. The minimum limits of coverage specified above are not intended, and shall not be construed, to limit any liability or indemnity of Contractor under this Contract to any indemnified party or other persons. Contractor shall be responsible for all deductibles with regard to such insurance. If Contractor fails to pay any premium for required insurance as specified in this Contract, or if any insurer cancels or significantly reduces any required insurance as specified in this Contract without the State's written consent, at the State's election (but without any obligation to do so) after the State has given Contractor at least 30 days written notice, the State may pay such premium or procure similar insurance coverage from another company or companies; and at the State's election, the State may deduct the entire cost (or part thereof) from any payment due Contractor, or Contractor shall pay the entire cost (or any part thereof) upon demand by the State.

2.190 Indemnification**2.191 Indemnification****(a) General Indemnification**

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Contractor in the performance of this Contract and that are attributable to the negligence or tortious acts of the Contractor or any of its subcontractors, or by anyone else for whose acts any of them may be liable.

**(b) Code Indemnification**

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from any claim, loss, or expense arising from Contractor's breach of the No Surreptitious Code Warranty.

**(c) Employee Indemnification**

In any and all claims against the State of Michigan, its departments, divisions, agencies, sections, commissions, officers, employees and agents, by any employee of the Contractor or any of its subcontractors, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Contractor or any of its subcontractors under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

**(d) Patent/Copyright Infringement Indemnification**

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Contractor or its subcontractors, or the operation of such equipment, software, commodity or service, or the use or reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or service, or its operation, become or in the State's or Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor shall at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Contractor, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Contractor, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Contractor shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Contractor, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Contractor under this Contract.

**2.192 Continuation of Indemnification Obligations**

The Contractor's duty to indemnify pursuant to this Section continues in full force and effect, notwithstanding the expiration or early cancellation of this Contract, with respect to any claims based on facts or conditions that occurred prior to expiration or cancellation.

**2.193 Indemnification Procedures**

The procedures set forth below shall apply to all indemnity obligations under this Contract:

- (a) After receipt by the State of notice of the action or proceeding involving a claim in respect of which it will seek indemnification, the State shall promptly notify Contractor of such claim in writing and take or assist Contractor in taking, as the case may be, any reasonable action to avoid the imposition of a default judgment against Contractor. No failure to notify Contractor shall relieve Contractor of its indemnification obligations except to the extent that Contractor can demonstrate damages attributable to such failure. Within 10 days following receipt of written notice from the State relating to any claim, Contractor shall notify the State in writing whether Contractor agrees to assume control of the defense and settlement of that claim (a "Notice of Election").



After notifying Contractor of a claim and prior to the State receiving Contractor's Notice of Election, the State shall be entitled to defend against the claim, at Contractor's expense, and Contractor will be responsible for any reasonable costs incurred by the State in defending against the claim during such period.

- (b) If Contractor delivers a Notice of Election relating to any claim: (i) the State shall be entitled to participate in the defense of such claim and to employ counsel at its own expense to assist in the handling of such claim and to monitor and advise the State about the status and progress of the defense; (ii) Contractor shall, at the request of the State, demonstrate to the reasonable satisfaction of the State, Contractor's financial ability to carry out its defense and indemnity obligations under this Contract; (iii) Contractor shall periodically advise the State about the status and progress of the defense and shall obtain the prior written approval of the State before entering into any settlement of such claim or ceasing to defend against such claim and (iv) to the extent that any principles of Michigan governmental or public law may be involved or challenged, the State shall have the right, at its own expense, to control the defense of that portion of such claim involving the principles of Michigan governmental or public law. Notwithstanding the foregoing, the State may retain control of the defense and settlement of a claim by written notice to Contractor given within 10 days after the State's receipt of Contractor's information requested by the State pursuant to clause (ii) of this paragraph if the State determines that Contractor has failed to demonstrate to the reasonable satisfaction of the State Contractor's financial ability to carry out its defense and indemnity obligations under this Section. Any litigation activity on behalf of the State of Michigan, or any of its subdivisions pursuant to this Section, must be coordinated with the Department of Attorney General. In the event the insurer's attorney represents the State pursuant to this Section, the insurer's attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.
- (c) If Contractor does not deliver a Notice of Election relating to any claim of which it is notified by the State as provided above, the State shall have the right to defend the claim in such manner as it may deem appropriate, at the cost and expense of Contractor. If it is determined that the claim was one against which Contractor was required to indemnify the State, upon request of the State, Contractor shall promptly reimburse the State for all such reasonable costs and expenses.

## 2.200 Limits of Liability and Excusable Failure

### **2.201 Limits of Liability**

Neither the Contractor nor the State is liable to each other, regardless of the form of action, for consequential, incidental, indirect, or special damages. Notwithstanding anything to the contrary in this Contract, the Contractor's liability for damages to the State is limited to the amount State has paid Contractor under this Contract. The foregoing limitation of liability does not apply to claims for infringement of United States patent, copyright, trademarks, or trade secrets or to claims for bodily injury or damage to property caused by the gross negligence or willful misconduct of the Contractor.

### **2.202 Excusable Failure**

Notwithstanding anything to the contrary in this Contract, neither party will be liable for any default, damage or delay in the performance of its obligations under this Contract to the extent such default, damage or delay is caused by government regulations or requirements (executive, legislative, judicial, military or otherwise), power or communications (telephone, cellular phone, internet and e-mail) failure, electrical surges or current fluctuations, lightning, earthquake, war, water or other forces of nature or acts of God, delays or failures of transportation, equipment shortages, suppliers' failures, or acts or omissions of common carriers, fire; riots, civil disorders; strikes or other labor disputes, embargoes; injunctions (provided the injunction was not issued as a result of any fault or negligence of the party seeking to have its default or delay excused); or any other cause beyond the reasonable control of such party; provided such default or delay could not have been prevented by reasonable precautions and cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means, including disaster recovery plans.

In such event, the non-performing party will be excused from any further performance or observance of the obligation(s) so affected for as long as such circumstances prevail and such party continues to use its commercially reasonable efforts to recommence performance or observance whenever and to whatever extent possible without delay and provided further that such party promptly notifies the other party in writing of the inception of the excusable failure occurrence, and also of its abatement or cessation.



If any of the above-enumerated circumstances substantially prevent, hinder, or delay Contractor's performance of the Services/provision of Deliverables for more than 10 Business Days, and the State determines that performance is not likely to be resumed within a period of time that is satisfactory to the State in its reasonable discretion, then at the State's option: (a) the State may procure the affected Services/Deliverables from an alternate source, and the State shall not be liable for payment for the unperformed Services/ Deliverables not provided under this Contract for so long as the delay in performance shall continue, with an equitable adjustment for any portion of Services adequately performed; (b) the State may terminate any portion of this Contract so affected and the charges payable there under shall be equitably adjusted to reflect those Services/Deliverables terminated; or (c) the State may terminate the affected Statement of Work without liability to Contractor as of a date specified by the State in a written notice of termination to Contractor, except to the extent that the State shall pay for Services/Deliverables and any annual set-up implemented or provided through the date of termination.

Contractor will not have the right to any additional payments from the State as a result of any Excusable Failure occurrence or to payments for Services not rendered/Deliverables not provided as a result of the Excusable Failure condition. Defaults or delays in performance by Contractor which are caused by acts or omissions of its Subcontractors will not relieve Contractor of its obligations under this Contract except to the extent that a Subcontractor is itself subject to an Excusable Failure condition described above and Contractor cannot reasonably circumvent the effect of the Subcontractor's default or delay in performance through the use of alternate sources, workaround plans or other means.

### **2.203 Disaster Recovery**

Contractor and the State recognize that the State provides essential services in times of natural or man-made disasters. Therefore, except as so mandated by Federal disaster response requirements, Contractor personnel dedicated to providing Services/Deliverables under this Contract will provide the State with priority service for repair and work around in the event of a natural or manmade disaster.

#### 2.210 Termination/Cancellation by the State

The State may terminate this Contract without further liability or penalty to the State, its departments, divisions, agencies, offices, commissions, officers, agents and employees for any of the following reasons:

### **2.211 Termination for Cause**

- (a) In the event that Contractor breaches any of its material duties or obligations under this Contract (including a Chronic Failure to meet any particular SLA as defined in **Section 2.076**), which are either not capable of or subject to being cured, or are not cured within the time period specified in the written notice of breach provided by the State (such time period not to be less than 30 days), or pose a serious and imminent threat to the health and safety of any person, or the imminent loss, damage or destruction of any real or tangible personal property, the State may, having provided written notice of termination to Contractor, terminate this Contract in whole or in part, for cause, as of the date specified in the notice of termination; provided, however, the State must discharge its obligations under **Section 2.250** before any such termination.
- (b) In the event that this Contract is terminated for cause, in addition to any legal remedies otherwise available to the State by law or equity, Contractor shall be responsible for all costs incurred by the State in terminating this Contract, including but not limited to, State administrative costs, reasonable attorneys' fees and court costs, and any reasonable additional costs the State may incur to procure the Services/Deliverables required by this Contract from other sources. Re-procurement costs shall not be considered by the parties to be consequential, indirect or incidental damages, and shall not be excluded by any other terms otherwise included in this Contract, provided such costs are not in excess of 50% more than the prices for such Service/Deliverables provided under this Contract.
- (c) In the event the State chooses to partially terminate this Contract for cause, charges payable under this Contract will be equitably adjusted to reflect those Services/Deliverables that are terminated and the State shall pay for all Services/Deliverables for which Final Acceptance has been granted provided up to the termination date. Services and related provisions of this Contract that are terminated for cause shall cease on the effective date of the termination.
- (d) In the event this Contract is terminated for cause pursuant to this Section, and it is determined, for any reason, that Contractor was not in breach of this Contract pursuant to the provisions of this section, that termination for cause shall be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties shall be limited to that otherwise provided in this Contract for a termination for convenience.

**2.212 Termination for Convenience**

The State may terminate this Contract for its convenience, in whole or part, if the State determines that such a termination is in the State's best interest. Reasons for such termination shall be left to the sole discretion of the State and may include, but not necessarily be limited to (a) the State no longer needs the Services or products specified in this Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Services no longer practical or feasible, (c) unacceptable prices for Additional Services or New Work requested by the State, or (d) falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the State. The State may terminate this Contract for its convenience, in whole or in part, by giving Contractor written notice at least 30 days prior to the date of termination. If the State chooses to terminate this Contract in part, the charges payable under this Contract shall be equitably adjusted to reflect those Services/Deliverables that are terminated. Services and related provisions of this Contract that are terminated for cause shall cease on the effective date of the termination.

**2.213 Non-Appropriation**

- (a) Contractor acknowledges that, if this Contract extends for several fiscal years, continuation of this Contract is subject to appropriation or availability of funds for this Contract. If funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available, the State shall have the right to terminate this Contract and all affected Statements of Work, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The State shall give Contractor at least 30 days advance written notice of termination for non-appropriation or unavailability (or such time as is available if the State receives notice of the final decision less than 30 days before the funding cutoff).
- (b) If funding for this Contract is reduced by law, or funds to pay Contractor for the agreed-to level of the Services or production of Deliverables to be provided by Contractor are not appropriated or otherwise made available, the State may, upon 30 days written notice to Contractor, reduce the level of the Services or the change the production of Deliverables in such manner and for such periods of time as the State may elect. The charges payable under this Contract will be equitably adjusted to reflect any equipment, services or commodities not provided by reason of such reduction.
- (c) In the event the State terminates this Contract, eliminates certain Deliverables, or reduces the level of Services to be provided by Contractor pursuant to this Section, the State shall pay Contractor for all Work-in-Process performed through the effective date of the termination or reduction in level, as the case may be and as determined by the State, to the extent funds are available. For the avoidance of doubt, this Section will not preclude Contractor from reducing or stopping Services/Deliverables and/or raising against the State in a court of competent jurisdiction, any claim for a shortfall in payment for Services performed or Deliverables finally accepted before the effective date of termination.

**2.214 Criminal Conviction**

The State may terminate this Contract immediately and without further liability or penalty in the event Contractor, an officer of Contractor, or an owner of a 25% or greater share of Contractor is convicted of a criminal offense incident to the application for, or performance of, a State, public or private Contract or subcontract; convicted of a criminal offense, including any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State reflects upon Contractor's business integrity.

**2.215 Approvals Rescinded**

The State may terminate this Contract without further liability or penalty in the event any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services pursuant to Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. Termination may be in whole or in part and may be immediate as of the date of the written notice to Contractor or may be effective as of the date stated in such written notice.

**2.216 Rights and Obligations Upon Termination**

- (a) If this Contract is terminated by the State for any reason, Contractor shall (a) stop all work as specified in the notice of termination, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Deliverables or other property derived or resulting from this Contract that may be in Contractor's possession, (c) return all materials and property provided directly or indirectly to Contractor by any entity, agent or employee of the State, (d) in the event that the Contractor maintains title in Deliverables that is intended to be transferred to the State at the termination of this Contract, Contractor will transfer title in, and deliver to, the State, unless otherwise directed, all Deliverables intended to be transferred to the State at the termination of this Contract and which are resulting from this Contract (which shall be provided to the State on an "As-Is" basis except to the extent the amounts paid by the State in respect of such items included compensation to Contractor for the provision of warranty services in respect of such materials), and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or termination settlement costs, to the extent commercially practical, including terminating or limiting as otherwise applicable those subcontracts and outstanding orders for material and supplies resulting from the terminated Contract.
- (b) In the event the State terminates this Contract prior to its expiration for its own convenience, the State shall pay Contractor for all charges due for Services provided prior to the date of termination and, if applicable, as a separate item of payment pursuant to this Contract, for Work In Process and annual set-up, on a percentage of completion basis at the level of completion determined by the State. All completed or partially completed Deliverables prepared by Contractor pursuant to this Contract shall, at the option of the State, become the State's property, and Contractor shall be entitled to receive equitable fair compensation for such Deliverables. Regardless of the basis for the termination, the State shall not be obligated to pay, or otherwise compensate, Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.
- (c) Upon a good faith termination, the State shall have the right to assume, at its option, any and all subcontracts and agreements for services and deliverables provided under this Contract, and may further pursue completion of the Services/Deliverables under this Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.

**2.217 Reservation of Rights**

Any termination of this Contract or any Statement of Work issued under it by a party shall be with full reservation of, and without prejudice to, any rights or remedies otherwise available to such party with respect to any claims arising prior to or as a result of such termination.

**2.218 Contractor Transition Responsibilities**

In the event this Contract is terminated, for convenience or cause, dissolved, voided, rescinded, nullified, expires or is otherwise rendered unenforceable, the Contractor agrees to comply with direction provided by the State to assist in the orderly transition of equipment, services, software, leases, etc. to the State or a third party designated by the State in exchange for additional compensation. In the event of termination or the expiration of this Contract, the Contractor agrees to make all reasonable efforts to effect an orderly transition of services within a reasonable period of time that in no event will exceed 180 days. These efforts shall include, but are not limited to, the following:

(a) **Personnel**

The Contractor shall work with the State, or a specified third party, to develop a transition plan setting forth the specific tasks and schedule to be accomplished by the parties, and the additional Contractor compensation required to effect an orderly transition. The Contractor shall allow as many personnel as practicable to remain on the job to help the State, or a specified third party, maintain the continuity and consistency of the services required by this Contract. In addition, during or following the transition period, in the event the State requires the Services of the Contractor's subcontractors or Contractors, as necessary to meet its needs, Contractor agrees to reasonably, and with good-faith, work with the State to negotiate appropriate compensation rates and use the Services of Contractor's subcontractors or Contractors. Contractor will notify all of Contractor's subcontractors of procedures to be followed during transition.

(b) **Information**

The Contractor agrees to provide reasonably detailed specifications for all Services/Deliverables, except Contractor secure tests and proprietary procedures and methods needed by the State, or specified third party, to properly provide the Services/Deliverables required under this Contract. The Contractor will provide the State with asset management data generated from the inception of this Contract through the date on which the Contractor is terminated in a comma-delineated format unless otherwise requested by the State. The Contractor will deliver to the State any remaining owed reports and documentation still in Contractor's possession subject to appropriate payment by the State.



(c) Software

The Contractor shall reasonably assist the State in the acquisition of any Contractor software required to perform the Services/use the Deliverables under this Contract. This shall include any documentation being used by the Contractor to perform the Services under this Contract. If the State transfers any software licenses to the Contractor, those licenses shall, upon expiration of this Contract, transfer back to the State at their current revision level. Upon notification by the State, Contractor may be required to freeze all non-critical changes to Deliverables/Services.

(d) Payment

If the transition results from a termination for any reason, reimbursement under this Contract shall be governed by the termination provisions of this Contract and Contractor will also be reimbursed for all reasonable transition costs (i.e. costs incurred within the agreed period after Contract termination). If the transition results from expiration, the Contractor will be reimbursed for all reasonable transition costs (i.e. costs incurred within the agreed period after Contract expiration that result from transition operations). The Contractor will prepare an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

## 2.219 State Transition Responsibilities

In the event that this Contract is terminated, dissolved, voided, rescinded, nullified, or otherwise rendered unenforceable, the State agrees to perform the following obligations, and any others upon which the State and the Contractor agree:

- (a) Reconciling all accounts between the State and the Contractor;
- (b) Completing any pending post-project reviews.

### 2.220 Termination by Contractor

#### 2.221 Termination by Contractor

If the State materially breaches its obligation to pay Contractor undisputed amounts due and owing under this Contract in accordance with **Section 2.090**, or if the State materially breaches its other obligations under this Contract to perform the Services, and if the State does not cure the breach within the time period specified in a written notice of breach provided to the State by Contractor (such time period not to be less than 30 days), then Contractor may terminate this Contract, in whole or in part based on Statement of Work for cause, as of the date specified in the notice of termination; provided, however, that Contractor must discharge its obligations under **Section 2.250** before any such termination.

### 2.230 Stop Work

#### 2.231 Stop Work Orders

The State may, at any time, by written stop work order to Contractor, require that Contractor stop all, or any part, of the work called for by this Contract for a period of up to 90 calendar days after the stop work order is delivered to Contractor, and for any further period to which the parties may agree. The stop work order shall be specifically identified as such and shall indicate that it is issued under this **Section 2.230**. Upon receipt of the stop work order, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the stop work order during the period of work stoppage. Within the period of the stop work order, the State shall either: (a) cancel the stop work order; or (b) terminate the work covered by the stop work order as provided in **Section 2.210**.

#### 2.232 Cancellation or Expiration of Stop Work Order

If a stop work order issued under this **Section 2.230** is canceled or the period of the stop work order or any extension thereof expires, Contractor shall resume work. The parties shall agree upon an equitable adjustment in the delivery schedule, these Contract price(s), or both, and this Contract shall be modified, in writing, accordingly prior to work commencing, if: (a) the stop work order results in an increase in the time required for, or in Contractor's costs properly allocable to, the performance of any part of this Contract; and (b) Contractor asserts its right to an equitable adjustment within 30 calendar days after the end of the period of work stoppage. Any adjustment will conform to the requirements of **Section 2.106**.

The State hereby acknowledges that due to the Contractor's work schedule, a work stoppage ordered by the State may cause a delay in the delivery schedule that is greater than the period of the stop work order.

**2.233 Allowance of Contractor Costs**

If the stop work order is not canceled and the work covered by the stop work order is terminated for reasons other than material breach, such termination shall be deemed to be a termination for convenience under **Section 2.212**, and the State shall allow reasonable costs resulting from the stop work order in arriving at the termination settlement. For the avoidance of doubt, the State shall not be liable to Contractor for loss of profits because of a stop work order issued under this **Section 2.230**.

2.240 Deleted N/A

2.250 Dispute Resolution

**2.251 In General**

Unless otherwise specified in this Contract, any claim, counterclaim, or dispute between the State and Contractor arising out of or relating to this Contract or any Statement of Work shall be resolved as follows. For all Contractor claims seeking an increase in the amounts payable to Contractor under this Contract, or the time for Contractor's performance, Contractor shall submit a letter executed by Contractor's Contract Administrator or his designee certifying that (a) the claim is made in good faith, (b) the amount claimed accurately reflects the adjustments in the amounts payable to Contractor or the time for Contractor's performance for which Contractor believes the State is liable and covers all costs of every type to which Contractor is entitled from the occurrence of the claimed event, and (c) the supporting data provided with such an affidavit are current and complete to Contractor's best knowledge and belief.

**2.252 Informal Dispute Resolution**

- (a) All operational disputes between the parties shall be resolved under this Contract Management procedures developed pursuant to **Section 2.100**. If the parties are unable to resolve any disputes after compliance with such processes, the parties shall meet with the Director of Purchasing Operations, DMB, or designee, for the purpose of attempting to resolve such dispute without the need for formal legal proceedings, as follows:
- (i) The representatives of Contractor and the State shall meet, by phone, e-mail, or in person, as often as the parties reasonably deem necessary in order to gather and furnish to each other all information with respect to the matter in issue which the parties believe to be appropriate and germane in connection with its resolution. The representatives shall discuss the problem and negotiate in good faith in an effort to resolve the dispute without the necessity of any formal proceeding.
  - (ii) During the course of negotiations, all reasonable requests made by one party to another for non-privileged information reasonably related to this Contract will be honored in order that each of the parties may be fully advised of the other's position.
  - (iii) The specific format for the discussions will be left to the discretion of the designated State and Contractor representatives, but may include the preparation of agreed upon statements of fact or written statements of position.
  - (iv) Following the completion of this process within 60 calendar days, the Director of Purchasing Operations, DMB, or designee, shall issue a written opinion regarding the issue(s) in dispute within 30 calendar days. The opinion regarding the dispute shall be considered the State's final action and the exhaustion of administrative remedies.
- (b) This **Section 2.250** will not be construed to prevent either party from instituting, and a party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period, to preserve a superior position with respect to other creditors, or pursuant to **Section 2.253**.
- (c) The State will not mediate disputes between the Contractor and any other entity, except state agencies, concerning responsibility for performance of work pursuant to this Contract.

**2.253 Injunctive Relief**

The only circumstance in which disputes between the State and Contractor will not be subject to the provisions of **Section 2.252** is where a party makes a good faith determination that a breach of the terms of this Contract by the other party is such that the damages to such party resulting from the breach will be so immediate, so large or severe and so incapable of adequate redress after the fact that a temporary restraining order or other immediate injunctive relief is the only adequate remedy.

**2.254 Continued Performance**

Each party agrees to continue performing its obligations under this Contract while a dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment shall not be deemed to preclude performance) and without limiting either party's right to terminate this Contract as provided in **Section 2.210** and **2.220**, as the case may be.

2.260 Federal and State Contract Requirements**2.261 Nondiscrimination**

In the performance of this Contract, Contractor agrees not to discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, physical or mental disability. Contractor further agrees that every subcontract entered into for the performance of this Contract or any purchase order resulting from this Contract will contain a provision requiring non-discrimination in employment, as specified here, binding upon each Subcontractor. This covenant is required pursuant to the Elliot Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, *et seq.*, and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, *et seq.*, and any breach of this provision may be regarded as a material breach of this Contract.

**2.262 Unfair Labor Practices**

Pursuant to 1980 PA 278, MCL 423.231, *et seq.*, the State shall not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled pursuant to section 2 of the Act. This information is compiled by the United States National Labor Relations Board. A Contractor of the State, in relation to this Contract, shall not enter into a Contract with a Subcontractor, manufacturer, or supplier whose name appears in this register. Pursuant to section 4 of 1980 PA 278, MCL 423.324, the State may void any Contract if, subsequent to award of this Contract, the name of Contractor as an employer or the name of the Subcontractor, manufacturer or supplier of Contractor appears in the register.

**2.263 Workplace Safety and Discriminatory Harassment**

In performing Services for the State, the Contractor shall comply with the Department of Civil Services Rule 2-20 regarding Workplace Safety and Rule 1-8.3 regarding Discriminatory Harassment. In addition, the Contractor shall comply with Civil Service regulations and any applicable agency rules provided to the Contractor. For Civil Service Rules, see [www.michigan.gov/mdcs](http://www.michigan.gov/mdcs).

2.270 Litigation**2.271 Disclosure of Litigation****(a) Disclosure.**

Contractor must disclose any material criminal litigation, investigations or proceedings involving the Contractor (and each Subcontractor) or any of its officers or directors or any litigation, investigations or proceedings under the Sarbanes-Oxley Act. In addition, each Contractor (and each Subcontractor) must notify the State of any material civil litigation, arbitration or proceeding which arises during the term of this Contract and extensions thereto, to which Contractor (or, to the extent Contractor is aware, any Subcontractor hereunder) is a party, and which involves: (i) disputes that might reasonably be expected to adversely affect the viability or financial stability of Contractor or any Subcontractor hereunder; or (ii) a claim or written allegation of fraud against Contractor or, to the extent Contractor is aware, any Subcontractor hereunder by a governmental or public entity arising out of their business dealings with governmental or public entities. Any such litigation, investigation, arbitration or other proceeding (collectively, "Proceeding") must be disclosed in a written statement to this Contract Administrator within 30 days of its occurrence. Details of settlements which are prevented from disclosure by the terms of the settlement may be annotated as such. Information provided to the State from Contractor's publicly filed documents referencing its material litigation will be deemed to satisfy the requirements of this Section.

**(b) Assurances.**

In the event that any such Proceeding disclosed to the State pursuant to this Section, or of which the State otherwise becomes aware, during the term of this Contract would cause a reasonable party to be concerned about:



- (i) the ability of Contractor (or a Subcontractor hereunder) to continue to perform this Contract in accordance with its terms and conditions, or
- (ii) whether Contractor (or a Subcontractor hereunder) in performing Services for the State is engaged in conduct which is similar in nature to conduct alleged in such Proceeding, which conduct would constitute a breach of this Contract or a violation of Michigan law, regulations or public policy, then Contractor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that:
  - (A) Contractor and/or its Subcontractors hereunder will be able to continue to perform this Contract and any Statements of Work in accordance with its terms and conditions, and
  - (B) Contractor and/or its Subcontractors hereunder have not and will not engage in conduct in performing the Services which is similar in nature to the conduct alleged in such Proceeding.

(c) Notifications.

Contractor shall make the following notifications in writing: Within 30 days of Contractor becoming aware that a change in its ownership has occurred, or is certain to occur, Contractor shall notify Purchasing Operations.

## **2.272 Governing Law**

This Contract shall in all respects be governed by, and construed in accordance with, the substantive laws of the State of Michigan without regard to any Michigan choice of law rules that would apply the substantive law of any other jurisdiction to the extent not inconsistent with, or pre-empted by federal law.

## **2.273 Compliance with Laws**

Contractor shall comply with all applicable state, federal, and local laws and ordinances ("Applicable Laws") in providing the Services/Deliverables.

## **2.274 Jurisdiction**

Any dispute arising from this Contract shall be resolved in the State of Michigan. With respect to any claim between the parties, Contractor consents to venue in Ingham County, Michigan, and irrevocably waives any objections it may have to such jurisdiction on the grounds of lack of personal jurisdiction of such court or the laying of venue of such court or on the basis of forum non conveniens or otherwise. Contractor agrees to appoint agents in the State of Michigan to receive service of process.

## 2.280 Environmental Provision

## **2.281 Environmental Provision – Deleted N/A**

## 2.290 General

## **2.291 Amendments**

This Contract may not be modified, amended, extended, or augmented, except by a writing executed by the parties.

## **2.292 Assignment**

- (a) Neither party shall have the right to assign this Contract, or to assign or delegate any of its duties or obligations under this Contract, to any other party (whether by operation of law or otherwise), without the prior written consent of the other party; provided, however, that the State may assign this Contract to any other State agency, department, division or department without the prior consent of Contractor and Contractor may assign this Contract to an affiliate so long as such affiliate is adequately capitalized and can provide adequate assurances that such affiliate can perform this Contract. Any purported assignment in violation of this Section shall be null and void. It is the policy of the State of Michigan to withhold consent from proposed assignments, subcontracts, or novations when such transfer of responsibility would operate to decrease the State's likelihood of receiving performance on this Contract or the State's ability to recover damages.
- (b) Contractor may not, without the prior written approval of the State, assign its right to receive payments due under this Contract. In the event of any such permitted assignment, Contractor shall not be relieved of its responsibility to perform any duty imposed upon it herein, and the requirement under this Contract that all payments shall be made to one entity shall continue.

**2.293 Entire Contract; Order of Precedence**

- (a) This Contract, including any Statements of Work and Exhibits, to the extent not contrary to this Contract, each of which is incorporated for all purposes, constitutes the entire agreement between the parties with respect to the subject matter and supercedes all prior agreements, whether written or oral, with respect to such subject matter and as additional terms and conditions on the purchase order shall apply as limited by **Section 2.061**.
- (b) In the event of any inconsistency between the terms of this Contract and a Statement of Work, the terms of the Statement of Work will take precedence (as to that Statement of Work only); provided, however, that a Statement of Work may not modify or amend the terms of **Sections 2.110 through 2.220** of this Contract, which may be modified or amended only by a formal Contract amendment.

**2.294 Headings**

Captions and headings used in this Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of this Contract.

**2.295 Relationship of the Parties (Independent Contractor Relationship)**

The relationship between the State and Contractor is that of client and independent Contractor. No agent, employee, or servant of a party or any of its Subcontractors shall be or shall be deemed to be an employee, agent or servant of the other party for any reason. Contractor will be solely and entirely responsible for its acts and the acts of its agents, employees, servants and Subcontractors during the performance of this Contract. The State will be solely and entirely responsible for its acts and the acts of its agents, employees, servants, and Subcontractors during the performance of this Contract.

**2.296 Notices**

- (a) Notifications

Any notice given to a party under this Contract shall be deemed effective, if addressed to such party as addressed below, upon: (i) delivery, if hand delivered; (ii) receipt of a confirmed transmission by facsimile if a copy of the notice is sent by another means specified in this Section; (iii) the third (3rd) Business Day after being sent by U.S. mail, postage pre-paid, return receipt requested; or (iv) the next Business Day after being sent by a nationally recognized overnight express courier with a reliable tracking system.

State of Michigan  
Purchasing Operations  
Attention: Lance Kingsbury  
PO Box 30026  
530 West Allegan  
Lansing, Michigan 48909

With a copy to:  
State of Michigan  
Office of Educational Assessment & Accountability  
Department of Education  
Attn: Joseph Martineau  
P.O. Box 30008  
Lansing, MI 48909

Contractor(s):  
ACT, Inc.  
Attention: Chief Financial Officer  
500 ACT Drive, PO Box 168  
Iowa City, Iowa 52243-0168

With a copy to:  
ACT, Inc.  
Attention: Assistant Vice President, State Programs  
500 ACT Drive, PO Box 168  
Iowa City, Iowa 52243-0168

Either party may change its address where notices are to be sent by giving notice in accordance with this Section.

- (b) Binding Commitments – Deleted N/A

**2.297 Media Releases and Contract Distribution****(a) Media Releases**

Neither Contractor nor the State will make any news releases, public announcements or public disclosures, nor will they have any conversations with representatives of the news media, pertaining to this Contract, the Services or this Contract without the prior written approval of the other party, and then only according to explicit written instructions provided by that party. In addition, neither Contractor nor the State will use the trademarks or other proprietary identifying symbol of the other party or its affiliates without the party's prior written consent. Prior written consent of the Contractor must be obtained from authorized representatives. Notwithstanding the foregoing, the parties agree that use of the party names for business references is acceptable without prior written consent.

**(b) Contract Distribution**

Purchasing Operations shall retain the sole right of this Contract distribution to all State agencies and local units of government unless other arrangements are authorized by Purchasing Operations.

**2.298 Reformation and Severability**

Each provision of this Contract shall be deemed to be severable from all other provisions of this Contract and, if one or more of the provisions of this Contract shall be declared invalid, the remaining provisions of this Contract shall remain in full force and effect.

**2.299 Consents and Approvals**

Except as expressly provided otherwise in this Contract, if either party requires the consent or approval of the other party for the taking of any action under this Contract, such consent or approval shall be in writing and shall not be unreasonably withheld or delayed.

**2.300 No Waiver of Default**

The failure of a party to insist upon strict adherence to any term of this Contract shall not be considered a waiver or deprive the party of the right thereafter to insist upon strict adherence to that term, or any other term, of this Contract.

**2.301 Survival**

Any provisions of this Contract that impose continuing obligations on the parties including the parties' respective warranty, indemnity and confidentiality obligations, shall survive the expiration or termination of this Contract for any reason. Specific references to survival in this Contract are solely for identification purposes and not meant to limit or prevent the survival of any other section.

**2.302 Covenant of Good Faith**

Each party agrees that, in its dealings with the other party or in connection with this Contract, it shall act reasonably and in good faith. Unless stated otherwise in this Contract, the parties will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required of them in order for the other party to perform its responsibilities under this Contract.

**2.303 Permits**

Contractor shall obtain and pay any associated costs for all required governmental permits, licenses and approvals for the delivery, installation and performance of the Services. The State shall pay for all costs and expenses incurred in obtaining and maintaining any necessary easements or right of way.

**2.304 Website Incorporation**

Unless otherwise specified in this Contract, the parties expressly state that they will not be bound by any content on the other party's website, even if the other party's documentation specifically referenced that content and attempts to incorporate it into any other communication, unless the party has actual knowledge of such content and has expressly agreed to be bound by it in a writing that has been manually signed by authorized representatives of both parties.

**2.305 Taxes**

Contractors shall collect and pay all applicable federal, state, and local employment taxes.

**2.306 Prevailing Wages – Deleted N/A**

**2.307 Call Center Disclosure**

Contractor and/or all subcontractors involved in the performance of this Contract providing call or contact center services to the State must disclose the location of its call or contact center services to inbound callers. Failure to disclose this information shall be a material breach of this Contract.

**2.308 Future Bidding Preclusion**

Contractor acknowledges that, to the extent this Contract involves the creation, research, investigation or generation of a future RFP, it may be precluded from bidding on the subsequent RFP. The State reserves the right to disqualify any Bidder if the State determines that the Bidder has used its position (whether as an incumbent Contractor, or as a Contractor hired to assist with the RFP development, or as a Contractor offering free assistance) to gain a leading edge on the competitive RFP.

2.310 Deleted N/A

2.320 Extended Purchasing

**2.321 MiDEAL - Deleted N/A**

**2.322 State Employee Purchases – Deleted N/A**



### Appendix A: General Material Specifications

Each college-entrance and work skills assessments booklet should be printed in black ink on white paper, such that the items on one page do not interfere with those printed on the reverse side. The front cover of each assessment booklet college-entrance and work skills assessments College portion of the MME assessment – different then the color(s) used for the Michigan-Developed assessment components. Each version of the college-entrance and work skills assessments booklet (initial, accommodation, make-up, and emergency) should also have a unique color on the cover. Answer documents should also contain printing in the same color of ink as the initial assessment booklets that make the connection between answer documents and the corresponding booklets obvious.

The total number of content areas and assessment forms developed per Contract year is dependent on which college-entrance and work skills assessments are selected. The following model is based on the ACT and ACT WorkKeys.

Based on the use of the ACT and ACT WorkKeys, the total college-entrance and work skills assessments test booklet forms developed per Contract year will be 13. The college-entrance and work skills assessments MME test booklets will consist of the multiple-choice and constructed-response items. Each assessment will be timed. An outside seal will enclose all sections of the assessment booklet and an inner seal will hold fast the individual sections. The matrixed and field test items will be embedded within their content area. The position of matrixed items and field test items may change from assessment cycle to assessment cycle, but must remain constant within an assessment cycle. All answers are marked in machine-scannable answer documents. The separation may be done by providing separate sections on the answer documents for each content area of the assessment.

1. Overall Quality: All documents must be of typeset quality. All graphics must meet professional commercial standards. The quality of the materials (i.e., paper, ink) used to produce all documents must meet with the CCI's approval.
2. Printing and Approval Process: For the college-entrance and work skills assessments, all printed documents must undergo the following steps:
  - a. The MDE Michigan-Developed (separate Contract) prepares the print optimized camera-ready versions of the regular non-scannable materials.
  - b. MDE reviews and passes these along to the MME Michigan-developed component Administration Contractor.
  - c. The Administration Contractor develops page proofs of all materials. Electronic proofs are confidentially submitted to the CCI.
  - d. The CCI has three (3) business days to review page proofs. The CCI returns an electronic copy of the proofs to the Administration Contractor with corrections marked, as needed.
  - e. Steps c and d are repeated until the CCI gives written approval of page proofs.
  - f. The Administration Contractor produces blueline proofs. Electronic blueline proofs are submitted to the CCI.
  - g. The CCI reviews blueline proofs. The CCI returns an electronic copy of the blueline proofs to the Administration Contractor with corrections marked, as needed.
  - h. Steps f and g are repeated until the CCI gives written approval to print.
  - i. The Administration Contractor shall prepare the print optimized camera-ready versions of the accommodation materials and follow steps c through h.
  - j. Administration Contractor prints materials to the quantities approved by the CCI.
  - k. Seven (7) sets of each regular print test booklet and reader script; one (1) set of each accommodation material; and 20 sets of each answer document, administration manual and header sheet template shall be provided to MDE after the printing of each begins and before materials begin to ship to schools.
- 
3. Assessment Booklets: All assessment booklet formats (including paper, braille, reader scripts, audio and video versions) are secure documents that must be returned by the school district to the Contractor after the assessment is finished.

All assessment booklets will be printed, to result in, two (2) sided on 8.5" x 11" sheets of 30# white paper stock offset with color cover ink (black and blue PMS 1234 [or red PMS #####, etc]) and black inside ink. The weight of the paper stock can be changed as long as the opacity does not allow for the reading of text from the opposite side of the paper. Bidders must provide a sample of the paper stock they intend to use along with their proposal.



The Development Contractor or the CCI will provide a camera-ready copy of all assessment booklets to the Administration Contractor.



4. Answer Document:

- a. There will be one (1) Answer Document for the Michigan-developed portion of the MME. Top right corner clip on all documents.
- b. As referenced in this Contract, the CCI must propose a mechanism to ensure that all pages of an Answer Document stay linked when the booklet is physically separated to facilitate scoring. This includes pages containing student identification information, multiple-choice items, and constructed-response items. The CCI must approve the Administration Contractor's method of carrying out this requirement.
- c. Item numbering and spacing in each Answer Document shall match the item numbering and page breaks in the corresponding assessment booklet.
- d. Answer documents shall be printed resulting in machine-scannable two (2) sided bound 8.5" x 11" white paper, with black and monochrome (to match the cover color of the initial assessment booklet) ink color (black and Scan Blue 123 [or scan red ###, etcetera).

5. Enlarged Print Versions of Materials:

- a. Materials are to be magnified to a 35% increase over original.
- b. Test booklet documents originally printed on 8½ " x 11" paper will be printed on 11" x 15" paper for enlarged print.
- c. Paper (type and stock) used for large print versions of materials shall be equivalent to that used in the regular version.
- d. Non-glossy (matte) paper must be used.
- e. The darkest possible print setting that will not turn the paper gray must be used.

6. Braille Versions of Materials:

- a. Assessments are to be brailled and proofread by a certified braille transcriber. The American Printing House for the Blind, Louisville, KY, is the preferred Vendor for the Braille testing materials.
- b. The braille shall follow formats in the publication entitled *Standardized Tests*, published by the National Braille Association. Nemeth Code Text should be followed for mathematics and science. Textbook Code (Literary Code) should be followed for ELA (reading, writing) and social studies.

7. English Language Learner Accommodation materials:

- a. An English reader script must be created for each test booklet (include the college-entrance and work skills) by the respective Contractor. The reader scripts should cover all content areas except English reading sections of the test.
- b. The English reader script is then provided to translators that have mastery in the target language, English, and the content area as well as grade level of the areas being translated. Target languages are Spanish and Arabic.
- c. The translators create readers scripts in the target languages.
- d. The target language reader scripts must then be reviewed by an independent third party for accuracy and natural language flow.
- e. Once the reader scripts are determined to be accurate they are used to make video masters.
- f. Video masters are created by using visual images of English text from actual test materials with an audio of the target language.
- g. When done, there should be at least three (3) sets of video masters for each test or section - each with different audio (English, Spanish and Arabic).

8. Audiotape, Videotape, and DVD Versions of Assessments:

- a. All media must be labeled with program name (MME), language version, accommodation type (e.g. ELL or Visually Impaired), content area, and date of assessment (e.g. Spring 2009). The label must also state "Any copying is strictly prohibited. All rights under copyright reserved. TM, ®, and Copyright © by the Michigan Department of Education. All rights reserved." These labels shall be approved by the CCI. Only the college-entrance and work skills media may also include other proprietary language.
- b. The labels for DVDs must also state "Audio Only Version" Or "Video Version" plus the media type of DVD.
- c. Each content area shall have a separate audio/video unit (DVD, VHS, Audiotape). Do not combine all content areas into one (1) video/audio unit.



- d. Individual audio/video units must be wrapped with the complimenting content areas' audio/video units (e.g. so that one (1) unit for each content area is included), one (1) corresponding assessment booklet plus any related ancillary materials (e.g., acetate ruler) for distribution to school districts. An example of what one (1) package would contain for a Spanish accommodation is: one (1) Spanish mathematics video DVD, One (1) Spanish science video DVD, One (1) Spanish social studies video DVD, one (1) regular form #1 test booklet, and one (1) acetate ruler.



- 
- e. The DVDs should be sectioned so as to permit students to re-listen to a passage, a question, or the responses to the question without listening to the entire section again.
- f. The same program shall be recorded on both sides of each audiotape.
- g. Additional requirements are in section 1.104.D.
- 
- 9. Assessment Administration Manuals and Assessment Coordinator manuals:
  - a. All manuals shall be printed in saddle-stitched booklets with 8.5" x 11" cover stock 50# buff offset, inside stock 30# white offset with black ink on both sides. The weight of the paper stock can be changed as long as the opacity does not allow for the reading of text from the opposite side of the paper.
  -
- 10. Student Labels
  - a. Refer to Section 1.104.H.

1.

### Material Quantities

All Michigan-Developed MME materials will comply with the general materials specifications of this appendix. The following tables describe an estimate of the deliverable products required for each of the three (3) years of the Contract. Actual materials and their quantities shall be approved by the CCI in writing before production of each item begins.

1. This table covers the materials that are needed for the college entrance and work skills assessment:

College Entrance Tests	
Standard Assessment Booklet	200,000
Enlarged print assessment booklet	250
Braille assessment booklet	45
Audiotape/Audio DVD	6,000:4,000
Reader Script – English Version	1,700
Reader Script – Spanish Version	10
Reader Script – Arabic Version	10
VHS/DVD Video – English Version	200:500
VHS/DVD Video – Spanish Version	100:500
VHS/DVD Video – Arabic Version	100:400
School Header Sheet	4,000
Student Labels	210,000
Answer document	210,000
Work Skills	
Standard Assessment Booklet	200,000
Enlarged print assessment booklet	250
Braille assessment booklet	45
Audiotape/Audio DVD	6,000:4,000
Reader Script – English Version	1,700
Reader Script – Spanish Version	10
Reader Script – Arabic Version	10
VHS/DVD Video – English Version	200:500
VHS/DVD Video – Spanish Version	100:500
VHS/DVD Video – Arabic Version	100:400
School Header Sheet	4,000
Student Labels	210,000
Answer document	210,000

2. The materials that are not component specific for the MME Assessment:
  - All Subjects:
  - Assessment Administration Booklet: 17,000



- Assessment Accommodations Administration Booklet: 25,000



### Appendix B: Michigan Merit Examination

#### Conceptual Draft Schedule Using Current College-Entrance & Work Skills Testing Components

Spring 2009	Initial Dates	Makeup Dates	Assessments	Students Tested
	March 10	March 24	ACT Plus Writing®	All Grade 11  plus Grade 12 as needed
	March 11	March 25	WorkKeys® <ul style="list-style-type: none"> <li>• Applied Mathematics</li> <li>• Reading for Information</li> <li>• Locating Information</li> </ul>	
	March 12	March 26	Michigan Mathematics Michigan Science Michigan Social Studies	

Spring 2010	Initial Dates	Makeup Dates	Assessments	Students Tested
	March 9	March 23	ACT Plus Writing®	All Grade 11  plus Grade 12 as needed
	March 10	March 24	WorkKeys® <ul style="list-style-type: none"> <li>• Applied Mathematics</li> <li>• Reading for Information</li> <li>• Locating Information</li> </ul>	
	March 11	March 25	Michigan Mathematics Michigan Science Michigan Social Studies	

Spring 2011	Initial Dates	Makeup Dates	Assessments	Students Tested
	March date to be determined	March date to be determined	ACT Plus Writing®	All Grade 11  plus Grade 12 as needed
	March date to be determined	March date to be determined	WorkKeys® <ul style="list-style-type: none"> <li>• Applied Mathematics</li> <li>• Reading for Information</li> <li>• Locating Information</li> </ul>	
	March date to be determined	March date to be determined	Michigan Mathematics Michigan Science Michigan Social Studies	

•  
•

•  
•  
•  
•  
•



## Appendix C: Information Technology Quality Plan

### A. Project Scope

The information technology system modules to be developed and implemented within the scope of this Contract as detailed herein.

### B. Deliverable Description

The principle deliverables for each IT module are identified in this Quality Plan in section G – Project Deliverables by Phase. Deliverables described under Section 1.103 Environment in this Contract is also required.

### C. Acceptance Criteria

Acceptance of these deliverables are defined by contract provisions and the IT Quality Plan. This includes adherence to the agreed-upon development methodology and standards.

System modules are acceptable when all required deliverables have been approved, system and user acceptance testing is successfully completed and approved, and the software is fully implemented and certified operable in the production environment. Unit testing will include technical review by DIT for compliance with security standards, State of Michigan standards and conformance to guidelines on web-based application appearance and function.

Milestones as follows:

Overall system design concept review and acceptance by CCI and DIT for each system module.

For each module:

- Biweekly status on progress, discrepancies and issues.
- Requirements completion and certification.
- Architecture and design certification with DIT
- Software technical review by DIT
- Quality assurance testing and certification
- Implementation operability certification (see 2.105 Performance and Reliability Evaluation (PARE))
- Updated Documentation

### D. Quality Assurance Activities

Test Plan: A thorough test plan will be executed for each system module to be developed. This thorough testing process will ensure the system product meets business requirements and project standards and operates successfully in the deployment environments. The Department of Education assures that user program leaders and staff selected for Quality assurance acceptance testing will be able to devote the time required to assure satisfactory quality of testing.

A qualified DIT staff member will conduct methods and product quality control reviews throughout the project. This person will report independently of the project staff to the project manager on methods and standards compliance issues, acceptance of project deliverables, alignment with user requirements, and effectiveness of management controls.

### E. Project Monitoring and Control

The principle project control tool is the project schedule. The project will take status checkpoints every week (unless otherwise agreed to with the CCI) during the development process. Control deliverables include formal status report, formal discrepancy/issue log review, review meeting or conference call)

- Project schedule and weekly status reports.
- Ongoing logging and tracking of project issues with timely resolution.
- Rigorous quality assurance process.
- Both continuous observation and scheduled formal overall project progress review sessions for system modules with feedback to the Contractor, CCI, and DIT project manager.

### F. Project Team Quality Responsibilities

As noted earlier, the mechanics of the development cycle require several quality checks by the project team. These include:

1. Definition of system module requirements and approval with the client.
2. Overall architecture and design review by DIT, including conformance with standards and technology environment requirements, compliance with appearance and web interface requirements, compliance with security requirements and general adherence to industry best practices.



3. Adherence to the test plan. Testing against functionality checklists, requirements test scripts, performance benchmarks established as part of the development, system load testing. Formal discrepancy reporting and resolution processing across all stages of testing.
4. User acceptance testing of each system module delivered. This includes confirmation that agreed-upon functionality levels and requirements have been achieved.
5. Final acceptance testing,
6. Formal clearance of all discrepancy and issue logs prior to user acceptance and quality assurance sign off and before production implementation of each module.

#### G. Quality Plan - Project Deliverables by Phase

The following is a list of all deliverables required for Project Planning.

##### Project Initiation and Planning

Deliverable	Software Used	Responsible
Project Charter	MS Word	DIT IT Project Manager
Quality Plan	MS Word	DIT IT Project Manager
Communications Plan	MS Word	DIT IT Project Manager
Risk Management Plan	MS Word	DIT IT Project Manager
Project Schedule (including tasks for each module updated throughout the contract)	MS Project	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Information technology issue log documenting issues related to the system modules and resolution (updated throughout the contract).	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>

The following is a list of all deliverables required for each system module.

##### Analysis and Design

Deliverable	Software Used	Responsible
<ul style="list-style-type: none"> <li>Requirements documents with client and DIT sign-off</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
<ul style="list-style-type: none"> <li>Technical Environment Architecture</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
<ul style="list-style-type: none"> <li>Module System Design</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
<b>Physical Data Model</b>	Visio	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
System and module Test Scripts including performance benchmarks and load balancing. User Acceptance Test Scripts	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
<ul style="list-style-type: none"> <li>Design technical sign-off with DIT project manager.</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> <li>DIT IT Project Manager</li> </ul>





## Construction and Testing

Deliverable	Software Used	Responsible
Software source code and deployment files	Selected Development Software	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Implementation Plan for Testing	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Software Technical Review with DIT sign-off	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Completed module testing and results logged.	<ul style="list-style-type: none"> <li>MS Word</li> </ul>	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Completed System Testing and results logged	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Training Plan and materials for client user testing	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
On-line Help	Robo Help	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Completed Client User Acceptance Testing and <ul style="list-style-type: none"> <li>results logged</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
<ul style="list-style-type: none"> <li>Client User Acceptance Sign Off</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> <li>DIT IT Project Manager</li> </ul>
<ul style="list-style-type: none"> <li>Quality Assurance Review Sign Off with DIT</li> </ul>	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> <li>DIT IT Project Manager</li> </ul>
Software Deployment and Implementation Plan	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>

## Implementation

Deliverable	Software Used	Responsible
Production software source code and deployment files.	Selected Development Software	Contract Project Manager
<ul style="list-style-type: none"> <li>Software and Database Deployment to Production</li> </ul>	<ul style="list-style-type: none"> <li>Production Servers Updated</li> </ul>	Contract Project Manager DIT IT Project Manager
Training Plan and materials	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
User Training Sessions Completed	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Implementation Problems\Issues Logged and resolved.	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> </ul>
Lesson Learned Discussion and Documentation Corresponding Standards/Procedures Updated	MS Word	<ul style="list-style-type: none"> <li>Contract Project Manager</li> <li>DIT IT Project Manager</li> </ul>



- 30-90 Day Post Implementation Review certification with client.

MS Word

- Contract Project Manager
- DIT IT Project Manager

**Final Documentation**

Deliverable	Software Used	Responsible
<ul style="list-style-type: none"><li>• Upon contract completion, Technology Transfer to DIT project staff on all system components completed including necessary training and documentation.</li></ul>	MS Word	<ul style="list-style-type: none"><li>• Contract Project Manager</li></ul>
Maintenance and Support Plan	MS Word	<ul style="list-style-type: none"><li>• Contract Project Manager</li></ul>
Enhancements Log	MS Word	<ul style="list-style-type: none"><li>• Contract Project Manager</li></ul>

**Quality Plan - System Test Plan****Objectives of the System Test Plan**

The objective of the system test plan is to verify that the system operates correctly under a variety of data conditions and ensure that the navigation through the system is consistent and the system will perform successfully and provides the flexibility and components the user has requested. System testing includes testing the interfaces between other systems and correctness of inputs and outputs.

The testing standard defines the order of testing, test types to be executed and roles involved.

**Method of Testing**

The test methodology is to verify that the entire process is correct and understandable to the user. The navigation of the system will be checked to confirm that it is straightforward and easy for the user to follow. The GUI will be checked to ensure that the system was designed with conformance to State standards on web-based application appearance and function.

The performance of the system will be checked using a database with a typical load of data and checking response time of processing and retrieval. The uploading/downloading of data, modification, deleting and printing reports will be tested.

All levels of the security system will be checked to confirm that users are limited to the functions assigned to their groups.

**Overall Plan****Testing Schedule**

The testing schedule for each module will be defined in the project schedule.

**Testing Materials****Test Checklists and Test Script Scenarios**

To assure completeness of testing, checklist and test script scenarios will be documented after the module business requirements are finalized. The purpose is to itemize all test cases which must be executed to certify that the system meets business requirements, architecture and design standards.

**Test Data**

A copy of the production database will be replicated to the testing database environment as needed to facilitate thorough testing. System interface modules will also be used to populate test data. Test data will also need to be created to ensure all test cases are executed.

**Criteria for Passing Tests**

All test cases are required to pass unless otherwise specified in the test script. Success of the entire system will be judged by tester's satisfaction that the new system performs satisfactory and the GUI is consistent and understandable to the user.

For further information on Test Failures see the Procedure Control section of this document.

**Procedure Control****Test Initiation**

Testing will proceed following successful installation of the system setup and implementation in the appropriate test environment.

**Test Execution**

The testers will execute all test cases within the timeframe scheduled.

**Test Failure**

Any test not passing will be logged. All test failures will be corrected by the developer and re-tested. When a given problem is demonstrated to be an isolated one, a re-test of just that module will suffice. Where the problem does or can impact several areas of functionality all affected modules will be re-tested as appropriate.



## Test Plan Standard - Scope of Test

	Test Scope	Target of Test	How it is Done	Type of Tests	Role	Testing Process
I N T E G R A T I O N	Unit (Objects)	<ul style="list-style-type: none"> <li>Verify the control flows and the data flows for each module.</li> </ul>	<ul style="list-style-type: none"> <li>Development and executable environment.</li> </ul> White-box, black box. GUI testing.	2&3	Developer	Use guidelines and test scripts from design phase to complete object level testing. Manually complete checklists to record test results. Maintain objects and retest until successful completion. Document additional test cases needed for complex logic.
	Module	System Module	Executable environment.  Black box test.	1,2&3	Analyst	Following unit testing, Analyst and developer review test plans and make necessary changes. Analyst conducts testing and records results. Developer makes the necessary code changes. Analyst repeats necessary test cases until successful completion.

**TERMS AND CONDITIONS****CONTRACT NO. 071B8200257**

	System	Whole system version or release.	Executable environment. Function, performance testing.	4,5,6,7,8,9,11	Architect, Developer, DBA, Analyst	System testing will be scheduled before implementation of a system version or release (iteration). Problems are logged for resolution. Developer makes the necessary code changes. Repeat necessary test cases until successful completion.
	User Acceptance	Whole system version or release.	Executable environment Testing at user site with test data.	2,3,8,10	User, Analyst	User acceptance testing will be scheduled after successful module and system testing of a system version or release (iteration). Problems are logged for resolution. Developer makes the necessary code changes. Repeat necessary test cases until successful completion.



## Types of Tests

### 1. Data & Database Integrity Testing

This test focuses on:

- Checking the integrity of the data types used and the referential integrity for the tables in the database.
- Ensure Database access methods and processes function properly and without data corruption.

#### Technique

Invoke each database access method and process, seeding each with valid and invalid data (or requests for data).

Inspect the database to ensure the data has been populated as intended, all database events occurred properly, or review the returned data to ensure that the correct data was retrieved.

#### Completion Criteria

All database access methods and processes, function as designed and without any data corruption.

#### Tasks

Developer - Test the SQL statements for the input data and the expected results.

DBA - Test the database design for the referential integrity.

### 2. Function Testing (Including functional regression testing)

This test focuses on:

- Requirements that can be traced directly to components and business rules.
- Verifying proper data acceptance, processing, and retrieval, and the appropriate implementation of the business rules.

#### Technique

Execute each module using valid and invalid data, to verify the following:

- The expected results occur when valid data is used.
- The appropriate error / warning messages are displayed when invalid data is used.
- Each business rule is properly applied.

#### Completion Criteria

All planned tests have been executed.

All identified defects have been addressed.

### 3. User Interface Testing

This test focuses on:

- Window objects and characteristics, such as menus, fonts, size, position, tree view controls conform to GUI standards.
- Navigation through the system properly reflects business process and requirements.

#### Technique

Create / modify tests for each window to verify proper navigation.

Prepare a checklist of the GUI Standards to be tested for the window or group of windows.

#### Completion Criteria

Each window successfully verified to remain consistent with the defined standards.

### 4. Performance Profiling

This test focuses on:

- Evaluating response times, transaction rates, and other time sensitive requirements.
- Verifying performance behaviors for designated transactions or business functions under the normal anticipated workload and anticipated worse case workload.

#### Technique

Use tests developed for Function Testing

Develop and run scripts on one (1) machine and repeat with multiple clients

**Completion Criteria**

Successful completion of the test scripts without any failures and within acceptable time allocation.

**5. Load Testing**

This test focuses on:

- Verifying performance behaviors, time for designated transactions or business cases under varying workload conditions.

**Technique**

Use tests developed for Function Testing with varying the number of transactions or number of times the transaction occurs.

**Completion Criteria**

Successful completion of the tests without any failures and within acceptable time allocation.

**6. Stress Testing**

This test focuses on:

- Verifying that the target-of-test functions properly and without error under the following stress conditions:
  - Little memory available on the server.
  - Maximum number of clients connected (or simulated).
  - Multiple users performing the same transactions against the same data / accounts.
  - Worst case transaction volume / mix.
- 

**Technique**

Use tests developed for Performance Profiling or Load Testing. To test limited resources, tests should be run on single machine, RAM on server should be reduced (or limited).

**Completion Criteria**

All planned tests are executed and specified system limits are reached / exceeded without the software or software failing.

**7. Volume Testing**

This test focuses on:

Verifying that the target-of-test successfully functions under the following high volume scenarios:

- Maximum number of clients connected all performing the same, worst case (performance) business function for an extended period.
- Maximum database size has been reached (actual or scaled) and multiple queries / report transactions are executed simultaneously.

**Technique**

Use tests developed for Performance Profiling or Load Testing.

**Completion Criteria**

All planned tests have been executed and specified system limits are reached / exceeded without the software failing.

**8. Security Testing**

This test focuses on:

- Verifying that a user can access only those functions / data for which their user group is provided permissions.
- Verifying security requirements are implemented correctly.

**Technique**

Identify and list each user group and the functions / data each group has permissions for.

Create tests for each user group and verify permissions by logging into the system with different user IDs.

Create tests to verify all data handling for inputs/outputs, uploads/downloads to meet security requirements.

**Completion Criteria**

For each known user group, the appropriate function / data are available and all transactions function as expected and run in prior function tests. For rest of the users the service is denied with a log in system administration log file. For all data handling scenarios verify proper security mechanisms are present and tested.

**9. Configuration Testing**

This test focuses on:

- Verifying that the target-of-test functions properly on the required hardware / software configurations.

**Technique**

Use Function Test scripts. Open / close various non-target-of-test related software, such as the Microsoft applications, Excel and Word, either as part of the test or prior to the start of the test.

Repeat the above process, minimizing the available conventional memory on the client.

**Completion Criteria**

For each combination of the target-of-test and non-target-of-test software, all transactions are successfully completed without failure.

**10. Installation Testing**

This test focuses on:

- Verifying that the software packages for the client and server properly installs onto each required hardware configuration for new installation, reinstallation or updating with new version.

**Technique**

Manually or develop installation scripts to validate the condition of the target machine.

**Completion Criteria**

The transactions for the software execute successfully without failure.

**11. Integration Testing**

This test focuses on:

- Verifying proper integration of the software modules and business rules are followed correctly.

**Technique**

Use the function test scripts to verify the proper integration of the modules.

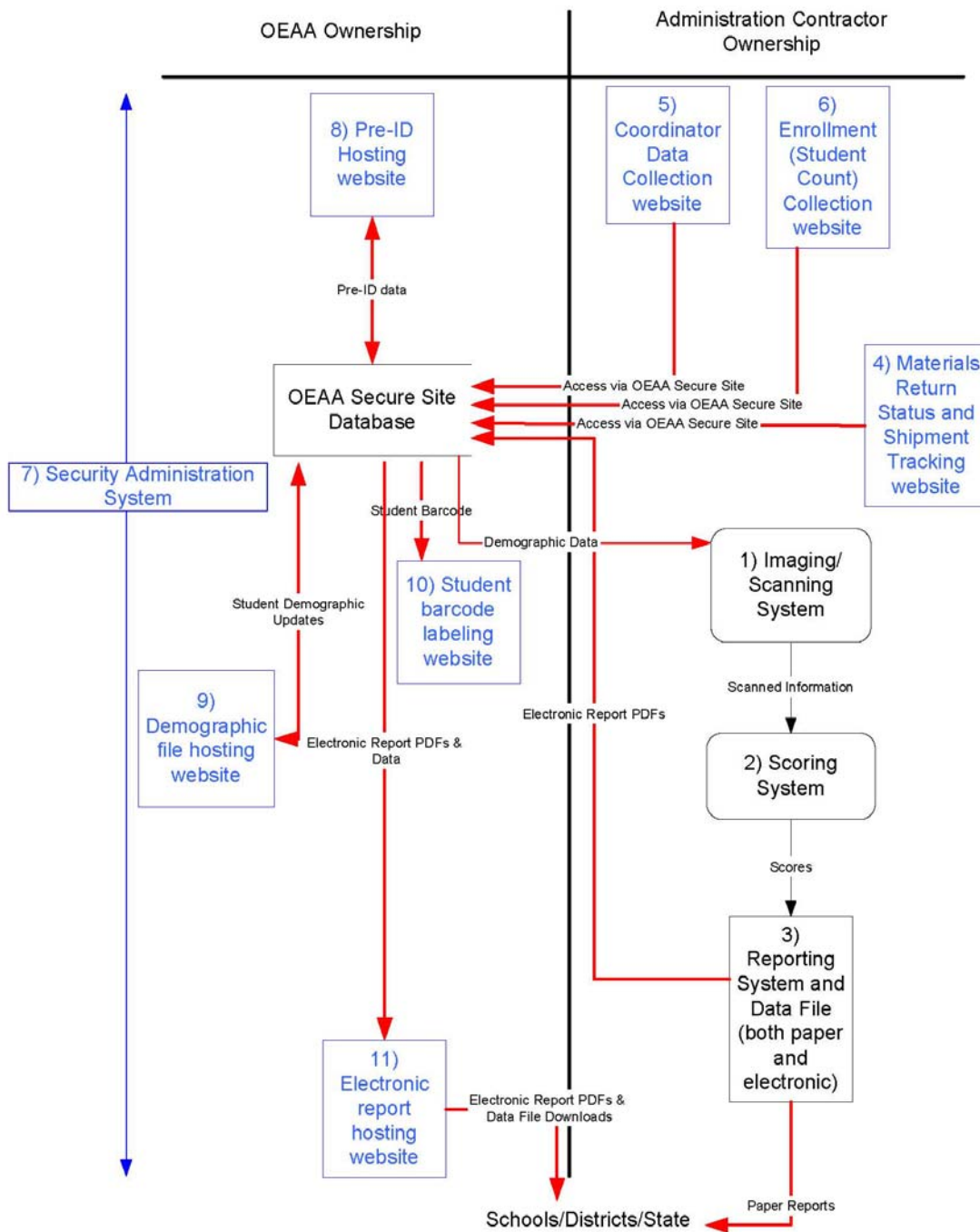
**Completion Criteria**

All transactions for the software execute successfully without failure.



## Appendix D: MDE Computing Environment

### OEAA Assessment Administration System Flow



Information regarding the State's information technology architecture and standards may be found at: <http://www.michigan.gov/dit>.

**Overview of Existing State Operating Environments for Education**

Broadly classified into three (3) environments: Development/Test, Quality Assurance, and the Production Environment.

All code changes undergo a three (3) step process to be introduced into production:

1. First, code is developed locally on the developers workstation and tested in the "development" server environment, which is composed of MS SQL (2000 or 2005) database, Microsoft SQL 2000 or 2005 Reporting Services Server, and Windows 2000/2003 server that serves as both application and Web server (IIS 5.0 or 6.0). Work will be performed utilizing tools on the local developer's machine utilizing server based Visual Source Safe (6.0c) for source code control. Contractor will be given Read/Write on all development servers as needed.
2. Second, once development is completed and initially tested, the code is moved to the Quality Assurance (QA) environment. The QA environment mimics the production environment and consists of Load Balanced Web Servers (IIS 5.0 or 6.0), Application Server (Windows 2000/2003), Microsoft SQL 2000 or 2005 Reporting Services Server, and Active/Active Clustered SQL Servers (MS SQL 2000 or 2005). QA pushes/changes are requested through the Remedy system. The installation script(s) and code is then tested. Client(s) perform final user acceptance testing (UAT) to verify proper functionality.
3. Finally, once approval has been received, the code changes are promoted by MDIT staff to the Production Environment utilizing the same installation script(s) used for the QA environment. The Production Environment is composed of Load Balanced Web Servers (IIS 5.0 or 6.0), Application Server (Windows 2000/2003), Microsoft SQL 2000 or 2005 Reporting Services Server, and Active/Active Clustered SQL Servers (MS SQL 2000 or 2005). Production pushes and changes to the production environment that could affect other sites in the environment must be requested through the Remedy system.

The current workplace technology for MDE environment includes:

- Windows 2000 Server SP4 or 2003
- Internet Information Services 5.0 or 6.0
- SQL Server 2000 Enterprise Edition SP3 or SQL Enterprise Edition 2005
- Microsoft SQL 2000 or 2005 Reporting Services
- Cisco CSS 11000 series content services switch
- SAN (storage area network) technology for data storage
- NAS (network area storage) technology for file storage

The following software tools and skills are used:

- Microsoft Visual Studio 6.0 (Visual Basic, Visual FoxPro, and C++)
- Microsoft Visual Studio 2003 (1.1 and 2.0 framework, VB.Net, C#.Net, ASP.Net, and Microsoft SQL Reporting Services)
- Microsoft Visual Studio 2005 (1.1 and 2.0 framework, VB.Net, C#.Net, ASP.Net, and Microsoft SQL Reporting Services)
- Microsoft SQL (2000 & 2005)
- Microsoft Message Queue (MSMQ)
- Microsoft Visual Source Safe (6.0c)
- Microsoft Access 2000 and above
- Microsoft Project
- Microsoft Visio
- HTML
- JavaScript
- XML
- FTP
- SMTP

**State Network Environment**

The State of Michigan has a very complex network. The network has different perimeter entry points, and an internal network made up of a large WAN, a large MAN, and three (3) hosting centers located in the Lansing metropolitan area.



**Contractor Extranet:** This zone allows Contractors to connect to the State's network via either point to point WAN circuits, or Gateway to Gateway VPN over the internet. The State currently allows Contractors to place their network equipment on our premise, or they can terminate their connection at our dmarc at an SBC facility. This zone is separated from the State's network with a firewall. This access is application only; remote control access is not allowed.

**Local Government Extranet:** This Zone allows local government entities access to applications on the State's network. This is provided by the provisioning of separate WAN circuits on the State's WAN cloud. This zone is separated from the State's network with a firewall.

**State of Michigan's Lansing Metropolitan Area Network (LMAN):** This is the State's high-speed backbone network that is utilized by the State's employees to access SOM resources and internet resources. The backbone is made up of redundant fiber links capable of transporting 2GBPS of traffic. Several State buildings as well as the State's three (3) hosting centers are also connected to the backbone through a distribution layer network.

**Agency Internet DMZ:** This zone is for public-facing server access to the Internet. This zone is firewall protected from the Internet, as well as from the LMAN. Servers in this zone can connect with 100mb Ethernet. The State currently has Internet services provided by Merit and Sprint to provide redundancy. This zone is available at all three (3) hosting centers.



## Appendix E: File Formats

I. Pre-Identification File Format

## Pre-Identification District Upload Record Format

Start Pos	End Pos	Field Length	Data Type	Field Name	Data Requirements
1	5	5	Numeric	<b>District Number</b>	State assigned district number, cannot be blank
6	9	4	Numeric	<b>School Number</b>	State assigned school number, cannot be blank
10	11	2	Numeric	<b>Pupil grade</b>	04, 05, 07,08, 10, 11 & 12 cannot be blank, must be numeric
12	27	16	Alpha	<b>Pupil last name</b>	Alpha only, no commas or special characters, cannot be blank, left justified
28	39	12	Alpha	<b>Pupil first name</b>	Alpha only, no commas or special characters, cannot be blank, left justified
40	40	1	Alpha	Pupil middle initial	Alpha or blank
41	50	10	Numeric	Student number	Numeric or blank position (no alpha or special characters) (the field is regarded as one data field, not 10 individual fields)
51	51	1	Alpha	<b>Student gender</b>	M' = Male, 'F' = Female, cannot be blank
52	53	2	Numeric	<b>DOB month</b>	Date of birth '01' thur '12', cannot be blank (must be 2 digits)
54	55	2	Numeric	<b>DOB day</b>	Date of birth '01' thur '31', cannot be blank (must be 2 digits)
56	57	2	Numeric	<b>DOB year</b>	Date of birth '00' thur '99', cannot be blank (must be 2 digits)
58	58	1	Numeric	<b>Student Ethnicity</b>	Student Ethnicity - must be generic 1. American Indian or Alaskan Native 2. Asian or Pacific Islander 3. Black, not of Hispanic Origin 4. Hispanic 5. White, not of Hispanic Origin 6. Multiracial 7. Other
59	60	2	Filler	Unused	Leave this area blank
61	61	1	Alpha	S.E.	Special Education (S.E.) 'Y' or blank  A Special Education student is a person under 26 years of age who is determined by an individualized educational planning committee (IEPC) (or a hearing officer) to have a disability defined under Michigan's Administrative Rules (R340.1703-R340.1715) that necessitates special education.
62	62	1	Alpha	L.E.P.	Limited English Proficiency (L.E.P.) 'Y' or blank Children who have or reasonably may be expected to have difficulty performing ordinary classwork in English because their native tongue is a language other than English or because they come from a home or environment where the primary language used is a language other than English.

**TERMS AND CONDITIONS**
**CONTRACT NO. 071B8200257**


63	63	1	Alpha	Accommodations	Accommodations (Accom) 'Y' or blank
					Any testing provision made so that the effect of a disability is minimized and so a student is provided an opportunity to demonstrate the degree of achievement he or she actually possesses.

Start Pos	End Pos	Field Length	Data Type	Field Name	Data Requirements
64	64	1	Alpha	Migratory Status	Migratory Status (M.S.) 'Y' or blank  A student who has moved with a parent/guardian within the past year across state boundaries in order that a parent/guardian might secure temporary or seasonal employment.
65	65	1	Alpha	Econ. Disadvantaged	Economically Disadvantaged (E.D.) 'Y' or blank. Based on free/reduced lunch eligibility or other criteria.
66	66	1	Alpha	Mobility	Mobility (MOB) 'Y' or blank (A student who has been enrolled in this school or its feeder school for less than one year at the time the MEAP test is administered).
67	68	2	Numeric	Research Code I	Research Code I '01' thru '10' or blank (must be 2-gisits)
69	70	2	Numeric	Research Code II	Research Code II '01' thru '10' or blank (must be 2-gisits)
71	74	4	Numeric	Feeder School Code	Must be the official four digit state-assigned school code (numeric or blank)
75	82	8	A/N	Administration Code	Administration Code (district use, free format, printed on document)
83	91	9	Numeric	Social Security Num	Social Security Number (9-digit number or blank)
92	99	8	Filler	Unused	Leave this area blank
100	134	35	A/N	Pupil Address	Pupil Address
135	154	20	A/N	Pupil City	Pupil City
155	156	2	Alpha	Pupil State	Pupil State
157	161	5	Numeric	Pupil Zipcode	Pupil Zipcode
162	167	6	Numeric	Graduation Date	Expected High School Date of Graduation (MMYYYY or blank)
168	174	7	Numeric	Merit ID Number	Merit Identification Number (same as HST ID Number) must have all seven digits including leading zeroes.
175	178	4	Numeric	Math Course ID	Math Course/group code - alphanumeric - used for test distribution and reporting
179	182	4	Numeric	Reading Course ID	No longer used
183	186	4	Numeric	Science Course ID	Science Course/group code - alphanumeric
187	190	4	Numeric	Writing Course ID	No longer used
191	194	4	Numeric	SS Course ID	Social Studies Course/group code - alphanumeric
195	198	4	Numeric	ELA Course ID	English Language Arts Course/group code - alphanumeric
199	199	1	Filler	Unused	Leave this area blank
200	200	1	Filler	Unused	Leave this area blank
201	220	20	Alpha	Birth City	City the student was born in.
221	221	1	Numeric	Birth Order	Used in the case of twins with the same name and gender.
222	231	10	Numeric	UIC	Unique Identifier from CEPI.



Note 1: Fields shaded in gray are new for this test period and **optional**.

Note 2: If course/group codes are present prior to Pre-ID overprinting, answer folders will be shipped sorted alphabetically by Course/group by grade by subject by school. Course/group codes will also be available for reporting. Districts will be provided with a batch method to update these codes prior to reporting if needed.

Version 1.0



## II. Student Demographic File

This file contains one (1) record per student per test cycle.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2		Yes	
TestType	VarChar	5		Yes	MEAP, MI-Access, HSA, MME, ELPA
StudentNumber	VarChar	10		Yes	
ISDCCode	Int	2		Yes	
DistrictCode	VarChar	5		Yes	
SchoolCode (Building Code)	VarChar	5		Yes	
Feeder School	VarChar	5		Yes	
Grade	VarChar	2		Yes	
Barcode	VarChar	10		Yes	
LastName	VarChar	25		Yes	
FirstName	VarChar	25		Yes	
MiddleInitial	Char	1		Yes	
UIC	Char	10		Yes	
Grade	VarChar	2		Yes	
Gender	VarChar	1		Yes	
Ethnic	VarChar	1		Yes	
DOB (DOB_Month, DOB_Day etc)	datetime	8		Yes	Reformat to MMDDYYYY format
ED	Bit	1		Yes	"1" if true. "0" or blank for not true.
SE	Bit	1		Yes	"1" if true. "0" or blank for not true.
LEP	Bit	1		Yes	"1" if true. "0" or blank for not true.
MS	Bit	1		Yes	"1" if true. "0" or blank for not true.
Flep	Bit	1		Yes	"1" if true. "0" or blank for not true.
LTFAY	Bit	1		Yes	"1" if true. "0" or blank for not true.
Migrant	Bit	1		Yes	"1" if true. "0" or blank for not true.
Mobility	Bit	1		Yes	"1" if true. "0" or blank for not true.



### III. Student Scores File

This file is one (1) record per student per subject, strand, domain, and benchmark. With rollups at each level.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2			
StudentNumber	VarChar	10			
ISDCode	Int	2			
DistrictCode	VarChar	5			
SchoolCode (Building Code)	VarChar	5			
Grade	VarChar	2			
ClassGroupCode	VarChar	5			
Barcode	VarChar	10			
UIC	VarChar	10			
Subject	VarChar	10		Yes	
Strand	Varchar	5	NULL	Yes	NULL = All Strands
Domain	VarChar	5	NULL	Yes	NULL = All Domains
Benchmark	VarChar	5	NULL	Yes	NULL = All Benchmarks
FormNumber	int	4		Yes	
Valid	bit	1		Yes	
RawScore	decimal(8,2)	8		Yes	Every level
PercentCorrect	decimal(8,2)	8		Yes	Every level
Unethical	bit	1		Yes	Only for Subject rollup
Attempted	bit	1		Yes	Only for Subject rollup
NonStandardAccom	bit	1		Yes	Only for Subject rollup
StandardAccom	bit	1		Yes	Only for Subject rollup
PerformanceLevel	int	4		Yes	Only for Subject rollup
ScaleScore	int	4		Yes	Only for Subject rollup

**IV. Student Item File**

This file is one (1) record per student per item presented. If an item assesses multiple benchmarks, then the item will appear multiple times under each benchmark.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2			
StudentNumber	VarChar	10			
ISDCCode	Int	2			
DistrictCode	VarChar	5			
SchoolCode (Building Code)	VarChar	5			
Grade	VarChar	2			
ClassGroupCode	VarChar	5	NULL		
Barcode	VarChar	10			
UIC	VarChar	10			
Subject	VarChar	10		Yes	
Strand	Varchar	5		Yes	
Domain	VarChar	5		Yes	
Benchmark	VarChar	5		Yes	
Multibenchmark	Bit	1		Yes	Item assesses multiple benchmarks (count only once); "1" if true. "0" or blank for not true.
FormNumber	int	4		Yes	
ItemNumber	int	4			
ItemPosition	int	4			
ReleasedItemNumber	Int	4	NULL	Yes	
Type	VarChar	2		Yes	CR or MC
FieldTest	Bit	1			"1" if true. "0" or blank for not true.
ExtendedCore	Bit	1		Yes	"1" if true. "0" or blank for not true.
FutureCore	Bit	1		Yes	"1" if true. "0" or blank for not true.
Response	Varchar	1	NULL	Yes	NULL for CR Items
FinalScore	decimal(4,1)	4		Yes	
Score1	int	4	NULL	Yes	CR Only
Score2	int	4	NULL	Yes	CR Only
Score3	int	4	NULL	Yes	CR Only
CommentCodes	VarChar	6	NULL	Yes	CR Only
ConditionCode	VarChar	1	NULL	Yes	CR Only
ErasureString	VarChar	4	NULL		0,1,2 in ABCD; 0 = No mark, 1 = Full Mark, 2 = Erasure, Null for CR Items



#### V. Summary Subject File

This file contains one (1) set of records for statewide and per ISD, district, and building. At each of those levels there is a record for each grade, subject, strand, domain, and benchmark with rollups at each level.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2			20 = MEAP, 22 = HS
TestType	Varchar	10			MEAP = gradea 3-8, HS = Grades 9-12
ISDCode	Varchar	2	NULL		NULL = Statewide
DistrictCode	Varchar	5	NULL		NULL = All Districts
BuildingCode	Varchar	5	NULL		NULL = All Buildings
Private	bit	1			1 = Private, 0 = Non-Private
Charter	Char	1			P = Public, C = Charter, N = Non-Public
Grade	Varchar	2			Grades 03 - 12
Subject	Varchar	5			
Strand	Varchar	5	NULL		NULL = All Strands
Domain	VarChar	5	NULL		NULL = All Domains
Benchmark	VarChar	5	NULL		NULL = All Benchmarks
TotalValid	int	4			
TotalTested	Int	8			Total students that sent in tests
AvgRawScore	decimal(4,1)	4			
StdDevRawScore	decimal(4,1)	4			
AvgSS	decimal(4,1)	4			Subject Rollup Only
StdDevSS	decimal(4,1)	4			Subject Rollup Only
PL1n	int	4			Subject Rollup Only
PL2n	int	4			Subject Rollup Only
PL3n	int	4			Subject Rollup Only
PL4n	int	4			Subject Rollup Only
Metn	Int	8			Subject Rollup Only; PL1n + PL2n
DidNotMeetn	Int	8			Subject Rollup Only; PL3n + PL4n

**VI. Summary Subgroup File**

This file is one (1) set of records for statewide and per ISD, district, and building. With rollups for each NCLB subgroup.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2			20 = MEAP, 22 = HS
TestType	Varchar	10			MEAP = gradea 3-8, HS = Grades 9-12
ISDCode	Varchar	2	NULL		NULL = Statewide
DistrictCode	Varchar	5	NULL		NULL = All Districts
BuildingCode	Varchar	5	NULL		NULL = All Buildings
Private	bit	1			1 = Private, 0 = Non-Private
Charter	Char	1			P = Public, C = Charter, N = Non-Public
Grade	Varchar	2			Grades 03 - 12
Subject	Varchar	5			
SubgroupGroup	Varchar	10			All Students, Gender, Ethnicity, ED, LEP, FLEP, Migrant, Homeless, StandardAccom, NonstandardAccom
Subgroup	VarChar	25			NCLB Subgroups
SubSubgroup	VarChar	3			Blank = All Students; SWD = Students With disabilities only; AED = All Except Students With Disabilities.
TotalValid	int	4			
TotalTested	Int	8			Total students that sent in tests
AvgRawScore	decimal(4,1)	4			
StdDevRawScore	decimal(4,1)	4			
AvgSS	decimal(4,1)	4			
StdDevSS	decimal(4,1)	4			
PL1n	int	4			
PL2n	int	4			
PL3n	int	4			
PL4n	int	4			
Metn	Int	8			
DidNotMeetn	Int	8			

**VII. Summary Item File**

This file contains records for statewide, ISD, district, and building levels. With a record at each level for each item presented to students in that level. If an item assesses multiple benchmarks, then there will be additional records for that item under each benchmark.

Field	Type	Length	NULL	On Downloadable Research File	Comments/Questions
TestCycle	int	2			20 = MEAP, 22 = HS
TestType	Varchar	10			MEAP = gradea 3-8, HS = Grades 9-12
ISDCode	Varchar	2	NULL		NULL = Statewide
DistrictCode	Varchar	5	NULL		NULL = All Districts
BuildingCode	Varchar	5	NULL		NULL = All Buildings
Private	bit	1			1 = Private, 0 = Non-Private
Charter	Char	1			P = Public, C = Charter, N = Non-Public
Grade	Varchar	2			Grades 03 - 12
Subject	Varchar	5			
Strand	Varchar	5			
Domain	VarChar	5			
Benchmark	VarChar	5			
Multibenchmark	Bit	1			Item assesses multiple benchmarks (count only once); "1" if true. "0" or blank for not true.
FormNumber	int	4			
ItemNumber	int	4			
ItemPosition	int	4			
ReleasedItemNumber	Int	4	NULL		
Type	VarChar	2			CR or MC
FieldTest	Bit	1			"1" if true. "0" or blank for not true.
ExtendedCore	Bit	1			"1" if true. "0" or blank for not true.
FutureCore	Bit	1			"1" if true. "0" or blank for not true.
TotalValid	int	4			
A/1	int	4	NULL		Count of students responding "A" or at Scorepoint 1
B/2	int	4	NULL		Count of students responding "B" or at Scorepoint 2
C/3	int	4	NULL		Count of students responding "C" or at Scorepoint 3
D/4	int	4	NULL		Count of students responding "D" or at Scorepoint 4
E/5	int	4	NULL		Count of students responding "E" or at Scorepoint 5
F/6	int	4	NULL		Count of students responding "F" or at Scorepoint 6
Omit	int	4	NULL		Count of students not responding
Multiple	Int	4	NULL		Count of students with multiple responses (MC Only)
AvgScore	decimal(4,1)	4	NULL		CR Only
MaxScore	int	4	NULL		Maximum Possible Points (CR Only)



## Appendix F: Contract Report Outline

This Contract report encompasses this entire Contract, with updates to the technical report for each cycle. The items in **bold** are descriptions of the processes that remain static across the span of this Contract report. Items not in bold are items that are updated for each cycle in an addendum to the volume. Items are delineated as the responsibility of OEAA, the Development Contractor (DC), or the Administration Contractor (AC).

Three (3) volumes are written for this Contract. Volume I gives background on the programs covered by the Contract.

Volume II describes and analyzes the processes used during this Contract, providing a historical record of and recommendations to improve the programs over the span of this Contract.

Volume III is a more traditional technical report containing descriptions of and summaries of psychometric and statistical procedures and analyses conducted over the life of this Contract.

Volumes II and III describe and analyze the quality control processes used by the Contractor and OEAA to assure high quality products, providing protocols and recommendations for monitoring program quality.

### I) Volume I: Background (OEAA)

- A) Organizational Structure of Michigan Schools**
- B) Statewide Testing and Accountability Programs**
- C) Descriptions of Current and Planned Assessments**
- D) Appropriate Uses for Scores and Reports**
  - 1. Individual Student Reports
  - 2. School, District, Intermediate School District, and State Reports
- E) Organizations and Groups Involved**
  - 1. Michigan Government
    - a. Michigan State Board of Education (SBE)
    - b. Michigan Department of Education (MDE)
      - i. Office of Educational Assessment & Accountability (OEAA)
      - ii. Office of Educational Technology
    - c. Department of Information Technology (DIT)
    - d. Center for Educational Performance and Information (CEPI)
  - 2. Contractors
    - a. Administration Contractors and subcontractors
    - b. Development Contractors and subcontractors
  - 3. Educators
  - 4. Technical Advisory Committee (TAC)

### II) Volume II: Operations (AC, except as noted)

- A) Project Management**
  - 1. **Scheduling**
    - a. Original Schedule
    - b. Implemented Schedule
    - c. Classification of significant changes to schedule
      - i. Risks
      - ii. Conflicts
      - iii. Infeasibility
    - d. Comparisons and recommendations for improvement
  - 2. **Issue Tracking**
    - a. Listing of significant issues
    - b. Summary of significant issues
    - c. Recommendations to reduce issues in future cycles
  - 3. **Contract Changes**
    - a. Listing of contract change requests
    - b. Recommendations to reduce contract changes in future cycles

**B) Item Banking (DC)**

1. **Quality control protocols**
2. **Variables gathered**
  - a. **Metadata**
  - b. **Statistical data**
3. **Item bank capacities**
  - a. **Item development**
  - b. **Test development**
    - i. **Test maps**
    - ii. **Test booklets**
  - c. **Integrated alignment**
    - i. **Webb analyses**
    - ii. **Other analyses**
4. **Summary of items in bank**
  - a. **By grade, subject, and content standard**
  - b. **Item development needs**

**C) Development/Production Activities**

1. **Information Technology**
  - a. **Modules developed**
  - b. **Modules already developed**
  - c. **Requirements gathering**
  - d. **Development**
  - e. **Testing**
  - f. **Implementation**
  - g. **Support**
  - h. **Training/Help**
  - i. **Maintenance**
2. **Item Development (DC)**
  - a. **Quality control protocols**
  - b. **Item Writing**
    - i. **Protocols**
    - ii. **Alignment**
    - iii. **Rangefinding**
    - iv. **Summary of participants**
    - v. **Summary of results**
  - c. **Item Review**
    - i. **Protocols**
    - ii. **Alignment**
    - iii. **Summary of participants**
    - iv. **Summary of results**
3. **Test Development (DC)**
  - a. **Quality control protocols**
  - b. **Test blueprints**
  - c. **Forms pulling**
  - d. **Summary of forms development**
    - i. **Test maps**
    - ii. **Numbers of forms developed by subject**
    - iii. **Recommendations for improvement**
  - e. **Accommodations (AC in coordination with DC)**
    - i. **Types of accommodated materials developed**
    - ii. **Protocols for development**
    - iii. **Timelines for developments by type**
    - iv. **Summary of development by type**
    - v. **Issues**
    - vi. **Numbers**
  - f. **Recommendations for improvement**



4. **Development of Ancillary materials**
    - a. Manuals
    - b. Answer documents
    - c. Released tests
  5. **Production of test materials**
    - a. **Estimating materials needs**
    - b. **Production of materials**
    - c. Summary of all materials produced
    - d. Materials appendix including one set of all materials produced
- D) Administration Activities**
1. Forms distribution (sampling) plan
  2. **Pre-Identification of students (spray-on and labels)**
    - a. **Public schools**
    - b. **Private schools**
    - c. Summary of Pre-ID
      - i. Numbers pre-ID'd through spray on and labels
      - ii. Problematic districts
      - iii. Recommendations for improvement
  3. **Packaging & Distribution**
    - a. **Quality control protocols**
    - b. **First round**
    - c. **Additional orders**
    - d. **Summaries**
      - i. Numbers (and distributions by shipment) of first round and additional order materials shipped
      - ii. Additional production
        1. By subject, grade, and material type
        2. Problematic districts
      - iii. Extra materials remaining
        1. By subject, grade, and materials type
        2. Problematic districts
  4. **Site monitoring**
    - a. **Protocols**
    - b. Sites monitored
    - c. Summary of issues identified during site monitoring
    - d. Recommendations for improvement
      - i. Administration protocols
      - ii. Ethical guidelines
      - iii. Site monitoring protocols
  5. **Materials receipt and tracking**
    - a. **Quality control protocols**
      - i. **Regular receipts**
      - ii. **Exceptional receipts**
        1. **Late shipments**
        2. **Delayed or no return** of secure materials
    - b. **Summaries**
      - i. Numbers of materials received
      - ii. Numbers of materials not returned without follow-up
        1. Problematic districts
      - iii. Discrepancies between materials shipped number tested
        1. Problematic districts

**E) Handscoring**

1. **Rangefinding (if needed)**
2. **Training**
3. **Hiring requirements**
4. **Monitoring**
  - a. **Validity**
  - b. **Reliability**
5. **Performance requirements**
6. **Rescoring requirements**
7. **Results summaries**
  - a. **Scorer characteristics**
  - b. **Numbers of items/essays scored by grade and subject**
  - c. **Dismissal and rescoring**

**F) Materials processing—a separate section each for...**

1. **Scanning, erasure analyses, MC scoring, rangefinding (if needed), logging, tested roster**
2. **Quality control protocols**
3. **Summaries**
  - a. **Issues with materials processing**
  - b. **Summaries of problematic districts with erasures**
    - i. **(details in psychometric volume)**
  - c. **Summary of handscoring results and problems**
    - i. **High level summary of psychometrics**
      1. **(details in psychometric volume)**
    - ii. **Scoring alerts**
    - iii. **Child in danger alerts**
  - d. **Districts not checking tested roster**
  - e. **Changes requested in tested roster**
    - i. **Problematic districts**

**G) Reporting activities**

1. **Quality control protocols**
  - a. **Contractor protocols**
    - i. **Listing of issues identified**
  - b. **Customer Acceptance Testing (CAT)**
    - i. **Test Deck**
    - ii. **Live Data**
    - iii. **Post-release**
    - iv. **Listing of issues identified in CAT**
2. **Production**
  - a. **Electronic data file production**
  - b. **Print production**
3. **Posting**
4. **Distribution**
5. **Listing of issues with reporting**
6. **Recommendations for improvement**

**H) Adequate Yearly Progress and EducationYES**

1. **Quality Control**
2. **Appeals**

**I) Ethical violations allegations and resolutions log****III. Volume III: Psychometrics & Technical Analyses (AC except as noted)****A) Test development analyses (DC)**

1. **Target characteristics**
  - a. **Alignment**
  - b. **Distributions of p-values, pt-bis correlations**
  - c. **Distributions of IRT parameters**
  - d. **Projected SEM/Information curves**
  - e. **Projected reliability**
  - f. **Projected classification accuracy**
  - g. **Pre- vs. post-equating needs**



2. Actual characteristics (as listed under target characteristics)
- B) Erasure analyses**
  1. **Analysis procedures**
    - a. **Ratio of erasures to all responses**
    - b. **Ratio of wrong-to-right erasures versus all erasures**
    - c. **Simultaneous analysis**
    - d. **Unweighted analyses**
    - e. **Weighted analyses (weight = inverse distance to proficient previous year)**
  2. **Data file description**
    - a. **Student level**
    - b. **Aggregate level**
  3. **Summaries**
    - a. Distributions of erasure and Scatterplots of ratio statistics at
      - i. Student/grade/subject level
      - ii. Group/grade/subject code level
      - iii. School/grade/subject level
      - iv. District/grade/subject level
    - b. Scatterplots of erasure ratio statistics
    - c. Cutoff values for identifying problems
    - d. Problematic results
      - i. Districts
      - ii. Schools
      - iii. Groups
- C) Handscoring analyses**
  1. Validity
  2. Reliability
  3. Consistency
  4. Rater harshness (FACETS analysis)
- D) Model fit**
  1. Summary results
  2. Comparisons to other models
- E) Scaling and Equating**
  1. **Quality control protocols**
  2. **Cross-sectional analyses**
  3. **Longitudinal analyses**
  4. **Results**
    - a. Cross-sectional
      - i. Equating quality/equating error
      - ii. Distributions of scale scores (with cuts superimposed)
      - iii. Percentages in performance categories
      - iv. Cohort to cohort changes (means, SDs, % in PL, % proficient)
        1. Statewide
        2. District distributions
        3. School changes
    - b. Longitudinal results
      - i. Statewide transition tables
      - ii. Statewide distributions of progress scores
      - iii. Statewide distributions of progress levels
- F) Reliability**
  1. **Cross-sectional**
    - a. SEM/Information curves (with cuts superimposed)
    - b. Internal consistency reliability
    - c. Empirical IRT reliability
    - d. Classification consistency
  2. **Longitudinal**
    - a. Classification consistency

**G) Validity****1. Construct**

- a. Alignment
- b. Item review
- c. Small and large sample comparability analyses of accommodations
- d. Cross-sectional classification accuracy (Martineau, 2007)
- e. Longitudinal classification accuracy (extension of Martineau, 2007)
- f. DIF analysis, including ICCs and option boxplots by group
- g. SEM analyses of reduction of relationship between achievement and
  - i. demographics when accounting for prior achievement on
  - ii. same or other subjects

**2. Consequential**

- a. Surveys of test score uses
- b. Surveys of test score impacts

**H) Item analysis****1. Types of analysis by**

- a. Operational items
- b. Field test items
- c. Pilot test items

**2. Results****I) Standard Setting**

1. Plans
2. Results

**J) Adequate Yearly Progress and EducationYES (OEAA)**

1. Methods
2. Results

**Appendix G: Current Test Deck and Customer Acceptance Rules****Test Deck Rules**

**Each rule applies to every grade/answer document type/content area unless specified. Each answer document must have a barcode label unless specified.**

1. Insert two (2) completely blank answer documents for each answer document type and each administration type: Each set of answer documents (Day one (1), Day two (2), and Day three (3)) will have two (2) randomly inserted blank answer documents.
2. For Michigan Developed assessments, ensure that each option for Research Code I is selected for each content area. Select one (1) option from the RESEARCH I grid for each content area on each answer document. This will result in 10 answer documents where a different option is bubbled for each content area.
3. For Michigan Developed assessments, ensure that each option for Research Code II is selected for each content area. Select one (1) option from the RESEARCH II grid for each content area on each answer document. This will result in 10 answer documents where a different option is bubbled for each content area.
4. Ensure that each option for each question for each content in the School Use Only section is captured. Select one (1) option for each question in each content area in the School Use Only section for each answer document (minimum of 10 answer documents). At least one (1) answer document must have different options selected for each content area.
5. Insert one (1) answer document where one (1) option is selected for ONLY one (1) of each of the questions in each content area. A different question and a different option must be selected on each answer document. This will require a minimum of 10 answer documents.
6. Ensure that all options are being captured for each content area in the School Use Only section. Insert one (1) answer document where more than one (1) option is selected for each question for each content area.
7. Ensure that each Report Code option is captured. Select two (2) random documents and bubble Prohibited Behavior. The Prohibited Behavior option is the only report code bubbled.
8. Ensure that each Report Code option is captured. Bubble the remaining report codes on an answer document. Only one (1) one of the following options is bubbled on an answer document: Home Schooled; Formerly LEP; Homeless, Spanish, Arabic, Chaldean, and Other Language. This results in seven (7) answer documents.
9. Ensure that two (2) or more Report Code options on the same answer document are captured. Include one (1) answer document for each Report Code option with Prohibited Behavior bubbled on the same answer document (e.g. Home Schooled and Prohibited Behavior, Spanish and Prohibited Behavior). This results in seven (7) answer documents.
10. Include one (1) answer document where ALL of the following are bubbled: Home Schooled, Formerly LEP, Homeless, Prohibited Behavior, AND one of the following: Spanish, Arabic, Chaldean, or Other Language.
11. Ensure that each Form Type is captured on each answer document. One (1) Answer document per form type. Also include at least two (2) answer documents where more than one (1) form type is bubbled. Requires a minimum of six (6) answer documents for each type of answer document.
12. Ensure that duplicated answer documents result in the same answers. Two (2) answer documents where the student barcode label is the same and the responses are the same.
13. Ensure that two (2) answer documents with the same bar code label, but different form types are both captured.
14. Ensure that two (2) answer documents with the same bar code label, same form type, but different answer choices are both captured.
15. Ensure that two (2) answer documents with the same bar code label, but split test sessions are both captured. One (1) answer document will include first part of test, the other answer document will include the remaining portions of the test.
16. Coding Answers scenarios: One (1) answer document with all questions bubbled answer 'A'.
17. Coding Answers scenarios: One (1) answer document with all questions bubbled answer 'B'.
18. Coding Answers scenarios: One (1) answer document with all questions bubbled answer 'C'.
19. Coding Answers scenarios: One (1) answer document with all questions bubbled answer 'D'.
20. Coding Answers scenarios: One (1) answer document with all questions bubbled correctly and all CRs graded with maximum points.
21. Coding Answers scenarios: One (1) answer document with all questions bubbled incorrectly and all CRs graded with minimum points.
22. Coding Answers scenarios: One (1) answer document where all items are blank
23. Coding Answers scenarios: One (1) answer document with only question 1 bubbled (item 1) in each section.
24. Coding Answers scenarios: One (1) answer document with only one (1) question (NOT item # 1 and not the last item) bubbled in each section.



25. Coding Answers scenarios: One (1) answer document where all of the questions are blank except the last question.
26. Tests where each condition code is applied to each CR item. ELA CR one (1) item - Condition Code = A:
27. Tests where each condition code is applied to each CR item. ELA CR one (1) item - Condition Code = B:
28. Tests where each condition code is applied to each CR item. ELA CR one (1) item - Condition Code = C:
29. Tests where each condition code is applied to each CR item. Social St. Item - Condition = A:
30. Tests where each condition code is applied to each CR item. Social St. Item - Condition = B:
31. Tests where each condition code is applied to each CR item. Social St. Item - Condition = C:
32. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 0.
33. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 1.
34. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 2.
35. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 3.
36. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 4.
37. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 5.
38. Each CR group scores equates to each scoring level (min-max pts.). ELA CR item - Scoring Level 6.
39. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 0.
40. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 1.
41. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 2.
42. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 3.
43. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 4.
44. Each CR group scores equates to each scoring level (min-max pts.). Social St. Item - Scoring Level = 5.
45. Ensure that all ELA writing comment codes are reported.
46. Ensure that form codes are reported correctly.
47. Ensure that form codes are reported correctly.
48. Reporting: One (1) student has two (2) answer documents one (1) answer document with Prohibited Behavior bubbled and no questions answered and the other answer document with Prohibited Behavior bubbled and some questions are answered.
49. Reporting: One (1) student has two (2) answer documents for the same test administration where NonStandard is bubbled on one (1) answer document and not bubbled on the second answer document.
50. Reporting: One (1) student has two (2) answer documents for the same test administration: one (1) document with all answers blank and one (1) answer document with all answers bubbled. No administration type or form number on either answer document.
51. Reporting: One (1) student has two (2) answer documents with the mathematics test taken on an initial form and the remaining tests are blank, and another answer document where the science and social studies components are taken on a makeup form and the mathematics test is blank.
52. Reporting: One (1) student has two (2) answer documents with the mathematics test taken on an initial form and the remaining tests are blank, and another answer document where the science and social studies components are taken on an accommodated form and the mathematics test is blank.
53. Reporting: FLEP is bubbled on the student answer documents, but LEP is listed in the overprint table.

#### **MME Customer Acceptance: Definition of Tasks**

Customer Acceptance Testing (CAT) on the MME project is broken into several separate, but related, stages. This appendix identifies and explains those stages. The last section of the appendix identifies the tasks that need to be completed in order to progress through the different stages of CAT. It is important to note that each stage of the customer acceptance process takes place after the Contractor has performed a rigorous quality review of the test scenarios during each phase. The Contractor creates test scenarios based on OEAA requirements as well as additional test cases that are necessary to fully determine the solid functionality of the software applications used to process and report MME data, based upon the project requirements. The documented test plan, along with test results are then delivered to OEAA for review in each stage. This testing is done prior to each phase moving into the production environment, and the customer acceptance review by OEAA should also be done prior to the production stage.

#### **Test Deck Customer Acceptance**

**Test Deck**

The test deck is comprised of various test documents including answer folders that have been bubbled in order to meet a variety of requirements. These requirements include specific circumstances defined by OEAA as well as specific circumstances defined by the contractor. The documents are created in an attempt to provide as many different scenarios as possible with regard to scanning, scoring, and reporting of the data. The Contractor is to develop at least one (1) test case for each scanning, scoring, and reporting scenario; each test case requires that the Contractor either validate the data that is being captured at scanning or manipulate the data correctly (calculations, overrides, etc.) to yield the appropriate results at the end of the process. In addition, some scenarios will have multiple test cases as requested by OEAA. There are also some scenarios that, although not necessary to validate the software functionality, are necessary to provide OEAA with scenarios for their own special analysis of particular assessment situations.

The Contractor prepares the test deck documents as soon as answer folders are available from the Printer. The test deck includes both base test answer folders and emergency test answer folders.

**CAT Part 1 = CAT Scan Data**

The purpose of CAT Part 1 is to verify the accuracy of the scanning equipment only. After the test deck documents are scanned, the scan data is exported into a data file that is provided to OEAA. Hard copies and images of the test deck documents are also provided. In addition, a “user friendly” PDF file of the data (Data Summary Sheet) is formatted and provided for use as a guide in comparing the documents with the scan data. The Contractor will add additional information to the test plan to aid OEAA staff in locating the hardcopies of the test documents within the stack of materials.

This data is “raw” scan data; that is, it is the data that is exported from the scanning system. The only data correction processes performed on the data are those needed for the scanning system to complete its export function.

CAT Part 1 is only concerned with the accuracy of the scan data. No scores are provided at this time. During CAT Part 1, any problems determined during the process must be communicated to the Contractor as they are found so that the Contractor can make the corrections to the scanning program in a timely manner. After acceptance of the scan data, the process moves forward to the next stage of CAT.

CAT Part 1 take place at the Contractor’s location. At least two (2) OEAA representatives will take part in the process.

**CAT Part 2 = CAT Score Data**

The purpose of CAT Part 2 is to verify the accuracy of the scoring and data entry systems and processes developed by the Contractor. After CA Part 1 is complete, the test deck data is run through MI’s data entry processes in order to clean up the data in preparation for score reporting. After data entry is complete, the score data is exported into a data file that is provided to OEAA. The same hard copies and images of the test deck documents that are used in CAT Part 1 are also used in CAT Part 2. In addition, copies of the handscoring monitors are provided for comparison between the handscores in the data and the scores on the documents. Also, a Data Summary Sheet is provided for use as a guide in comparing the documents with the score data. When reviewing data for this stage of CAT, it is important that the reviewer refer to the test plan for each case being reviewed so that any discrepancies with expected results are resolved. For instance, the data that is bubbled on the answer document being reviewed may have changed purposely during the data entry process. This can affect multiple choice answers, demographic data, etc. From this stage forward, one cannot simply compare the hard copy or image of the document to the output, but must take into account during the review what should have happened and whether or not it did. The Contractor will add additional information to the test plan to aid OEAA with determining expected results.

CAT Part 2 is only concerned with the accuracy of the score data and data entry. The accuracy of the scan data has already been verified during CAT Part 1. Remember that the scoring keys are used as a lookup table function in the database. By this time, it should have already been determined that the scoring keys are correct and the focus should be on validating that they have been correctly applied. Scale scores are not always final at this point so the Contractor may use a representative set of scale scores to validate that the scale score lookup table is being read and applied properly within the Contractor software systems. We are not determining, at this point, if the scores are appropriate for the test, but rather that the scores in the database are being applied properly. Of course, any errors found with the scoring keys should be immediately communicated to the Contractor, but this stage of CAT is happening after the keys have been finalized and approved. During CAT Part 2, any problems determined during the process will be communicated to the Contractor as they are found so that the Contractor can make the corrections to the scoring program in a timely manner. After acceptance of the score data, the process moves forward to the next stage of CAT.



CAT Part 2 will also take place at the Contractor site with at least 2 OEAA staff taking part in the process.

### **CAT Part 3 = CAT Reporting Data**

The purpose of CAT Part 3 is to verify the accuracy of the reporting processes developed by the Contractor. After CAT Part 2 is complete, the Contractor will develop a reporting extract file that includes at a minimum, test reporting scenarios for each performance level within each content area, across all single administration types and all possible combination administration types. This extract file will also include reporting scenarios for students with a complete set of MME answer documents (Day one (1), Day two (2), and Day three (3)) as well as one (1) student for each combination of answer document scenarios (Day one (1), Day two (2), and Day three (3) only, Day one (1) and Day two (2), Day one (1) and Day three (3), Day two (2) and Day three (3)). This reporting extract file will also include sufficient records for each reporting subgroup to have more than 10 students within a school, and each reporting subgroup to have less than 10 students within a school. Additionally, the file must have test scenarios for each situation in which a student would not meet attemptedness for each content area. The reporting data file will be used to generate and provide sample reports and a student data file to OEAA. The reports are generated in two (2) phases: first, the student level reports; second, the aggregate level reports. The reports, data file used to generate them, and a Data Summary Sheet are provided to OEAA. This phase of CAT is to validate that all reporting rules and overrides have been applied correctly during processing. The reporting rule covered by specific test cases will be noted in the expected results column of the test plan.

CAT Part 3 is only concerned with the accuracy of the reports as compared to the data file used to generate them. The accuracy of the scan data and score data have already been verified during CAT Parts 1 and 2. Therefore, this phase is a matter of matching the data file to the report samples and reviewing the expected results of the test case as noted on the test plan to ensure that the student in question is being reported as expected. For this reason, images and/or hard copies of the test deck documents are no longer needed.

During CAT Part 3, any problems determined during the process will be communicated to the Contractor as they are found so that the Contractor can make the corrections to the reporting program in a timely manner. After acceptance of the reporting data, the process moves forward to the next stage of CAT.

CAT Part 3 will also take place at the Contractor site with at least three (3) OEAA staff taking part in the process.

### **Sample Production Deck Reports CAT**

The purpose of the Sample Production Deck Reports CAT is to verify that “live” data is being reported in the same manner as the Test Deck data. After CAT Part 3 is complete, a Production Deck sample is used to generate a new extract reporting file. This sample includes several public and private schools (identified by OEAA), as well as district, ISD, and state level data (using only the CAT schools selected by OEAA). Samples of all reports are provided along with the data file used to generate the reports. A Data Summary Sheet is not provided during this part of customer acceptance because the actual reports are now serving that purpose.

Sample Production Deck Reports CAT is only concerned with the accuracy of the reports with regard to “live” data. The focus is on a comparison of the reports and the data used to generate them. The accuracy of the scan, score, and reporting data has already been verified during CAT Parts 1, 2, and 3. Hard copies or answer folder images for the CAT schools must be provided if requested by OEAA.

If the first three (3) stages (CAT Parts 1, 2, and 3) are completed accurately and thoroughly then there should not be any problems found during Sample Production Deck Reports CAT. However, if any problems are found then they will be communicated to the Contractor as they are found so that the Contractor can make the corrections to the reporting program in a timely manner. After acceptance of the production deck reporting data, the process moves forward to the last stage of CAT.

CAT Part 3 will also take place at the Contractor site with at least three (3) OEAA staff taking part in the process. The CAT reporting data file will be provided to OEAA in advance of CAT taking place.

### **Production Deck Final Reports CAT**

The purpose of the Production Deck Final Reports CAT is to verify that the final reports are generated as expected. After the Sample Production Deck Reports CAT is complete, the Contractor generates the final reports. The student data file and the aggregate data file will be provided to OEAA for final review.



The focus of this final stage is on the layout and structure of the reports and accuracy of the aggregate data file as verified during the Sample Production Deck Reports CAT. If the previous stage of CAT is completed correctly, then this should be a very simple task. For this reason, there should not be any changes made during this stage of the process. Any changes made, no matter how slight, will require that the final reporting data file is generated again.

**Milestones Needed for CAT Stages to Proceed****CAT Part 1**

Answer Documents are printed and available  
Scan hardware and software is ready to go  
All answer keys (operational and emergency) are approved  
Sample scale scores and performance levels are available

**CAT Part 2**

CAT Part 1 is complete  
Image Edit processes are setup  
Score import processes are setup

**CAT Part 3**

CAT Part 2 is complete  
Reporting rules are defined  
All report programming is complete  
Test Deck reporting data file is generated

**Sample Production Deck Reports CAT**

CAT Part 3 is complete  
Production Deck schools are identified  
Handscoring is complete (or near completion)  
Data entry is complete (or near completion)  
Equating is approved  
All report-level data is provided

**Sample Production Deck reporting data file is generated****Production Deck Final Reports CAT**

Sample Production Deck Reports CAT is complete  
Final answer keys approved  
Handscoring is complete  
Data entry is complete  
Student data merge and other contractor data processes are complete  
All changes to demographic data (including Tested Roster updates) are complete  
Final reporting data file is generated

**Appendix H**
**Michigan Merit Examination - College-entrance and Work Skills Tests  
For Spring 2009 through 2011**
**LN Description**

8 All rates quoted are stand-alone. Any changes to actual quantities ordered shall  
9 Otherwise, the stated rate will be assumed to apply to any quantity ordered from  
10 Any line item that is submitted with a "\$0.00" rate shall be assumed to be provided  
11 rate columns for that line.

12

**13 GENERAL ADMINISTRATION**

14

15	Administration Briefings
16	
17	Staff Participation in On-Site Meetings
18	Indirect Costs (per Meeting)
19	En-route Cost (Meetings * Persons Traveling)
20	Project Kickoff Meeting (ACT)
21	Monthly Meetings (ACT)
22	Daily Costs (Days of Meeting * Persons Traveling)
23	
24	Call Center
25	Technical Reports
26	
27	Compile and transfer data files of student test results (including matched Michigan student UICs)
28	College-entrance
29	Work skills
30	
31	Psychometric review of student data files that have all components of the MME combined
32	
33	College-Entrance Test
34	Work Skills Test(s)
35	Reading
36	Mathematics
37	Other (Bidder may replace this line and/or add lines as appropriate)
38	Certification (option line)
39	
40	Testing Center for College-Entrance and Work Skills (for non-public students that can not test at their own school)



41	
42	Testing Center for Michigan-developed (for non-public students that can not
43	test at their own school)
44	Other (Please describe and add additional line if needed)
45	Technical Advisory Committee (TAC) Meetings
46	Standard Setting Meetings
47	Other Meetings
48	MME Test Coordinatoar Supervisor Training
49	Records & Minutes
50	Shipment Overage
51	Military Testing - Set up
52	Additional Cost beyond ACT & WK price (per student standard testing
53	Additional Cost beyond ACT & WK price (per student accomm testing
54	Observer Training
55	Phone Training
56	Image Requirements for WorkKeys
57	Operational Check-In for WorkKeys
58	Program Management
59	Training DVD for Test Accommodation Coordinators
60	WorkKeys IT Development
61	WorkKeys Erasure Analysis
62	End To End System Testing
63	IT Contingency
64	Test Development-Alignment
65	Test Development-Item Mapping
66	WorkKeys state form development
67	Produce Barcode Labels
68	No Reporting of Students w/o Barcode Label
69	Append 1700 Byte file w/Pre-ID Information.
70	Pre-ID Label File Addendum-Set Up Fee Per File
71	Pre-ID Label File Addendum-Per Label Fee
72	WorkKeys Program Management
73	<b>GENERAL ADMINISTRATION SUBTOTAL</b>
74	
75	
76	<b><u>Preparing Accommodation Materials - College-Entrance</u></b>
77	Translation Spanish
78	Translation Arabic
79	Design and Compose Braille Versions
80	Design and Compose Enlarged-Print Versions
81	a. Assessment Administration Booklets for Braille
82	Reader Scripts or Assessment Administration Booklets for Braille:
83	English Reader Script



84	Spanish Reader Script
85	Spanish Reader Script - Independent Review
86	Arabic Reader Script
87	Arabic Reader Script - Independent Review
88	Audio Accommodation Masters:
89	General Audio Master creation (regardless of media format)
90	Audio DVD Master (rate only dependent on General Audio Master work occurring)
91	Master specific for audio cassette duplication (rate only dependent on GeneralAudio Master work occurring)
92	Master Audio - Spanish ACT
93	Master Audio - Arabic ACT
94	Video Accommodation Masters:
95	English Versions
96	General Video Master creation (regardless of media format)
97	DVD Master (rate only dependent on General Video Master work occurring)
98	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)
99	Spanish Versions
100	General Video Master creation (regardless of media format)
101	DVD Master (rate only dependent on General Video Master work occurring)
102	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)
103	Arabic Versions
104	General Video Master creation (regardless of media format)
105	DVD Master (rate only dependent on General Video Master work occurring)
106	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)
107	
108	Duplication and Packing
109	Paper Media
110	Braille
111	Enlarged Print
112	English reader scripts
113	Spanish reader scripts
114	Arabic reader scripts
115	Audio/Video Media
116	English
117	DVD - Audio Only ( cost is for 5 content areas: 20,000 units )
118	DVD ( cost is for 5 content areas: 2,500 units )



119	VHS ( cost is for 5 content areas: 1,000 units )
120	Audiocassette ( cost is for 5 content areas: 30,000 units )
121	Spanish
122	DVD ( cost is for 5 content areas: 2,500 units )
123	VHS ( cost is for 5 content areas: 500 units )
124	Arabic
125	DVD ( cost is for 5 content areas: 2,000 units )
126	VHS ( cost is for 5 content areas: 500 units )
127	
128	<b>SUBTOTAL Preparing Accommodation Materials - College-entrance</b>
129	
130	<b>Preparing Accommodation Materials - Work Skills (Bidders may adjust quantities)</b>
131	Design and Compose Braille Versions
132	Design and Compose Enlarged-Print Versions
133	a. Assessment Administration Booklets for Braille
134	Reader Scripts or Assessment Administration Booklets for Braille:
135	English Reader Script
136	Spanish Reader Script
137	Spanish Reader Script - Independent Review
138	Arabic Reader Script
139	Arabic Reader Script - Independent Review
140	Audio Accommodation Masters:
141	General Audio Master creation (regardless of media format)
142	Audio DVD Master (rate only dependent on General Audio Master work occurring)
143	Master specific for audio cassette duplication (rate only dependent on General Audio Master work occurring)
144	Video Accommodation Masters:
145	English Versions
146	General Video Master creation (regardless of media format)
147	General Video Master creation adjustment if Audio Accommodation master can be used.
148	DVD Master (rate only dependent on General Video Master work occurring)
149	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)
150	Spanish Versions
151	General Video Master creation (regardless of media format)
152	ACT General Video Master creation regardless...(LI specific
153	DVD Master (rate only dependent on General Video Master work occurring)
154	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)



155	Arabic Versions
156	General Video Master creation (regardless of media format)
157	ACT General Video Master creation (regardless...) LI specific
158	DVD Master (rate only dependent on General Video Master work occurring)
159	BETA Master specific (for VHS Duplication) (rate only dependent on General Video Master work occurring)
160	
161	Duplication and Packing
162	Paper Media
163	Braille
164	Braille - RFI <b>ALL ACT</b>
165	Braille - AM
166	Braille - LI
167	Enlarged Print
168	English reader scripts
169	Spanish reader scripts
170	Arabic reader scripts
171	Audio/Video Media
172	English
173	DVD - Audio Only ( cost is for 2 content areas: 8,000 units )
174	DVD ( cost is for 2 content areas: 1,000 units )
175	VHS ( cost is for 2 content areas: 400 units )
176	Audiocassette ( cost is for 2 content areas: 12,000 units )
177	Spanish
178	DVD ( cost is for 2 content areas: 1,000 units )
179	VHS ( cost is for 2 content areas: 200 units )
180	Arabic
181	DVD ( cost is for 2 content areas: 800 units )
182	VHS ( cost is for 2 content areas: 200 units )
183	
184	<b>SUBTOTAL Preparing Accommodation Materials - Work Skills</b>
185	
186	<b>ESTIMATED CONTRACT TOTAL</b>



ACT

Unit Type	Est Quantity / Year (A)	Units/Quantity (B)	Estimated Total Units/Year C = A*B
-----------	-------------------------------	-----------------------	---

Spring 2009	
Rate Per Unit (D)	Est Sum [(C)*(D)]

all not effect that rate or any other rate. If any rate quoted is part of a tier structure based on quantity from zero up to 150% of the estimated quantity.

vide at no cost to the state. Any line item that is NOT being provided will have either "Not Provided"

each	12	1	12	\$4,370.00	\$52,440
meeting	12	1	12	\$0.00	\$0
Prsn/mtg	12	8	96	\$0.00	\$0
meeting	1	1	1	\$25,050.00	\$25,050
meeting	12	1	12	\$16,100.00	\$193,200
Prsn/day	12	24	288	\$0.00	\$0
year	1	1	1	\$0.00	\$0
year	1	1	1	\$59,340.00	\$59,340
year	1	1	1	\$72,845.00	\$72,845
year	1	1	1	\$72,845.00	\$72,845
year	1	1	1	\$1,363,430.00	\$1,363,430
each	160,000	1	160,000	\$44.00	\$7,040,000
each	160,000	1	160,000	\$5.00	\$800,000
each	160,000	1	160,000	\$5.00	\$800,000
each	160,000	1	160,000	\$5.00	\$800,000
each	160,000	1	160,000	\$0.00	\$0
site/day	5	3	15	\$3,476.67	\$52,150



site/day	8	1	8	\$0.00	\$0
each	4	1	4	\$1,530.00	\$6,120
each	1	1	1	\$5,970.00	\$5,970
each	6	1	6	\$4,510.00	\$27,060
each	12	1	12	\$6,830.00	\$81,960
each	1	1	1	\$0.00	\$0
year	1	1	1	\$13,790.00	\$13,790
each	0	1	0	\$1,840.00	\$0
each	0	1	0	\$160.00	\$0
each	0	1	0	\$310.00	\$0
year	1	1	1	\$5,150.00	\$5,150
Session	1	1	1	\$580.00	\$580
year	1	1	1	\$92,170.00	\$92,170
year	1	1	1	\$0.00	\$0
year	1	1	1	\$991,500.00	\$991,500
year	1	1	1	\$35,320.00	\$35,320
year	1	1	1	\$178,520.00	\$178,520
year	1	1	1	\$58,205.00	\$58,205
year	1	1	1	\$31,020.00	\$31,020
year	1	1	1	\$260,120.00	\$260,120
year	1	1	1	\$50,380.00	\$50,380
year	1	1	1	\$291,800.00	\$291,800
year	1	1	1	\$124,145.00	\$124,145
year	1	1	1	\$4,730.00	\$4,730
year	1	1	1	\$26,730.00	\$26,730
year	1	1	1	\$32,670.00	\$32,670
each	1	1	1	\$54.18	\$54
each	160,000	1	160,000	\$0.04	\$6,720
year	1	1	1	\$95,000.00	\$95,000
					<b>\$13,751,014</b>

year	1	1	1	\$6,710.00	\$6,710
year	1	1	1	\$6,710.00	\$6,710
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0



booklet	1	1	1	\$1,760.00	\$1,760
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$1,760.00	\$1,760
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1		
year	1	1	1	\$12,870.00	\$12,870
year	1	1	1	\$12,870.00	\$12,870
booklet	1	1	1	\$7,700.00	\$7,700
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$7,700.00	\$7,700
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$7,700.00	\$7,700
booklet	1	1	1	\$0.00	\$0
booklet	1	1	1	\$0.00	\$0
				\$0.00	\$0
booklet	45	1	45	\$0.00	\$0
booklet	250	1	250	\$0.00	\$0
booklet	1,700	1	1,700	\$0.00	\$0
booklet	10	1	10	\$6.60	\$66
booklet	10	1	10	\$6.60	\$66
each	4,000	1	4,000	\$0.00	\$0
each	500	1	500	\$0.00	\$0



each	200	1	200
each	6,000	1	6,000
each	500	1	500
each	100	1	100
each	400	1	400
each	100	1	100

\$0.00	\$0
\$0.00	\$0
\$6.40	\$3,200
\$23.40	\$2,340
\$7.25	\$2,900
\$23.40	\$2,340
	\$76,692

**ties to match the number of booklets being bid)**

booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	-1	-1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1
booklet	1	1	1

\$0.00	\$0
\$5,760.00	\$5,760
\$0.00	\$0
\$14,010.00	\$14,010
\$24,640.00	\$24,640
\$11,220.00	\$11,220
\$42,240.00	\$42,240
\$11,220.00	\$11,220
\$12,760.00	\$12,760
\$4,840.00	\$4,840
\$1,320.00	\$1,320
\$52,800.00	\$52,800
\$0.00	\$0
\$660.00	\$660
\$600.00	\$600
\$52,800.00	\$52,800
\$5,500.00	\$5,500
\$660.00	\$660
\$660.00	\$660



booklet	1	1	1	\$52,800.00	\$52,800
booklet	1	1	1	\$5,500.00	\$5,500
booklet	1	1	1	\$660.00	\$660
booklet	1	1	1	\$660.00	\$660
booklet	45	1	45	\$40.00	\$1,800
booklet	45	1	45	\$70.00	\$3,150
booklet	45	1	45	\$270.00	\$12,150
booklet	250	1	250	\$10.00	\$2,500
booklet	1,700	1	1,700	\$1.50	\$2,550
booklet	10	1	10	\$1.50	\$15
booklet	10	1	10	\$1.50	\$15
each	4,000	1	4,000	\$0.75	\$3,000
each	500	1	500	\$4.50	\$2,250
each	200	1	200	\$6.50	\$1,300
each	6,000	1	6,000	\$0.55	\$3,300
each	500	1	500	\$4.50	\$2,250
each	100	1	100	\$6.50	\$650
each	400	1	400	\$4.50	\$1,800
each	100	1	100	\$6.50	\$650
					\$338,690

\$14,166,395
--------------



Spring 2010		Spring 2011		ACT
Rate Per Unit	Est Sum	Rate Per Unit	Est Sum	Est Contract Sum
(E)	[(C)*(D)]	(F)	[(C)*(D)]	[(C)]*[(D)+(E)+(F)]

entities, illustrate the tier structure.

led" or "NP" in the

\$4,570.00	\$54,840	\$4,770.00	\$57,240	\$164,520
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$25,050
\$16,830.00	\$201,960	\$17,590.00	\$211,080	\$606,240
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$34,010.00	\$34,010	\$35,550.00	\$35,550	\$128,900
\$12,695.00	\$12,695	\$13,265.00	\$13,265	\$98,805
\$12,695.00	\$12,695	\$13,265.00	\$13,265	\$98,805
\$1,243,655.00	\$1,243,655	\$1,304,490.00	\$1,304,490	\$3,911,575
\$45.00	\$7,200,000	\$46.00	\$7,360,000	\$21,600,000
\$5.50	\$880,000	\$5.50	\$880,000	\$2,560,000
\$5.50	\$880,000	\$5.50	\$880,000	\$2,560,000
\$5.50	\$880,000	\$5.50	\$880,000	\$2,560,000
\$0.00	\$0	\$0.00	\$0	\$0
\$3,462.67	\$51,940	\$3,626.67	\$54,400	\$158,490



\$0.00	\$0	\$0.00	\$0	\$0

\$1,600.00	\$6,400	\$1,670.00	\$6,680	\$19,200
\$6,240.00	\$6,240	\$6,520.00	\$6,520	\$18,730
\$4,720.00	\$28,320	\$4,930.00	\$29,580	\$84,960
\$7,140.00	\$85,680	\$7,470.00	\$89,640	\$257,280
\$0.00	\$0	\$0.00	\$0	\$0
\$14,410.00	\$14,410	\$15,060.00	\$15,060	\$43,260
\$1,920.00	\$0	\$2,010.00	\$0	\$0
\$170.00	\$0	\$180.00	\$0	\$0
\$320.00	\$0	\$330.00	\$0	\$0
\$5,350.00	\$5,350	\$5,610.00	\$5,610	\$16,110
\$610.00	\$610	\$630.00	\$630	\$1,820
\$7,210.00	\$7,210	\$7,525.00	\$7,525	\$106,905
\$0.00	\$0	\$0.00	\$0	\$0
\$977,790.00	\$977,790	\$1,021,790.00	\$1,021,790	\$2,991,080
\$36,920.00	\$36,920	\$38,570.00	\$38,570	\$110,810
\$31,090.00	\$31,090	\$32,495.00	\$32,495	\$242,105
\$6,780.00	\$6,780	\$7,080.00	\$7,080	\$72,065
\$5,410.00	\$5,410	\$5,650.00	\$5,650	\$42,080
\$45,315.00	\$45,315	\$47,360.00	\$47,360	\$352,795
\$52,660.00	\$52,660	\$55,020.00	\$55,020	\$158,060
\$304,920.00	\$304,920	\$318,640.00	\$318,640	\$915,360
\$0.00	\$0	\$0.00	\$0	\$124,145
\$0.00	\$0	\$0.00	\$0	\$4,730
\$0.00	\$0	\$0.00	\$0	\$26,730
\$0.00	\$0	\$0.00	\$0	\$32,670
\$56.61	\$57	\$59.16	\$59	\$170
\$0.04	\$7,040	\$0.05	\$7,360	\$21,120
\$98,375.00	98,375	\$101,900.00	101,900	295275
	<b>\$13,172,372</b>		<b>\$13,486,459</b>	<b>\$40,409,845</b>

\$7,010.00	\$7,010	\$7,330.00	\$7,330	\$21,050
\$7,010.00	\$7,010	\$7,330.00	\$7,330	\$21,050
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0



\$1,840.00	\$1,840	\$1,920.00	\$1,920	\$5,520
\$0.00		\$0.00	\$0	\$0
\$1,840.00	\$1,840	\$1,920.00	\$1,920	\$5,520
\$0.00		\$0.00		\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$13,450.00	\$13,450	\$14,060.00	\$14,060	\$40,380
\$13,450.00	\$13,450	\$14,060.00	\$14,060	\$40,380
\$8,050.00	\$8,050	\$8,410.00	\$8,410	\$24,160
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$8,050.00	\$8,050	\$8,410.00	\$8,410	\$24,160
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$8,050.00	\$8,050	\$8,410.00	\$8,410	\$24,160
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$8,050.00	\$8,050	\$8,410.00	\$8,410	\$24,160
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$6.90	\$69	\$7.20	\$72	\$207
\$6.90	\$69	\$7.20	\$72	\$207
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0



\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$0
\$6.70	\$3,350	\$7.00	\$3,500	\$10,049
\$24.45	\$2,445	\$25.55	\$2,555	\$7,339
\$7.60	\$3,040	\$7.95	\$3,180	\$9,118
\$24.45	\$2,445	\$25.55	\$2,555	\$7,339
	\$80,168		\$83,784	\$240,638

				\$0
\$0.00	\$0	\$0.00	\$0	\$5,760
\$0.00	\$0	\$0.00	\$0	\$0
\$0.00	\$0	\$0.00	\$0	\$14,010
\$0.00	\$0	\$0.00	\$0	\$24,640
\$0.00	\$0	\$0.00	\$0	\$11,220
\$0.00	\$0	\$0.00	\$0	\$42,240
\$0.00	\$0	\$0.00	\$0	\$11,220
\$0.00	\$0	\$0.00	\$0	\$12,760
\$0.00	\$0	\$0.00	\$0	\$4,840
\$0.00	\$0	\$0.00	\$0	\$1,320
\$0.00	\$0	\$0.00	\$0	\$52,800
\$0.00	\$0	\$0.00	\$0	
\$0.00	\$0	\$0.00	\$0	\$660
\$0.00	\$0	\$0.00	\$0	\$600
\$0.00	\$0	\$0.00	\$0	\$52,800
\$0.00	\$0	\$0.00	\$0	\$5,500
\$0.00	\$0	\$0.00	\$0	\$660
\$0.00	\$0	\$0.00	\$0	\$660



\$0.00	\$0	\$0.00	\$0	\$52,800	
\$0.00	\$0	\$0.00	\$0	\$5,500	
\$0.00	\$0	\$0.00	\$0	\$660	
\$0.00	\$0	\$0.00	\$0	\$660	
\$41.80	\$1,881	\$43.70	\$1,967	\$5,648	
\$73.15	\$3,292	\$76.45	\$3,440	\$9,882	
\$282.15	\$12,697	\$294.85	\$13,268	\$38,115	
\$10.45	\$2,613	\$10.90	\$2,725	\$7,838	
\$1.55	\$2,635	\$1.65	\$2,805	\$7,990	
\$1.55	\$16	\$1.65	\$17	\$47	
\$1.55	\$16	\$1.65	\$17	\$47	
\$0.80	\$3,200	\$0.85	\$3,400	\$9,600	
\$4.70	\$2,350	\$4.90	\$2,450	\$7,050	
\$6.80	\$1,360	\$7.10	\$1,420	\$4,080	
\$0.60	\$3,600	\$0.65	\$3,900	\$10,800	
\$4.70	\$2,350	\$4.90	\$2,450	\$7,050	
\$6.80	\$680	\$7.10	\$710	\$2,040	
\$4.70	\$1,880	\$4.90	\$1,960	\$5,640	
\$6.80	\$680	\$7.10	\$710	\$2,040	
	\$39,248		\$41,238	\$419,176	
\$13,291,785		\$13,611,480		\$41,069,659	